

DIGITAL GAMES

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एन सी ई आर टी
NCERT



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Introduction





Games have been a part of classroom activity since the past few decades. There are numerous types of games and it varies based on classroom needs. Some use it as a warm-up activity, previous knowledge testing, teaching aid, or to add a fun element to education. As technology transforms, games also modify their nature. For a long time, learning has demanded something different. It is important to hypothesize the opportunities and challenges that game-based learning presents. This provides the key ideas that propel the application of games and their design to teaching and learning, within the domains of pedagogy, implementation, and assessment. From decades ago, games have embodied well-established principles of knowledge, models of learning, and teaching aid that add a meaningful element to education. As technology transforms, games also re-frame their nature into digital games.

Digital Game-based Learning is a straightforward introduction to the creation and use of computer games aimed to support and enhance teaching-learning with an interest in the use of digital games. In the 21st century, digital games can be played through tablets, computers, mobile phones, PlayStation, etc. Digital games also get considerable attention to pedagogical uses.

Despite years of active research and growth, Teachers and pedagogs remain unaware of Digital Game-Based Learning (DGBL). There have been constant questions about the efficiency of DGBL for teaching and learning. Nevertheless, digital games have attracted everyone's attention. This has resulted in widespread public interest in games as learning tools. Many pieces of research reveal the significant impact of game-based learning. Over the past decade, digital games have come up as an efficient teaching tool for education. It is an innovative approach to engage learners actively in the classroom and an effective way to understand difficult concepts. Students unknowingly learn different strategies to solve problems, and are highly confident while practising.

Before the intervention of technology in education, the whole system was based on textbooks, and learning was considered as content mastery of textbooks rather than skill mastery. But now, learners of different ages, learning styles, educational backgrounds, have choices to acquire skills, the games are developed with meaningful context. It focuses on integrating games with educational practices and placing learners in a situation to solve problems, make decisions, and tackle challenges to acquire higher-order skills. In this scenario, the teacher's role will also shift, from an instructor to the facilitator who provides the students with game-





based learning. Digital games include a fun element that allows student's fantasy and, curiosity to grow, challenges them, and allows them the freedom to choose. Students can grasp complex/abstract concepts better through representation with simulations and gaming features (Jan & Gaydos, 2016).

A wider definition is used by Freitas, S. de, & Maharg, P. (2011) that defines computer-based learning games as applications using the characteristics of video and computer. Here games are created engaging and immersive learning experiences for delivering specific learning goals, outcomes, and experiences. Freitas, S. de, & Maharg, P. (2011) explained that these digital games introduce real context and problems to students which helps them in developing advanced skills. Digital games tend to provide an authentic context and purpose for an activity for the child. They both are equally essential in the real as well as offline worlds as they are fundamentally collaborative in nature.

Game-based learning changed the learning style of students as observed by teachers and school leaders. Now students want to learn more, easily work with other students, and feel proud about their work. It also increased motivation, self-esteem & confidence. Students started helping each other and work in a collaborative & communal manner with teachers and their peers. This approach also increased concentration towards class teaching and learning activities in the classroom. Game-based learning provides space to communicate with parents, students, and teachers, and it prompts critical thinking and helps in engaging deeply with activities. This is often related to the development of ICT skills in parents, students, and teachers (Groff, Howells & Cranmer, 2010).

Divjak & Tomić (2011) - explains game-based learning as an upliftment in their learning, that builds student's positive attitude towards mathematics, help them to understand quickly, and for the long term with increased motivation.

According to the U.S. Department of Education (2017), game-based learning creates an environment with quality education, personalized learning, and increased capacity for educators. Learners need core academic competencies with the development of critical thinking, complex problem-solving, collaboration, multimedia communication skills with a sense of their own agency on learning, self-awareness, work cooperatively, etc.

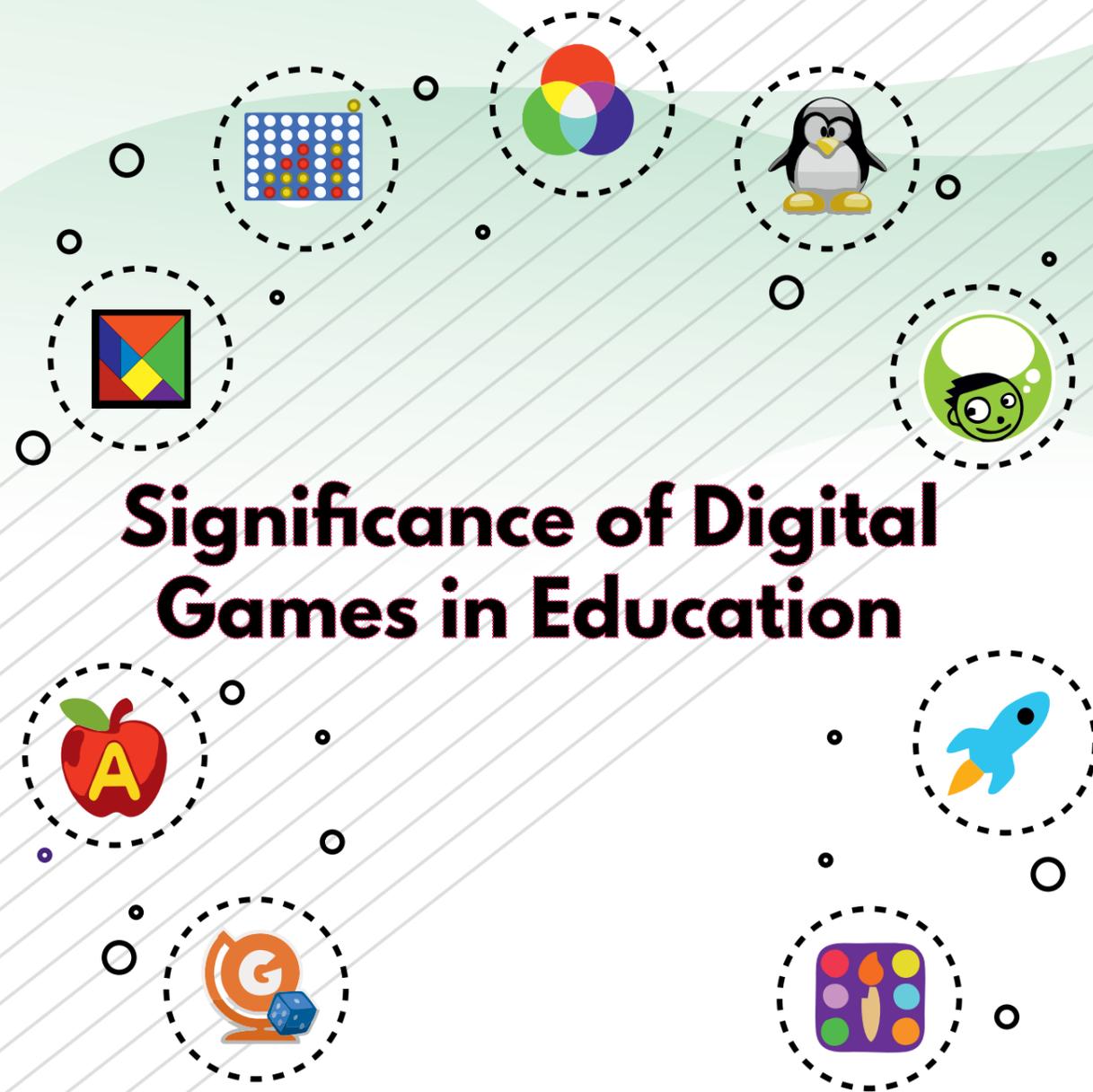


For effective use of games in the classroom; teachers and parents need to understand and agree on the functions & roles of digital game-based learning functions and roles. It will disseminate the acquired educational games skills & knowledge into the teaching field. Researchers have pointed out that play is the primary socialization that also improves the cognitive benefits of games. It is a learning mechanism common to all human cultures. It is also indicated in Jean Piaget's theories about children that includes the concepts of assimilation and accommodation. In assimilation, we provide new information to an existing knowledge base and accommodation modifies the existing model to accommodate new information.

Various studies on digital gaming highlight the positive effect of DGBL that have traced the transformation in the teaching-learning process, teaching aids, and learning styles by the intervention of technology. This is seen in the development of educational games for learners, the role of teachers in the development of learners. This means that DGBL can be implemented most effectively by attending to the fundamentals of learning. We know from research, when it's about learning, practically doing it far outweighs theoretically showing and telling. One is enabled to explore the use of games in learning contexts that matter to them and the young people in their lives. Digital Games Based Learning have such potential for learning, they are nothing more than complex problems waiting to be solved by players in a way that is both fun and challenging.



Significance of Digital Games in Education





Prominent thinkers from Plato to Piaget have conceded to the importance of child's play in learning and child overall development. There had been a great deal of linkage between the digital game and the effective educational learning experiences.

Classrooms today look very different than they did years ago. The reason behind the change is a well-known teaching method- digital game-based learning. It's now become a prominent teaching method, thanks to the advancement in technology. This has drastically changed the scenario of how students are taught as well as how they learn. Studies show children use digital game-based learning methods an average of 4-6 hours a day and its thought increases engagement and overall learning in classes. Research has shown that the teachers have started implementing digital game-based learning in classrooms to help augment instruction.

The use of technology has become an inseparable part of our society and consequently an important aspect of the teaching and learning process. Technology changes many aspects of our life such as tourism, medicine, business, law, banking, architecture, etc. these changes also demand improvement in the skills and abilities of students. New technology, globalisation, international competition, transnational environment, and migration also challenges the education sector to prepare students as a citizen and as an employee in the twenty-first century (Scott,2015).It enables the teaching community to reformulate strategies, approaches (child-centric approach) and content for teaching and learning. Technology also helps in both the personal development of students as well as cooperation among them. The teacher can develop his/her teaching-learning materials (e.g. e-dairies, use presentation tools, interactive games, concrete and virtual objects) and/or guide students to develop for themselves (e.g. audio/video presentation, interactive stories, audiobooks, and animations). Massive books, videos, audio, images, and information are available online, worldwide that opens opportunities to access quality education. Technology in this way changes the role of the teacher as well as the learner.

Twenty-first-century requires skills, more than thinking, reproduction of knowledge, and content knowledge. Learners imagined with personal skills (responsible, risk-taking, creative, resilience, and initiative), social skills (teamwork, compassion, and networking), and learning skills (organizing, managing, metacognitive skills, response to failure) (Scott,2015). Students need to know seven survival skills for twenty-first-century existence, these seven skills are critical thinking



& problem solving, collaboration & leadership, agility & adaptability, initiative & entrepreneurialism, effective oral & written communication, accessing & analyzing information, curiosity & imagination (Wagner as cited in Scott, 2015). Teachers use many aids to develop skills among students, such as storytelling, puzzles, flashcards, role-play, games, audio-video aids, worksheets, concrete materials, etc. After the intervention of technology, these aids have also transformed their form such as e-content which includes interactives, animations, simulations, mobile apps, text, interactive games, etc. one of the effective ways to learn is game-based learning.

Games include both intended educational games for educational purposes (formal learning) and commercial entertainment games (informal learning) (Whitton , 2013) Games should have an aim and not only for fun, should use a language by which students refine, learn, practise their language skills, use appropriate content as per curriculum prescribed, technically easy and as per the age of the students, but short games may also help students to engage better as they may not engage in long games (Constantinescu as cited in Gozcu & Caganaga, 2016). Students have their agency to control their actions and choose as per their choices, and also their efforts should be acknowledged and awarded. One of the key aspects of game-based learning is that each student receives immediate feedback and guidance on their facilitation and correct performance and acknowledges them with improvements. Care should be taken to meet the objectives and proper alignment of curriculum and academic performance to meet the goals and resolve the challenges.

Play is a powerful influence on learning, that the whole purpose of games is to learn, that play is fundamental to our development (Reiber, 1996) in that it can promote engagement in and mastery of a range of tasks as we mature into adults (Colarusso, 1993). Koster (2005) argues that games are an essential part of the human learning experience, providing the opportunity to safely practice skills like aiming, timing, hunting, strategy, and manipulation of power.

There are different types of games that influence their learning in various areas. Many researchers have tried to categorize computer games into types or taxonomies, and although there are often large differences between them, there are also many similarities in terms of the general classifications.

The types of games are-



Motivational Games

These games include a fun element associated with the games which allow student's fantasy, curiosity, challenge, and freedom to choose as per their own choice.



Drill and Practice Games

Before exposure to these games, the teacher needs to introduce concepts by other methods such as instructional method, through a textbook, after that, the students should engage in repetitive challenging tasks to practice a particular concept. These also develop higher-order thinking among students.



Content Mastery Games

Include games with mostly mastery of knowledge, facts, and information. These games represent a complex/abstract concept with better representation with simulations, gaming features, and representation. Which helps students to understand it easily.



Adventure Games

These are one of the oldest forms of computer games. They involve the player undertaking a series of tasks or puzzles in which they must interact with the virtual world, performing actions, talking to characters, and manipulating objects to achieve the objectives of the game, often to solve some mystery or complete a quest.



21st-century Competencies Games

21st-century competencies games encourage students to develop higher-level thinking and social skills (like problem-solving, systems thinking, argumentation, and collaboration). These games introduce real context and problems to students which helps them to develop advanced skills. Games must have motivational elements, interactive elements, fun elements, multimedia elements (Jabbar & Felicia, 2015). Games incorporate (relevance, embedding, translation, adaptation, immersion & naturalization), RETAIN model. This model helps to overcome errors in instructional principles.



Gagné and et. al., (1992) identify five main categories of learning that can be facilitated with games- Intellectual skill, which includes concepts, rules, and relationships, and making discriminations (e.g. using algebra to solve a mathematical puzzle). Cognitive strategy, referring to personal techniques for thought and action (e.g. developing a mental model of a problem). Verbal information that relates to facts (e.g. recalling the names of the bones in the hand). Motor skill refers to actions that use the muscles (e.g. dancing) and lastly attitude beliefs and feelings (e.g. choosing to read detective fiction). Ardito, Costabile, Lanzilotti & Desilda (2013), explore the effectiveness of game-based learning and found that students learn more effectively when game-based learning integrates with formal education like school trips, as well as lessons in the classrooms. Integration must be followed by the theory of Bruner, firstly by symbolic phase, as the teacher presents content in the classroom. Secondly, the active phase, as acting in a real-life context. Thirdly, the Iconic phase, interaction with technological tools like in educational games on the screen. These may not present in the sequence given but can be modified by the facilitator according to their needs.

Learning does not occur only with the guidance of the teacher but also through the interaction with peers, teachers and other sources. Digital games contain challenges, role-play, competition, reward system. Many different types of digital games influence students' learning in different areas (Jan & Gaydos, 2015). Digital games are basic human activity in everyday life. They include a fun element which allows student's fantasy, curiosity, challenge and freedom to choose but before the exposure of these digital games, the teacher needs to introduce concepts by other methods such as instructional methods, through a textbook which also helps in the development of higher-order thinking and social skills. Various studies support the enhancement of education through digital gaming. Jan and Gaydos, (2015) students are able to grasp complex/abstract concepts better through representation with simulations and gaming features. These games introduce real context and problems to students which helps them in developing advanced skills. Students and teachers recognize the change in learning as the speed at which they access learning materials, the number of suitable instant search available for additional information, and the effectiveness of integrating the learning of the students (Montrieux, Vanderlinde, Schellens, Marez, 2015). (Hsu, Tsai, Chang, Liang, 2017). This identifies game-based learning as effective learning which enhances their higher-order thinking, increases problem-solving skills, promotes more engagement.



Digital games should have rules and laws that allow student's decision-making processes. Murphy (2011) states laws of learning as

Law of Readiness,

as students learn the best when they are mentally, physically, and emotionally ready to learn and motivation is an important part of effective learning. Flow is the basic attraction of the game.

Law of Exercise,

learners should repeat and practice. Teachers should give feedback because practice and feedback exist together. Feedback is an essential part of the game.

Law of Effect

students learns better when they associate with positive emotion. It is also known as the law of positive feeling. Simplicity and involvement in games motivate the learner.

Law of intensity

as things which are more intense and heighten our perception, concentration to bear on a task, which increases the learning. The feedback upon the loopholes and games as a combination of immersion and engagement to create intense experiences.

Law of Primacy

is to replace negative training, unlearn bad habits, and flawed logic and is related to time. Learners are actively engaged in the process of learning.

Law of Recency

as learning builds upon previously done. As a cyclic approach to learning because we remember the things which are done earlier

Mathrani, Christian & Sutton (2016) identify, students perceived game-based learning as active learning and effective learning with a component of delight. Students feel more confident in helping others in identifying strategies to solve games.

Orr & McGuinness (2018), studied the nature of learning in game-based learning and cognitive & motivational processes. Explains, it has altered the conception of learning since the last decade. Changes in learning theories also foster the growth of game-based learning. Game-based learning also benefits the cognition of students, collaborative works, school attainment, engaging appeal and motivation. Whereas Plass, Homer & Kinzer, (2015) explained games, which foster learner's cognitive, motivational, affective and socio-cultural engagement. Students have their agency to make decisions. Problems are well ordered as well as simple to complex, which help students to move on from one to another.

Game-based learning changed the learning style of students as observed by teachers and school leaders of the school. (Groff, Howells & Cranmer, 2010) Now students want to learn more, easily work with other students and felt proud about their work. It has also increased motivation, self-esteem and confidence of the students. Students have started helping each other and work in a collaborative & communal manner with teachers, and their peers. DGBL approach has also increased concentration towards teaching and learning activities in the classroom. This also provides space to communicate with other students and teachers, think critically and engage deeply with activities. Game-based learning has also increased the ICT skills of students and teachers. Teachers also design activities with more enthusiasm and creativity. This approach has also allowed teachers to integrate interdisciplinary curricular activities (Groff, Howells & Cranmer, 2010).

Advancement in technology has influenced education as now, educators can develop new technology-mediated spaces for effective teaching and learning processes (Dia & Zin, 2013).

Woo (2014), there is a correlation between motivation and cognition load with performance. Digital games should be designed with high motivational factors such as interactives, feedback, challenges, representation of problems, and rules. Although Eseryel, Law, Ifenthaler, Ge, Miller (2014) identified that, there is a complex relationship between students' motivation and engagement (with the task) with problem-solving abilities. Digital games can even foster or suppress their



learning, choices and self-efficiency. So, it's also essential to design games with the ability to motivate and engage with competencies like problem-solving, autonomy, attainable challenge to complete goals. While Spires (2015) stressed on integration of disciplinary content with games rather than supplementary content. Content should be designed in a way that students can work collaboratively and independently, creating a balance between learning as play and disciplinary learning goals achieved by all students.

Gozcu & Caganaga (2016), asserts that game-based learning creates a situation, where students learn without anxiety & stress, with an effective, enjoyable & interesting environment. Divjak & Tomić (2011) explains game-based learning as an uplift in their learning, build their positive attitude towards mathematics, help them to understand quickly and for the long term with increased motivation.

Although Jabbar & Felicia (2015) indicate that individual differences (in gaming proficiency, personality, preferences and emotional state) impact on learning and engagement of students and learning is a personal process. Whitton (2013) explains that a variety of digital games are there to include diverse social groups but at the same time, there are many advantages and disadvantages of games. Many games may empower masses but at the same time unconsciously excludes some. So, it depends on the diverse techniques to use certain games with an account of the individual needs of learners.

Interesting sounds and pictures construct an enjoyable environment for students. Students do not realise that the learning takes place but unknowingly they engage in language learning. Students engage in learning by taking responsibility for their own learning. Earlier, students felt anxious because they had a fear of making mistakes and receiving punishment but games have helped them to reduce anxiety and increase positive feelings. This is a result of no fear of punishment or criticism from peers and teachers (Rahayu, Putri, Zulkardi & Hartono, 2019).

Educational games are most efficient since they allow collaborative learning and stimulating learning. Some games are purposefully designed to motivate or provide an engaging experience. Students interact socially with other students and provide constructive feedback to each other. There is a marked increase sensitivity in students towards their environment as now they are more engaged in conversation



with students of different schools (Kayali, Fares & Schwarz, Vera & Purgathofer, Peter & Götzenbrucker, Gerit,2018). Fujimoto 2017 (as cited in Fujimoto, Shigeta & Fukuyama) states that games as a motivation for learning, help students to get mastery in a particular area. There is a significant decrease in interest in conventional learning. The students create a self-learning environment by trial and error method that enables learning in a safe environment DGBL allows students to practice individually.

Rockwell & Gouglas, (2019) studied the role of locative games. They concluded that a combination of intrinsic with extrinsic motivation helps in catering their interest. Locative games promote discovery learning. It engages participants with more interest and also inspires creativity. Game-based learning also termed as 'adapting learning' as games can adapt to the learners according to their level and preferences and therefore get more attention. Game-based learning is also influenced by Felder-Silverman classification, perception, input, processing, and organization of information. This study also tries to find out the learning gain and motivation in mathematics games (proportional reasoning) and found that the students with prior knowledge learn better from the game rather than students with no prior knowledge have a decline in their performance. Students who can actively process performed better than students with reflective processing (Wouters & Meulen, 2020).

As an indispensable part of modern education, Game-based learning has shifted focus from learning with lectures and written tasks to learning with games. But it is also true that the role of the teacher in game-based learning contributes to the current understanding of the domains and engages students to enhance the learning experience.

Teachers must choose games which balance the fun elements with learning. Therefore, the teachers require academic content should be added to specific games. Teachers should help the students by providing them guidance when needed, maintain rules for students while ensuring that students follow them and maintain a respectful environment (Perrotta, 2013). Earlier a traditional teacher assumed high degrees of and personal contacts with learners. However, as technology enters the classroom, it also changes the role of the learner as wells as of the teacher. Technology in the classroom, also welcomes mentors, workspace trainers, specialists that create opportunities for students to explore more affordably and comfortably. Teacher's job





is only to provide a flexible setting for learning. Thus, DGBL demands that teachers have a well-developed skill set for future teaching (Oliver, 2018).

Montrieux, H., Vanderlinde, R., Schellens, T., & De Marez, L (2015) studied the impact of tablet devices on teaching and learning processes in the classroom setting. They found that teachers enjoyed more authority over students using digital game-based learning than traditional classrooms. Earlier, much time was wasted on organising content compatible with the learner. More time was spent in checking notebooks or collecting/ distribute notebooks but now students have to follow the teacher's instruction for digital game-based learning on the tablet and they get digitalized feedback immediately. This allows the teacher and the students to share individualized learning and be closer. Tablets shift their learning to 'learning by heart' that include learning with multimedia, social media and integration of the personal world of the students.

Students pointed to the teacher's role as the provider of factual information and rules about the games. The teacher helps in communicating with other students by choosing appropriate characters, and appropriate voices. Also, the teacher helps and provides support as a mediator. Feedbacks also incorporate the personal development of each student (Greenberg, 2019).

Students acquire knowledge and skills not only to merely practise it but also to become an individual who thinks rationally, makes decisions on time, reacts purposefully in each situation and are trained for life-long learning. Educational purposes should be more creative, contemporary and updated as new generations. Games should be an integral part of learning as they motivate students to learn and retain (Divjak and Tomić, 2011).

Hamari and Nousiainen, (2015) analysed individual and institutional factors that affect ICT readiness which impacts teacher's selection of game-based learning. They found that teacher's adoption of openness towards ICT, ICT attitude, ICT compatibility with teaching positively influenced the perceived value, supportive organisation ICT culture, ICT self-efficiency and ICT compatibility with teaching positively influence Game-based learning.

Game-based learning is an essential part of education where games are tools, through which teachers instruct direction of learning, discussion and debrief and



support in the construction of social learning culture. Before the game, the teacher must ensure that the objective of the game is clear to the students and students, each game should not have an entire educational goal but with only an end goal of playing. It should be timed a lot as per the need of the individual student, separate time for any kind of technical issues. The game should endorse students to guide/ lead/ train others, while technical staff should also help the teacher while encouraging a larger culture of collaborative learning among peers (Groff, Howells, and Cranmer, 2012).

Fujimoto 2017 (as cited in Fujimoto, Shigeta & Fukuyama) states teacher should be concerned that games shouldn't make it difficult to control the classroom, winning the game is not be an only priority rather it is learning. Facilities shouldn't bound students to learn and tends should be evaluated against games for entertainment. Teachers should plan 'Embedded Assessment' to assess students while engaged in the process of learning.

Molin (2017), studied the role of the teacher as an agent in digital game-based learning. Game-based learning can be used to engage students in learning, and empower students. Game-based learning also creates opportunities for teachers to empower them, by giving a sense of ownership of teaching and learning. Magerko (2010) states that teachers should focus on four main factors for real-world educational experiences; content should be adapted for each individual's learning and playing style, evaluation should not be rigorous which not only stops the learning but gives a chance to improve learning, games could be modified easily if needed, and lastly games should be appropriate as per the new domains of teaching.

Digital game-based learning is effective for teachers and students because it helps in creating a healthy environment to teach and learn new skills, concepts as well as decreases cognitive pressure. ICT curriculum can not be implemented in primary classes but should be integrated with the curriculum, digital games can be a tool to enhance ICT skills, as mentioned above the skills such as problem-solving, higher-order thinking, critical thinking, reasoning, etc are enhanced when digital games are included in the classroom.



Theme wise mapping of Digital Games



Several Free and Open Source Software (FOSS) digital game packages like GCompris, Tux math and eduActiv8 were identified and the games were mapped according to the themes in NCERT Curriculum. 103 activities from GCompris, 192 activities from eduActive8 and 58 activities from Tux maths from the identified activities are mapped here with learning outcomes and description of the games.

ENGLISH



Theme : Listening



Name of the Game	Game Path	Learning Outcome	Description
Word Matchers (Listening Exercises): Nature	Open eduActiv8-first option-word matchers (listening exercise)-nature	Listening and responding orally	Match sounds to words. Click on any one of the speaker signs, hear the word carefully, then click on the corresponding written word to make a match.
Word Builders (Listening Exercises): Nature	Open eduActiv8-first option-word builders (listening exercise) option 6-nature	Listen and write the correct spelling	Listen to the word and fill in the missing letters to complete the written version of that word by dragging and dropping the missing letters, choosing from the letters provided at the bottom of the screen.
Word Matchers (Listening Exercises): Body	Open eduActiv8-first option-word matchers (listening exercise)-body	Listening and responding orally	Match sounds to words. Click on any one of the speaker signs, Listen to the word carefully, then click on the corresponding written word to make a match.

Name of the Game	Game Path	Learning Outcome	Description
Word Matchers (Listening Exercises): Clothes and Accessories	Open eduActiv8-first option-word matchers (listening exercise)-clothes and accessories	Listening and responding orally	Match sounds to words. Click on any one of the speaker signs, Listen to the word carefully, then click on the corresponding written word to make a match.
Word Builders (Listening Exercises): Body	Open eduActiv8-first option-word builders (listening exercise)-body	Listen and write the correct spelling	Listen to the word and fill in the missing letters to complete the written version of that word by dragging and dropping the missing letters, choosing from the letters provided at the bottom of the screen.
Word Builders (Listening Exercises): Clothes and Accessories	Open eduActiv8-first option-word builders (listening exercise)-body	Listen and write the correct spelling	Listen to the word and fill in the missing letters to complete the written version of that word by dragging and dropping the missing letters, choose from the letters provided at the bottom of the screen.
Word Matchers: Nature	Open eduActiv8-first option-word matchers-nature	Identification of the picture and matching with the correct word	Match images to words. Click on any one of the images given in the left half of the screen. Then click on the name corresponding to the image, choosing from those provided in the right half of the screen, to make a match.

Name of the Game	Game Path	Learning Outcome	Description
Word Builders (Listening Exercises): Fruits and Vegetables	Open eduActiv8-First circle (book icon)-word builders listening exercise-fruits and vegetables	Identification of fruits and vegetables recognises letters and their sound A-Z, listens to sounds and try to build the unknown spellings, the pronunciation of words will be improved.	Listen to the word and fill in the missing letters to complete the written version of the word by dragging and dropping the missing letters from the letters provided at the bottom of the screen.
Word Matchers (Listening Exercises): Fruits and Vegetables	Open eduActiv8-First circle (book icon)-word matchers listening exercise-fruits and vegetables	Identification of fruits and vegetables recognises words and their sounds, improved spellings i.e. fewer errors, the recapitulation of known spellings, improvement in concentration level.	Match sounds to words. Click on any one of the speaker signs, Listen to the word carefully, then click on the corresponding written word to make a match.

Name of the Game	Game Path	Learning Outcome	Description
Word Matchers (Listening Exercises): Action	Open eduActiv8-first option-word matchers (listening exercise)-action	Enhancing listening skills and association of sounds with words	Match sounds to words. Click on any one of the speaker signs, Listen to the word carefully, then click on the corresponding written word to make a match.
Word Builders (Listening Exercises): Action	Open eduActiv8-first option-word builders (listening exercise)-action	Enhancement of vocabulary, listening skill, and learning action words.	Listen to the word and fill in the missing letters to complete the written version of the word by dragging and dropping the missing letters, choosing from the letters provided at the bottom of the screen. If in the answer, the spelling is wrong then it will show the errors by reflecting the symbols 'right' 'wrong' in the boxes. After that, the user can correct the word by dragging the wrong alphabets to their right positions.
Word Matchers (Listening Exercises): People	Open eduActiv8-first option-word matchers(listening exercise)-people	Listen and choose the correct option	Match sounds to words. Click on any one of the speaker signs, Listen to the word carefully, then click on the corresponding written word to make a match.

Name of the Game	Game Path	Learning Outcome	Description
Word Matchers (Listening Exercises): Transport	eduactiv8/first option/word matchers (listening exercise)/transport	Can read, identify and associate the audio spelling and pictures with each other, can spell the modes of transport correctly, can use the vocabulary in day to day life	The child has to match the pronunciation in the audio of different mode of transport name on the left side with different modes of transport's name in the words given on the right side if the correct audio and name is matched the photo of the mode of transport appears which when press audio can still be heard.
Enrich Your Vocabulary (Nature)	Educational Suite GCompris-go-to reading activities-language learning activities-enrich your vocabulary-nature category	Enhance Listening skill, eye-hand-ear coordination, associate objects with pictures, identifying sounds related to objects, Remember and recall pictures related to words categorised in headers- animals, fruits, nature, plant and vegetables	Various pictures have been given, on the screen with their categorisation at the top and their names at the bottom. Listen to pronunciation carefully. Next, the screen displays the name of an object, from the given options. In later levels, listen to the sound and identify what is being said and write the word you Listen to. Take the help from 'Hints' if needed.

Name of the Game	Game Path	Learning Outcome	Description
Word Builders (Listening Exercises): People	Open eduActiv8-first option-word builders (listening exercise)-people	Listen and fill in the correct spelling	Listen to the word and fill in the missing letters to complete the written version of that word by dragging and dropping the missing letters, choosing from the letters provided at the bottom of the screen.
Enrich Your Vocabulary (Object)	Educational Suite GCompris-go-to reading activities-language learning activities-enrich your vocabulary-object category	Enhance Listening skill, eye-hand-ear coordination, associate objects with pictures, Identifying sounds, Remember and recall pictures related to words categorised in headers- Construction, furniture, tool, actions, describing words,	Various pictures have been given with their categorisation at the top and their names at the bottom. Listen to pronunciation carefully. Next, the screen displays the name of an object, choose from the given options. In later levels, Listen to the sound and identify what is being said and write the word you hear. take the help from 'Hints' if needed.

Name of the Game	Game Path	Learning Outcome	Description
Enrich Your Vocabulary (Other)	Educational Suite GCompris-go to reading activities-language learning activities-enrich your vocabulary-other category	Enhance Listening skill, eye-hand-ear coordination, associate objects with pictures, Identifies describing words as Adjectives, identify similar-sounding words, uses words related to other subjects like Maths, EVS, identify pictures associated with words	Various pictures have been given with their categorisation at the top and their names at the bottom. Listen to pronunciation carefully. Next, the screen displays the name of an object, choose from the given options. In later levels, Listen to the sound and identify what is being said and write the word you Listen to. Take the help from 'Hints' if needed.
Click On A Lowercase Letter	Educational Suite GCompris-go to reading activities-click on a lowercase letter	Sound identification, Prompt response, Recognise letters and their sounds, Formation of lower case letters	The screen displays a train with lowercase letters written on it. The user has to click on the letter that they hear. The number of letters keeps on increasing as the level progresses.

Name of the Game	Game Path	Learning Outcome	Description
Enrich Your Vocabulary (People)	Educational Suite GCompris-go to reading activities-language learning activities-enrich your vocabulary-people category	Enhance Listening skill, eye-hand-ear coordination, associate objects with pictures, Identifying sounds, Remember and recall pictures related to words categorised in headers- clothes, body parts, food, sport, emotion	Various pictures have been given with their categorisation at the top and their names at the bottom. Listen to pronunciation carefully. Next, the screen displays the name of an object, choose from the given options. In later levels, Listen to the sound and identify what is being said and write the word you Listen to. Take the help from 'Hints' if needed.
Click On An Uppercase Letter	Educational Suite GCompris-go to reading activities-click on an uppercase letter	Sound identification, Prompt response, Recognise letters and their sounds, Formation of upper case letters, differentiate between uppercase and lowercase letters	The screen displays a train with uppercase letters written on it. Click on the letter that you hear. The number of letters keeps on increasing as the level progresses.

Name of the Game	Game Path	Learning Outcome	Description
Go To Memory Activity	Educational Suite GCompris-go to discovery activity-go to memory activities-go to an audio memory game	Enhancing Listening Skills, Recognising And Comparing Different Sounds	Click on TUX the violinist and listen to find the matching sounds from the shown set of violinist Tux. Each Tux has an associated sound, and each sound has a twin Click on a Tux to see its hidden sound and try to match the twins. Users can activate only two Tux at one time, so they need to remember where a sound is, while they are listening to its twin. When the user turns over the twins, both disappear.
Go To Memory Activity	Educational Suite GCompris-go to discovery activity-go to memory activities-go to audio memory game against tux	Recognise and Compare Different Sounds	Play the audio memory game against TUX. A set of violinist Tux is shown. Each Tux has an associated sound, and each sound has a twin. Click on a Tux to see its hidden sound, and try to catch the twins. Users can activate only two Tux at one time, so they need to remember where a sound is, while they listen to its twin. When the player turns over the twins, both disappear.

Name of the Game	Game Path	Learning Outcome	Description
Go To Memory Activity	Educational Suite GCompris-go to discovery activity-go to memory activities-go to memory game with images, against tux	Recognise and Compare Different Sounds	A set of cards is given. Find the cards that have the same image hidden behind them. How? By clicking? Explain. Once you twin, they disappear from the screen. The number of cards increases as the level progresses.

Theme : Reading



Name of the Game	Game Path	Learning Outcome	Description
Word Matchers: Body	Open eduActiv8-first option-word matchers-body	Identification of the picture and matching with the correct word	Match images to words. Click on any one of the images given in the left half of the screen Then click on the name corresponding to the image, provided in the right half of the screen, to make a match.
Word Matchers: Clothes And Accessories	Open eduActiv8-first option-word matchers-clothes and accessories	Identification of the picture and matching with the correct word	Match images to words. Click on any one of the images given in the left half of the screen. Then click on the name corresponding to the image, provided in the right half of the screen, to make a match.
Word Matchers: People	Open eduActiv8-first option-word matchers-people	Identification of the picture and matching with the correct word	Match images to words. Click on any one of the images given in the left half of the screen. Then click on the name corresponding to the image, provided in the right half of the screen, to make a match.

Name of the Game	Game Path	Learning Outcome	Description
Learn New Words: People	Open eduActiv8-first option-learn new words-people	Associate words with pictures and correlate the relations with their real-life	The screen displays a picture The word related to the picture is written at the bottom. This activity contains pictures and terms used for individuals as well as for the relationships among them. Two buttons are shown on the screen, one for moving to the next word, after you have learnt the name of the relationship. The other is for going back if you want to visit the previous one.
Horizontal Reading Practice	Educational Suite GCompris-go to reading activities-horizontal reading practice	Reading and responding, Identify the correct word from a set of words, Can read, comprehend, remember and recall the moving words. Improve memory.	A word is shown in blue on the board on the right side of the screen. A list of words appears and disappears horizontally on the left board. Look carefully and answer if you have or haven't seen the word. The speed of appearance and disappearance increases as the level progresses.

Name of the Game	Game Path	Learning Outcome	Description
Word Builders (Complete The Words): People	Open eduActiv8-first option-word builders-people	Identification of relations, enhancement of vocabulary	The activity contains a picture and the word related to that picture is written at the bottom with a few letters missing from it. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the word and then complete it by clicking and dragging the letters in the right order to the empty boxes. As the level advances, more and more missing letters will be introduced until you have to make the whole word by yourself.
Simple Letter	Educational Suite GCompris-discover Computer-keyboard manipulation boards-simple Letter	Identification of alphabets(both uppercase and lowercase) and numbers, Hand-Ear-Eye coordination	The game is to type the falling letters (capital and small) as well as digits before they reach the ground. As the levels are crossed, the difficulty level increases as a mix of small, capital and digits all fall together.

Name of the Game	Game Path	Learning Outcome	Description
Vertical Reading Practice	Educational Suite GCompris-go to reading activities-vertical reading practice	Reading and responding, Identify the correct word from a set of words, Remember and recall the word appearing vertically.	A word is shown in blue on the board on the right side of the screen. A list of words appears and disappears vertically on the left board. Look carefully and answer if you have or haven't seen the word. The speed of appearance and disappearance increases as the level progresses.
Image Name	Educational Suite GCompris-go to reading activities-image Name	Relate the words with their pictures, learn about the functions of a mouse	A few pictures of items are given vertically on the left side of the screen. Drag and drop the items onto their names.
Reading Practice	Educational Suite GCompris-go to reading the activities-reading practice	Association of words with pictures and name of the familiar pictures.	Some pictures are given with several options. Click on the word that matches the picture.

Name of the Game	Game Path	Learning Outcome	Description
Missing Letter	Educational Suite GCompris-go to reading activities- missing Letter	Enhances reading and writing skills, Improves vocabulary, Can spell the word orally or on paper.	Choose the missing letter to complete the word related to the picture given.
The Classic Hangman Game	Educational Suite GCompris-go to reading activities- the classic Hangman Game	Improve Reading and spelling skills, Solve crosswords puzzles, learn new words and their meanings.	A word is hidden in the blanks. Discover it by first placing all possible vowels. Then use the consonants to fill up the remaining places.
Make The Ball Go To Tux	Educational Suite GCompris-discover Computer-keyboard manipulation boards-make the ball go to tux	Learns to position the Shift keys on the keyboard, Hand-eye coordination	Go through the levels by sending the ball to Tux by pressing both the shift keys on the keyboard at the same time

Theme : Writing



Name of the Game	Game path	Learning Outcome	Description	Subjects
Learn To Write	Open eduActiv8- first Option- discover Letters- learn to Write	Learn to trace alphabets in upper and lower case in cursive and numbers 1 -12, command on mouse dragging	Trace letters and numbers click on the letter or number you want to trace. Then choose the colour in which you want to trace that letter. Then trace the alphabet or number by dragging the mouse.	
Learn To Write	Open eduActiv8- first option- discover letters- learn to write	Learn to write alphabets in upper and lower case and numbers 1 -12	Trace letters and numbers. Click on the Letter or Number you want to trace. The numbers and letters to be traced are in Standard font.	
Sorting Letters (Lowercase Letters)	Open eduActiv8- first option- discover letters- sorting letters	Arrange the letters in correct alphabetical order	Rearrange the letters so that they are in alphabetical order. Click and drag the letters to drop them in the empty boxes, to arrange them.	

Name of the Game	Game path	Learning Outcome	Description	Subjects
Complete The Abc (Lower Case Letters)	Open eduActiv8-first option-discover letters-complete ABC	Ability to choose the correct word, able to write the alphabet in alphabetical order	In the first line, some letters are missing. In the second line, these letters (answer) are given. Each letter has to be dragged and put in the right place to get a green tick. Fill in the boxes with the correct letters, click on the letters and drag it using the mouse to fill the blank space.	
Complete The Abc (Uppercase Letters)	Open eduActiv8-first option-discover letters-complete ABC	Ability to choose the correct word, Able to choose the correct alphabet to write in alphabetical order	In the first line, some letters are missing. In the second line, the missing letters (answer) are given. The missing letter has to be dragged and put in the right place to get a green tick. Fill in the boxes with correct letters, click on the letter and drag it with the mouse to fill the blank space	

Name of the Game

Word Maze

Game path

Open eduActiv8-first circle (Book icon)-discover letter icon-word Mazes

Learning Outcome

Identification of letters, word building, developing command of operating mouse i.e. up, down right and left, developing interest for the language, spellings, vocabulary enhancement.

Description

The activity contains a maze with a word in the middle of it and a beetle lying alongside the word. The letters that make up the word are scattered throughout the maze. Instruct the students to click on the Beetle and navigate through the Maze to drag it to each letter, in the right order, to complete the word.

Subjects

Word Number Memory Game

GCompris-go to reading activities-word number memory game

Integration of language and mathematical aspect, Remember and recall the cards seen and matching them accordingly.

Some cards are given to the players with letters and numbers. The contents of the cards are hidden. Students have to match the numbers with the words.

English / Maths

Name of the Game	Game path	Learning Outcome	Description	Subjects
Word Maze + 4	Open eduActiv8-first circle (Book icon)-discover letter icon-word Mazes + 4	Recognise letters and their sounds, developing command in operating the mouse i.e. up, down right and left, developing interest for the language, spellings, vocabulary enhancement.	The activity contains a maze with a word in the middle of it and a beetle lying alongside the word. Several other beetles are roaming around the maze. The letters making up the word are scattered throughout the maze. Instruct the students to click on the Beetle and navigate the beetle through the Maze to drag it to each letter, in the right order, to complete the word.	
Reading Practice	Educational Suite GCompris-go to reading activities-reading practice	Association of words with pictures and name familiar pictures.	Some pictures are given with several options. Click on the word matching with the picture.	

Name of the Game	Game path	Learning Outcome	Description	Subjects
Missing Letter	Educational Suite GCompris-go to reading activities-missing Letter	Enhances reading and writing skills, Improves vocabulary, Can spell the word orally or on paper.	Choose a letter to complete the word related to the picture given.	
Your Word Processor	Educational Suite GCompris-go to amusement activities-your Word Processor	Spellings, Vocabulary, Sentence Formation	The programme can be used as a word processor to create documents. There are options to put titles, headings and also hyperlinks. The created document can also be saved.	
The Classic Hangman Game	Educational Suite GCompris-go to reading activities-the classic Hangman Game	Improve Reading and spelling skills, Solve crosswords puzzles, learn new words and their meanings.	A word is hidden in the blanks. Discover it by first by placing all possible vowels. Then use the consonants to fill in the remaining places.	

Theme : Vocabulary



Name of the Game	Game path	Learning Outcome	Description
Learn New Words: Body	Open eduActiv8-first option-learn new words-body	Associates words with pictures, enhancement of vocabulary	The screen displays the picture of a body part and its name at the bottom. There are two buttons, one for moving to the next word, once you have learnt the name of the part and one for going back if you want to visit the previous one.
Word Builders (Complete the Words): Clothes and Accessories	Open eduActiv8-first option-word builders-clothes and accessories	Identification of clothes and accessories, enhancement of vocabulary	The activity contains a picture of an item of clothing/accessory and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the clothing item/accessory and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more missing letters will be introduced, until then you have to make the whole word by yourself.

Name of the Game	Game path	Learning Outcome	Description
Word Builders (Complete the Words): Body	Open eduActiv8-first option-word builders-body	Identification of body parts, enhancement of vocabulary	The activity contains a picture of a body part and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the part and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more missing letters will be introduced until you have to make the whole word by yourself.
Learn New Words: Clothes and Accessories	Open eduActiv8-first option-learn new words-clothes and accessories	Associates words with pictures, enhancement of vocabulary	The screen has a picture of an item of clothing / accessory and its name at the bottom. Two buttons are shown on the screen, one for moving to the next word after you have learnt the name of that item of clothing/accessory, and the other is for going back if you want to visit the previous one.

MATHEMATICS



Name of the Game	Game path	Learning Outcome	Description
Number Typing	Tux maths	Identification of numbers (1 digit)	This game is time-based. Use a keyboard to type the numbers you see in the falling asteroids. As you type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Memory	Open eduActiv8-third option-memory-photographic memory	Identifies the number and visualises and memories it	Click the numbers in the order they blink. Look at the blinking number. Click on the numbers following the same order they were blinked before. The speed increases as the level progresses.
Memory	Open eduActiv8-third option-memory-match Numbers	Identifies the numbers and matches it	Match the numbers which are hiding behind the bear by clicking on them. A set of cards are given. Find and twin the cards that have the same number hidden behind them. The number of cards increases as the level progresses.

Name of the Game	Game path	Learning Outcome	Description
Temperature	Open eduActiv8-numbers-negative numbers-basics-temperature	Explores negative numbers.	Instruct the children to drag the mouse up and down to observe positive and negative numbers.
Even Or Odd	Open eduActiv8-numbers-negative numbers-basics-even or odd	Sorts numbers as even or odd.	Two boxes termed Even and Odd are given. The upper box named 'Even' is empty while the bottom box, 'Odd', holds an assortment of numbers. Hold and drag the even numbers from the odd box to the even one. When these two types of numbers are divided properly, click the OK sign at the top left corner of the screen to submit the activity. As soon as it is submitted, the screen will start reflecting green tick signs on the right answers and red crosses on the wrong ones.
Count The Items	GCompris-mathematics-numeration-count the items	Learn to count	Count the items showing on the screen and write the number in the box given using a keyboard.

Name of the Game	Game path	Learning Outcome	Description
Sorting Numbers	Open eduActiv8-numbers-negativesorting numbers	Works with three-digit numbers – reads and writes numbers up to 999 (both negative and positive numbers) and sorts numbers in ascending order.	Rearrange the numbers so they are in ascending order. Hold and drag the numbers into the empty boxes to arrange them.
Number Comparison	Open eduActiv8-numbers-negatives-number comparison	Compares numbers up to 9999 for their value (both positive and negative numbers)	Drag the slider up and down so that the right sign is in the square and then click the green OK sign at the top left corner of the screen to submit and verify your answers.
Enumeration Memory Game	GCompris-mathematics-numeration-enumeration memory game	Learn to identify the numbers by doing calculations	There are some cards. Each card is hiding several pictures/written numbers. You have to match the card with the same number of pictures and written numbers on it. As the level increased, the number of cards also increased.

Name of the Game

Game path

Learning Outcome

Description

Number with Pair Of Dice	GCompris-mathematics-numeration-numbers with a pair of dice	Learn to count	It's a time-based activity, count the number of dots at the upper face of falling dice. Type that number with the help of a keyboard.
The Magician Hat	GCompris-mathematics-numeration-the magicians hat	Learn to subtract one-digit number	Click on the hat to open it. Under the hat, how many stars can you see moving around? count carefully. Click on the button to validate your answer.
The Magician Hat	GCompris-mathematics-numeration-the magician hat	Learn to add the one-digit number	Click on the hat to open it. Under the hat, how many stars can you see moving around? count carefully. Click on the button to validate your answer.
Numbers In Order	GCompris-mathematics-numeration-numbers in order	Learn to put numbers in order	Catch the numbers in increasing order, using the up, down, right and left arrows on the keyboard to move the helicopter.

Name of the Game	Game path	Learning Outcome	Description
Equal Number Munchers	GCompris-mathematics-calculation activities-number muncher activities-equal number muncher	Give expression to equal the number	Guide the number muncher to the expression that is equal to the number at the top of the screen. Use the arrow keys to navigate around the board and to avoid the toggles. Press the spacebar to eat the number.
Inequality Number Munchers	GCompris-mathematics-calculation activities-number muncher activities-inequality number muncher	Give the expressions that do not equal the number	Guide the number Muncher to the expressions that do not equal the number at the top of the screen. Use the arrow keys to navigate around the board and to avoid the toggles. Press the spacebar to eat the number.
Miscellaneous Activities	Educational Suite GCompris-go to discovery activity-go to miscellaneous-go to double-entry table	Get to know about classification and about numbers	Just drag and drop the items in the boxes based on their number {i.e, how many they are}.

Name of the Game	Game path	Learning Outcome	Description
Numbers With Dice	Educational Suite GCompris, Discover Computer, Keyboard manipulation boards, Numbers with Dice	Hand-eye coordination, Identify the keys on the keyboard	The game is to count the number of dots on the dice and type the digit before the dice falls on the ground.
The Fifteen Game	Educational Suite GCompris-puzzles-sudoku-the fifteen game	Counting, Arrangement of numbers in increasing order	The game is to arrange numbers in increasing order. Move each item to make an increasing series from the smallest to the largest. Click on any item that has a free block beside it, and it will be wrapped with the empty block.
Practice Subtraction with Fun Game	GCompris-mathematics-numeration-practice subtraction with a fun game	Learn to count	Click on the dice to show how many ice spots there are between Tux and the fish. Click the dice with the right mouse button to count backwards.

Name of the Game	Game path	Learning Outcome	Description
Guess The Number	GComprismathematics-numeration-guess the number	Learn to tell the number between the two-digits	Enter a number in the top right blue entry box. Tux will tell you if your number is higher or lower than the number entered. The distance between Tux and the escape area on the right represents how far you are from the correct answer. If the Tux is over or under the escape area, it means your number is over or under the correct number.

Theme :Numbers (Percentage)



Name of the game	Game path	Learning Outcome	Description
Experiment With Percentages	Open eduActiv8-second Option-percentages-experiment with percentages	Know about the percentages and their concentration in a whole, Distinguish between the percentages, Can learn and use the acquired knowledge in their day to day life.	Percentage in numbers are given alongside their shaded part which indicates its part in a whole.
Match Percentage	Open eduActiv8-second option-Percentages-Match percentage	Solve problems related to the conversion of percentage into Pie- chart, Understand the concept of percentage, Use percentages in day to day Understanding what is bigger and smaller, Show/depict the data in different percentage, Understanding of different kind of angles	There are shaded pie-charts that represent certain percentages. Children have to match the percentage numbers with their related Pie-charts by clicking on the same percentage number and pie chart. Doing that, if correct it will make them fade away with a green tick mark.

Name of the game	Game path	Learning Outcome	Description
Group Percentage Together	Open eduActiv8-second option-percentages-group percentage together	Conversion and grouping percentage into Pie-graph/Fractions/Decimal/Pictorial representation of fractions. Understand the concept of one-fourth, half, one-third etc, Read the fraction, decimal, pictorial representations as a percentage.	Children need to Group percentage numbers with their corresponding/related fractions, decimals, and pictorial representations by dragging and dropping them in front of given percentages.
Percentage In A Pie Chart	Open eduActiv8-second Option-percentages-percentage in a Pie Chart	Visualize and explore percentages, conceptualization about Pie-charts, Representing percentages as Pie-chart, Making conclusions from the pictorial representations, Understand that percentages are part of the whole and together they make a whole.	A pie-chart is shaded with different colours representing some percentages. On the right side, some percentages are given at the top. Drag and drop them in the front of the colour they're representing.

Theme :Numbers (Subtraction)



Name of the game	Game path	Learning Outcome	Description
Subtraction: 0 to 10	Tux maths	Will be able to subtract one-digit number	This game is a time -based game. Use a keyboard to type the subtraction of numbers you see in the falling asteroids. As you type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Subtraction: 0 to 20	Tux maths	Will be able to subtract one and two-digit numbers	This game is time-based. Use a keyboard to type the Subtraction of numbers you see in the falling asteroids. As you type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Subtraction: the two-digits Numbers	Tux maths	Will be able to subtract one and two-digit numbers	This game is time-based. Use a keyboard to type the Subtraction of numbers you see in the falling asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Subtraction of numbers. Practice the Subtraction Operation.	GCompris-mathematics-calculation Activities-algebra activities-practice subtraction Operation	Will be able to subtract one-digit number	A subtraction is displayed on the screen. Quickly find the result and use your computer's keyboard or the screen keypad to type it. You have to be fast and submit the answer before the penguins in their balloon fall into the sea.
Find Solution	Open eduActiv8-numbers-positive numbers-subtraction-find solution	Subtract numbers up to 20 and find the right solution.	Some subtraction problems are given in a column and front of these sums, there is a table displaying the answer to these sums randomly. Instruct the students to solve these sums and then drag the correct answers to the empty boxes in front of each sum. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.

Name of the game**Game path****Learning Outcome****Description**

Find Missing Number	Open eduActiv8-numbers-positive numbers-subtraction-find missing number	Subtract numbers up to 20 and find the missing number.	The activity contains simple subtraction problems. The first number from which the second number is going to be subtracted is given along with the answer to every problem. The second number which is to be added to obtain the given answer is missing from every problem. There is a table next to the sums with the missing numbers randomly provided. Students need to identify which number from this table completes which problem correctly and then drag that number into the empty box in the middle of that particular sum. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.
Plus or Minus	Open eduActiv8-numbers-positive numbers-subtraction-plus or minus	Analyze and apply an appropriate number operation in the situation/context.	Drag the slider up and down so that the right sign is in the square and then click the green OK sign at the top left corner of the screen to submit and verify your answers.

Name of the game	Game path	Learning Outcome	Description
Maths Matching Game	Open eduActiv8-numbers-positive numbers-subtraction-maths matching name	Subtract numbers up to 20 and match with the right answer.	The activity contains subtraction sums as well as their jumbled up answers on the screen. The students need to figure out the answers of each of these sums separately, then, click first on the sum and then on its answer to make a match. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.
Practice Subtraction with Fun Game	GCompris-mathematics-numeration-practice subtraction with a fun game	Learn to count	Click on the dice to show how many ice spots there are between Tux and the fish. Click the dice with the right mouse button to count backwards.

Name of the game	Game path	Learning Outcome	Description
Columnar Subtraction (Demonstration/practice)	Open eduActiv8-numbers-positive numbers-subtraction-columnar subtraction (option 1)	Solved sums on subtraction with and without regrouping (borrowing) numbers not exceeding 9999.	The activity contains 3-4 digit columnar subtraction problems. To solve a problem click on the box at the bottom of the rightmost column first, type your answer and if the number at the top is smaller than the number at the bottom of that column you can borrow 10 from the next column to your left by clicking at the small box with a minus sign at the top of the column that you are borrowing from and typing one (as your borrowing 1 from that column). A 10 will automatically appear on the small box with a plus sign at the top of the column that you are borrowing for, then you can go ahead and solve the problem by adding 10 to the first number and subtracting the now smaller bottom unit from it. If there is no need to borrow, you can simply click on the empty box at the bottom of each column and fill in your answer. When you are done with all the columns of one sum, click on the green OK sign at the top left corner to submit and verify your answer.



Name of the game	Game path	Learning Outcome	Description
Addition: 1 to 3	Tux maths	Learns to add 0 to 9	This game is time-based. Use a keyboard to type the addition of numbers you see in the falling asteroids. As you type, the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Addition : 0 to 5	Tux maths	Learns to add 0 to 9	This game is time-based. Use a keyboard to type the addition of numbers you see in the falling asteroids. As you type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Addition: Sums to 10	Tux maths	Learns to add 0 to 9	This game is time-based. Use a keyboard to type the addition of numbers you see in the falling asteroids. As you type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Find Solution	Open the eduActiv8-numbers-positive numbers-addition-find solution	Learn to add number up to 20	Some additional problems are given in a column and in front of these sums, there is a table displaying the answer to these sums randomly. Instruct the students to solve these sums and then drag the correct answers to the empty boxes in front of each sum. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.
Addition: Sums to 15	Tux maths	Learns to add 0 to 15	This game is time-based. Use a keyboard to type the addition of numbers you see in the falling asteroids. As you type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Addition: Sums to 20	Tux maths	Learns to add 0 to 20	This game is time-based. Use a keyboard to type the addition of numbers you see in the falling asteroids. As you type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Adding Two-Digit Numbers	Tux maths	Learns to add two-digit numbers	This game is time-based. Use a keyboard to type the addition of numbers you see in the falling asteroids. As you type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Addition: Missing Numbers	Tux maths	Learns to add two-digit numbers	This game is time-based. Use a keyboard to type the missing number you see in the falling asteroids. You can use subtraction/addition to find the missing number. As you type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Maths Matching Game	Open eduActiv8-numbers-positive numbers-addition-maths matching game	Adds numbers up to 20 and matches with the right answer.	The activity contains additional sums as well as their jumbled up answers on the screen. The students need to figure out the answers of each of these sums separately, then, click first on the sum and then on its answer to make a match. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.

Name of the game	Game path	Learning Outcome	Description
Find Missing Number	Open eduActiv8-numbers-positive numbers-addition-find missing number	Adds-Subtracts numbers up to 20 and finds the missing number.	The activity contains simple addition problems. The first number to be added is given along with the answer to every problem. The second number which is to be added to obtain the given answer is missing from every problem. There is a table next to the sums with the missing numbers randomly provided. Students need to identify which number from this table completes which problem correctly and then drag that number into the empty box in the middle of that particular sum. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.
Plus Or Minus	Open eduActiv8-numbers-positive numbers-addition-plus or minus	Analyses and applies an appropriate sign in the situation-context.	Drag the slider up and down so that the right sign is in the square and then click the green OK sign at the top left corner of the screen to submit and verify your answers.

Name of the game	Game path	Learning Outcome	Description
Columnar Addition (Demonstration/ Practice)	Open eduActiv8-numbers-positive numbers-addition-columnar addition	Solves sums on addition with and without regrouping numbers not exceeding 9999.	The activity contains 3-4 digit columnar addition problems. To solve a problem click on the box at the bottom of the rightmost column first, type your answer and if there is a number left to be carried over, click on the carry box at the top of the next column to the left. Again, type the number to be carried then move to the box at the bottom of the same column, add the two numbers to be added as well as the carried over the number, type your answer, then move to the next column to your left. If there is nothing to carry over, simply go to the bottom box of every column and type your answer. When you are done with all the columns of one sum, click on the green OK sign at the top left corner to submit and verify your answer.
Addition Of Numbers	GCompris-mathematics-calculation activities-algebra activities-practice addition operation	Able to add one-digit number	An addition is displayed on the screen. Students need to quickly find the result and use their computer's keyboard or the on-screen keypad to type it. They have to be fast and submit the answer before the penguins land in their balloon.

Name of the game	Game path	Learning Outcome	Description
Addition Memory Game	GCompris-mathematics-calculation activities-mathematics memory activities-addition memory game	Addition of a one-digit number	Students can see some cards, but they can't see what's on the other side of them. Each card is hiding an adding-up sum or the answer to the sum. Add until all cards are gone.
Practice Addition with a Target Game	GCompris-mathematics-calculation activities-practice addition with a target game	Learns addition	Instruct the students to throw the darts at the target and count their score. when all their darts are thrown, ask them to count their score. Enter the score with the keyboard. As levels increased, the number of darts and numbers on board also increased.

Theme :Numbers (Division)



Name of the game	Game path	Learning Outcome	Description
Division by 2	Tux maths	Learns to divide by 2	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division by 3	Tux maths	Learns to divide by 3	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division by 4	Tux maths	Learn to divide by 4	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Division by 5	Tux maths	Learn to divide by 5	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division: 1 to 5	Tux maths	Learn to divide by 1 to 5	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division by 6	Tux maths	Learns to divide by 6	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division by 7	Tux maths	Learns to divide by 7	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Division by 8	Tux maths	Learns to divide by 8	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division by 9	Tux maths	Learns to divide by 9	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division by 10	Tux maths	Learns to divide by 10	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division: 1 to 10	Tux maths	Learns to divide from 1 to 10	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Division by 11 and 12	Tux maths	Learns to divide by 11 and 12	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division: 1 to 12	Tux maths	Learns to divide from 1 to 12	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division by 13, 14 and 15	Tux maths	Learns to divide by 13, 14 and 15	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division: 1 to 15	Tux maths	Learns to divide from 1 to 15	This game is time-based. Instruct the students to use a keyboard to type the division of numbers you see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Division	Open eduActiv8-numbers-positive numbers-division-division (option 1)	Divides numbers up to 3 digit numbers and finds the quotient.	Some (2, 3 digits) division problems are given in a column and in the front of these sums, there is a table displaying the answer of these sums randomly. Instruct the students to solve these sums, and then drag the correct answers to the empty boxes in front of each sum. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.
Find Solution	Open eduActiv8-numbers-positive numbers-division-find solution	Divide numbers up to 99 and find the right solution.	Some one to three-digit division problems are given in a column and in the front of these sums, there is a table displaying the answer of these sums randomly. Instruct the students to solve these sums and then drag the correct answers to the empty boxes in front of each sum. When they are done with all the sums they will automatically move to the next level.

Name of the game

Game path

Learning Outcome

Description

Find the Missing Number	Open eduActiv8-numbers-positive numbers-division-find the missing number	Divides numbers up to 99 and finds the quotient	The activity contains a simple one or three-digit division to problems. The Dividend is given along with the answer to every problem. The Divisor is missing from every problem. There is a table next to the sums with the missing Divisors randomly provided. Students need to identify which number from this table completes which problem correctly and then drag that number into the empty box in the middle of that particular sum. When they are done with all the sums they will automatically move to the next level.
Maths Matching Game	Open eduActiv8-numbers-positive numbers-division-maths matching game	Explores the meaning of division facts by equal grouping/sharing and finds it by repeated subtraction	The activity contains one to three-digit division sums as well as their jumbled up answers on the screen. The students need to figure out the answers of each of these sums separately, then, click first on the sum and then on its answer to make a match. When they are done with all the sums they will automatically move to the next level.

Name of the game	Game path	Learning Outcome	Description
Division	Open eduActiv8- numbers- positive numbers- division- find Solution	Divide numbers up to 99 and find the right solution. (Both positive and negative numbers)	Some one to two-digit division problems are given in a column and in front of these sums, there is a table displaying the answer to these sums randomly. Instruct the students to solve these sums and then drag the correct answers to the empty boxes in front of each sum. When they are done with all the sums they will automatically move to the next level.
Maths Matching Game	Open eduActiv8- numbers- positive numbers- division- maths matching game	Divide numbers up to 99 and match with the right answer (both positive and negative numbers)	The activity contains one to two digit division sums as well as their jumbled up answers on the screen. The students need to figure out the answers of each of these sums separately, then, click first on the sum and then on its answer to make a match. When they are done with all the sums they will automatically move to the next level.

Name of the game	Game path	Learning Outcome	Description
Find Missing Number	Open eduActiv8- numbers- positive numbers- division- find missing number	Divide numbers up to 99 and find the missing number (Both positive and negative numbers)	The activity contains one to three-digit division problems. The divisor is missing from every problem. There is a table next to the sums with the missing numbers randomly provided. Students need to identify which number from this table completes which problem correctly and then drag that number into the empty box in the middle of that particular sum. When they are done with all the sums they will automatically move to the next level.

Theme : Numbers (Multiplication)



Name of the game	Game path	Learning Outcome	Description
Multiplication 0 to 3	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Multiples of 2	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiples of 3	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiples of 4	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Multiples of 5	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiplication : 0 to 5	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiples of 6	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in the falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Multiples of 7	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiplication: 0 to 7	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiples of 8	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Multiples of 9	Tux maths	Learns multiplication of the one-digit number	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiples of 10	Tux maths	Learns multiplication of the two-digit numbers	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiplication: 0 to 10	Tux maths	Learns multiplication of the two-digit numbers	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Multiples of 11 and 12	Tux maths	Learns multiplication of the two-digit numbers	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiplication: 0 to 12	Tux maths	Learns multiplication of the two-digit numbers	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiples of 13, 14 and 15	Tux maths	Learns multiplication of the two-digit numbers	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Multiplication :0 to 15	Tux maths	Learns multiplication of the two-digit numbers	This game is time-based. Instruct the students to use a keyboard to type the multiplication of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiplication: Missing Numbers	Tux maths	Learns multiplication of the two-digit numbers	This game is time-based. Instruct the students to use a keyboard to type the missing number (to complete multiplication of numbers) they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Addition of Numbers	GCompris-mathematics-calculation activities-practice the multiplication operation	Able to multiply the one-digit number	A multiplication is displayed on the screen. Instruct the students to quickly find the result and use their computer's keyboard or the on-screen keypad to type the product of the numbers. Students have to be fast and submit the answer before the penguins in their balloon land on the ground.

Name of the game	Game path	Learning Outcome	Description
Multiplication Table	Open eduActiv8-numbers-positive numbers-multiplication-multiplication table (option 2)	Constructs and uses the multiplication facts (tables) of 2, 3, 4, 5 etc and finds the product.	The activity contains multiplication tables from two to twelve (higher tables with each advancing level) marking the whole first row as well as the first column. Randomly, any one of the row and column is highlighted and the student needs to look at the box which is at the intersection of these column and row to figure out the answer of multiplication of the numbers at the top of these two rows and column. Then type the answer in the box above the table and hit enter. If the answer is right, another box will be highlighted but if the answer is wrong they will have to figure out the correct answer. Until they get the sum right they won't be able to move to another sum. As soon as the whole table is completed students can move to the next level with added rows and/or columns.
Find Solution	Open eduActiv8-numbers-positive numbers-multiplication-find solution	Multiply numbers up to 9999 and find the right solution (Both positive and negative numbers)	Some one to two digit multiplication problems are given in a column and in front of these sums, there is a table displaying the answer of these sums randomly. Instruct the students to solve these sums and then drag the correct answers to the empty boxes in front of each sum. When they are done with all the sums they will automatically move to the next level.

Name of the game	Game path	Learning Outcome	Description
Multiplication Table	Open eduActiv8-numbers-positive numbers-multiplication-multiplication table	Constructs and uses the multiplication facts (tables) of 2, 3, 4, 5 etc and finds the multiplier	The activity contains multiplication tables from two to twelve (higher tables with each advancing level) marking the whole first row as well as the first column. One multiplication sum is given next to the multiplication table and the multiply and, (, as well as the multiplier row for the same sum, the quantity which is to be multiplied by another) column as well as the multiplier row for the same sum is also highlighted in the table. In the given multiplication sum, only the multiplicand and the answer of the sum is provided, players have to lookup the multiplier from the table and fill it in the given empty box to complete the sum. With advancing level each multiple will be highlighted in both ways, a x b as well as b x a, so they can verify their answer both ways. If the answer is right, another box will be highlighted but if the answer is wrong players will have to figure out the correct answer. Until the players get the sum right they won't be able to move to another sum. As soon as the whole table is completed they will move to the next level with added rows and/or columns. At the final level players only get the sum and they have to complete it without the help of the table.

Name of the game	Game path	Learning Outcome	Description
Multiplication Table (Find the Multiplier)	Open eduActiv8-numbers-positive numbers-multiplication-multiplication table (find the multiplier)	multiplies 2 and 3 digit numbers and finds the right answer.	The activity contains multiplication tables from two to twelve (higher tables with each advancing level) marking the whole first row as well as the first column. Randomly, any one of the row and column is highlighted and the student needs to look at the box which is at the intersection of these columns and row to figure out the answer of multiplication of the numbers at the top of these two rows and columns. Then type the answer in the box adjacent to the table and hit enter. With advancing level each multiple will be highlighted in both ways, a x b as well as b x a, so you can verify your answer both ways. If the answer is right, another box will be highlighted but if the answer is wrong the player will have figured out the correct answer. Until they get the sum right they won't be able to move to another sum. As soon as the whole table is completed the player is moved to the next level with added rows and/or columns.

Name of the game	Game path	Learning Outcome	Description
Find Solution	Open eduActiv8-numbers-positive numbers-multiplication-find solution	Multiplies numbers up to 12 and finds the right solution.	Some multiplication problems are given in a column and in front of these sums, there is a table displaying the answer of these sums randomly. Instruct the students to solve these sums and then drag the correct answers to the empty boxes in front of each sum. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.
Find Missing Number	Open eduActiv8-numbers-positive numbers-multiplication-find missing number	Multiplies numbers up to 12 and finds the product.	The activity contains simple multiplication problems. The first number to be multiplied is given along with the answer to every problem. The second number which is to be multiplied to obtain the given answer is missing from every problem. There is a table next to the sums with the missing numbers randomly provided. Students need to identify which number from this table completes which problem correctly and then drag that number into the empty box in the middle of that particular sum. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.

Name of the game	Game path	Learning Outcome	Description
Maths Matching Game	Open eduActiv8-numbers-positive numbers-multiplication-maths matching game	Multiplies numbers up to 12 and finds the product.	The activity contains one to two-digit multiplication sums as well as their jumbled up answers on the screen. The students need to figure out the answers of each of these sums separately, then, click first on the sum and then on its answer to make a match. When they are done with all the sums they will automatically move to the next level.
Multiple Number Munchers	GComprismathematics-calculation-activities-number muncher activities-multiple number munchers	Gives the expression of multiples of the number	Guide the number muncher to find all the multiples of the number at top of the screen. Use the arrow keys to navigate around the board and to avoid the Troggle. Press the spacebar to eat the number.

Name of the game	Game path	Learning Outcome	Description
Find Missing Number	Open eduActiv8-numbers-positive numbers-multiplication-find missing number	Multiplies numbers up to 9999 and finds the missing number (Both positive and negative numbers)	The activity contains one to three digit multiplication problems. The multiplicand is given along with the answer to every problem. The multiplier is missing from every problem. There is a table next to the sums with the missing numbers randomly provided. Students need to identify which number from this table completes which problem correctly and then drag that number into the empty box in the middle of that particular sum. When they are done with all the sums they will automatically move to the next level.
Maths Matching Game	Open eduActiv8-numbers-positive numbers-multiplication-maths matching game	Multiplies numbers up to 9999 and matches with the right answer (Both positive and negative numbers)	The activity contains one to two digit multiplication sums as well as their jumbled up answers on the screen. The students need to figure out the answers of each of these sums separately, then, click first on the sum and then on its answer to make a match. When they are done with all the sums they will automatically move to the next level.

Name of the game	Game path	Learning Outcome	Description
Long Multiplication (Demonstrate / Practice)	Open eduActiv8-numbers-positive numbers-multiplication-long multiplication	Multiplies 2, 3 and 4 digit numbers Learns the steps for long multiplication	The activity contains 3-4 digit long multiplication problems. To solve a problem click on the box at the bottom of the rightmost column first, instruct the students to type their answer and if there is a number left to be carried over, click on the carry box at the top of the next column to the left. Again, type the number to be carried then move to the box at the bottom of the same column, add the two numbers to be added as well as the carried over number, type the answer, then move to the next column to the left. If there is nothing to carry over, simply go to the bottom box of every column and type the answer. When the player is done with all the columns of one sum, they can click on the green OK sign at the top left corner to submit and verify their answer.

Theme : Numbers (Factors & Multiples)



Name of the game	Game path	Learning Outcome	Description
Factor Number Muncher	GCompris-mathematics-calculation activities-number muncher activities-factor number muncher	Give the expression of all the factors of the number	Guide the number muncher to find all the factors of the number showing at top of the screen. Use the arrow keys to navigate around the board and to avoid Troggle. Press the spacebar to eat the number.
Factoroids	Tux maths	Learn factor and prime numbers	Factorize numbers with your laser beams. To win, the player must destroy all the asteroids. Turn : arrow keys or mouse movement. Thrust : up arrow or right mouse button. Shoot : [Enter], [Space], or left mouse button. Switch Prime Number Gun : [D], [F], or mouse scroll wheel. Activate powerup : [Shift]. Shoot the rocks with their prime factors until they are all destroyed.

Theme : Numbers (Prime numbers)

2,3,
5...

Name of the game	Game path	Learning Outcome	Description
Prime Number Munchers	GCompris-mathematics-calculation activities-number muncher activities-prime number munchers	Able to identify the prime numbers	Guide the number muncher to find the less than or more than prime numbers of the number given at the top of the screen. Use the arrow keys to navigate around the board and to avoid Troggle. Press the spacebar to eat the number.

Theme : Numbers (Fraction)



Name of the game	Game path	Learning Outcome	Description
Experiment with Fractions	Open eduActiv8-numbers-fractions-basics-experiment with fractions	Represents the fractions as half, one fourth and three-fourths by using numbers/ numerals.	A visual representation of a fraction is provided, adjacent to which are two empty boxes on top of one another for numerator and denominator. Students need to calculate the numerator and denominator from the drawing and write it in the given boxes.

Name of the game	Game path	Learning Outcome	Description
What Fraction Is It?	Open eduActiv8-numbers-fractions-basics-what fraction is it?	Represents the fractions as half, one fourth and three-fourths by using numbers/ numerals.	This activity provides students with an opportunity to visualize and explore fractions. A fraction is written in the right half of the screen with an increase and decrease options alongside both the denominator and the numerator. The visual representation of that fraction is also displayed on the left half of the screen, which keeps changing along with the changes made in the fraction using the increase or decrease options.
Match Fractions	Open eduActiv8-numbers-fractions-basics-match fractions	Matches the given fraction with the correct fractional number	The activity contains a fraction in the form of figures as well as numbers (jumbled up answers on the screen). The students need to figure out the answers of each of these sums, then, click first on the figure and then on its answer to make a match. When they are done with all the sums they will automatically move to the next level.
Group Fractions 1,2,3	Open eduActiv8-numbers-fractions-basics-group fractions	Groups Fractions Together as halves, quarters and so on	Match Fraction charts on the right to the ones on the left by dragging and dropping the ones on the left into the appropriate boxes on the right.

Name of the game	Game path	Learning Outcome	Description
Reduce and Expand Fractions	Open eduActiv8-numbers-fractions-Equivalent Fractions-reduce and expand fractions	Shows the equivalence of a fraction with other fractions. Identifies and forms equivalent fractions of a given fraction	Instruct the children to increase the numerator or decrease it and observe the changes happening in the fraction chart.
Match Equivalent Fractions	Open eduActiv8-numbers-fractions-Equivalent Fractions-match equivalent fractions	Shows the equivalence of a fraction with other fractions. Identifies and forms equivalent fractions of a given fraction	The activity contains different figures with equivalent fractions. The students need to figure out the answers of each of these, then, click on each to make a match. When they are done with all the sums they will automatically move to the next level.
Addition	Open eduActiv8-numbers-fractions-Addition	Adds fractions with the same denominator	The activity contains different figures with numerals. The students need to add and figure out the answers of each of these, then, click on each to make a match. When they are done with all the sums they will automatically move to the next level.

Name of the game	Game path	Learning Outcome	Description
Subtraction	Open eduActiv8-numbers-fractions-subtraction	Subtracts fractions with the same denominator	The activity contains different figures with numerals. The students need to subtract and figure out the answers of each of these, then, click on each to make a match. When they are done with all the sums they will automatically move to the next level.
Multiplication	Open eduActiv8-numbers-fractions-multiplication	Multiplies fractions with and without simplifying	The activity contains different figures with fractions. The students need to multiply and figure out the answers to each of these. When they are done with all the sums they will automatically move to the next level.
Division	Open eduActiv8-numbers-fractions-division	Divides fractions with and without simplifying	The activity contains different figures with fractions. The students need to divide and figure out the answers to each of these. When they are done with all the sums they will automatically move to the next level.

Theme : Numbers (Decimal Fraction)



Name of the game	Game path	Learning Outcome	Description
Experiment With Decimal Fractions	Open eduActiv8-numbers-decimal fractions-experiment with decimal fractions	Expresses a given fraction $1/2$, $1/4$, $1/5$ in decimal notation and vice-versa.	This activity provides students with an opportunity to visualize and explore decimal and fractions. A decimal fraction is written in the right half of the screen with an increase and decrease options above and below it, respectively. The visual representation of that fraction is also displayed on the left half of the screen, which keeps changing along with the changes made in the fraction using the increase or decrease options.
What Decimal Fraction Is It?	Open eduActiv8-numbers-decimal fractions-what decimal fraction it is?	Converts fractions into decimals and vice versa.	The activity contains a visual representation of decimals as well as their jumbled up answers on the screen. The students need to figure out the answers of each of these sums separately, then, click first on the sum and then on its answer to make a match. When they are done with all the sums they will automatically move to the next level.

Name of the game	Game path	Learning Outcome	Description
Match Decimals	Open eduActiv8-numbers-decimal fractions-match decimals	Match decimals with correct fractions and vice versa.	The activity contains a visual representation of decimals as well as their jumbled up answers on the screen. The students need to figure out the answers of each of these sums separately, then, click first on the sum and then on its answer to make a match. When they are done with all the sums they will automatically move to the next level.
Compare Decimals And Fractions	Open eduActiv8-numbers-decimal fractions-compare decimals and fractions	Compare fractions and decimals.	The activity contains a visual representation of decimal as well as the representation of fraction on the screen. The students need to figure out the answers of each of these sums separately, then, but the signs ($>$, $<$, $=$). When they are done with all the sums they will automatically move to the next level.



Name of the game	Game path	Learning Outcome	Description
Subtraction: Negative Answers	Tux maths	Learn Subtraction of integers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Adding Negatives to Positives	Tux maths	Learns Addition of integers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Adding Positives to Negatives	Tux maths	Learns Addition of integers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Subtracting Negatives from Positives	Tux maths	Learns Subtraction of integers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Subtracting Positives from Negatives	Tux maths	Learns Subtraction of integers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Adding Negatives to Negatives	Tux maths	Learns Addition of integers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Subtracting Negatives from Negatives	Tux maths	Learns Subtraction of integers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Negatives and Positive Numbers Review.	Tux maths	Sorting numbers as positive and negative numbers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Multiplication and Division Of Negatives	Tux maths	Able to do multiplication and division of integers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.

Name of the game	Game path	Learning Outcome	Description
Multiplication of Positives and Negatives	Tux maths	Able to do multiplication and division of integers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Division of Positives and Negatives	Tux maths	Able to divide integers	This game is time-based. Instruct students to use a keyboard to type the subtraction of negative numbers, they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As the level increases, the number of asteroids and the speed of falling asteroids also increases.
Find Solution	Open eduActiv8-numbers-negative numbers-addition-find solution	Add numbers up to 9999 and find the right solution. (Both positive and negative numbers)	Some (2,3,4 digits) additional problems on negative numbers are given in a column and in front of these sums, there is a table displaying the answer of these sums randomly. Instruct the students to solve these sums and then drag the correct answers to the empty boxes in front of each sum. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.

Name of the game	Game path	Learning Outcome	Description
Find Missing Numbers	Open eduActiv8-numbers-negative numbers-addition-find missing number	Adds /Subtracts numbers up to 9999 and finds the missing number. (Both positive and negative numbers)	The activity contains simple addition problems. The first number to be added is given along with the answer to every problem. The second number which is to be added to obtain the given answer is missing from every problem. There is a table next to the sums with the missing numbers randomly provided. Students need to identify which number from this table completes which problem correctly and then drag that number into the empty box in the middle of that particular sum. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.
Maths Matching Game	Open eduActiv8-numbers-negative numbers-addition-maths matching game	Adds numbers up to 9999 and matches with the right answer. (both positive and negative numbers)	The activity contains additional sums as well as their jumbled up answers on the screen. The students need to figure out the answers of each of these sums separately, then, click first on the sum and then on its answer to make a match. When they are done with all the sums they can click on the green OK sign at the top left corner to submit and verify their answers.

Theme :Mental Arithmetic



Name of the game	Game path	Learning Outcome	Description
The series of correct operations that matches the answer	GCompris-mathematics-calculation activities-the series of correct operations	Learn different operations on the one-digit number	Instruct the students to choose the number and arithmetic operations that give the specified result from the top of the board area. They can drag the numbers to arrange them in order with the help of a mouse.

Theme : Measurement (Weight)



Name of the game	Game path	Learning Outcome	Description
Balance the scale properly	GCompris-mathematics-calculation activities-balance the scale properly	Learn to balance the scale using weights	To balance the scales, move the masses to the left or the right side (on higher levels). They can be arranged in any order.



Name of the game	Game path	Learning Outcome	Description
Paint	Open eduActiv8-third circle-art and colour-paint	Creativity, Freehand drawing	The programme can be used to do a freehand drawing. There are undo and redo buttons, pencil, brush and thick brush option, tools to draw a line, rectangle, circle, eraser and fill tool. There is also an option to change the brush size from 0 to 98. There is an option to select several colours out of a collection which is given at the bottom. The interface can be changed from the top-bottom display to left-right display option. By clicking at the bit arrows given the top right-hand corner.
Tux Paint	GCompris-go to amusement activities-tux paint	Creativity, identification of shapes, colours,	The interface can be used to create pictures. There are several features such as tools, colours and brushes. It several readymade stamps which can be used to bring to life the creativity of the students. There are several pre-prepared colouring and drawing templates.

Name of the game	Game path	Learning Outcome	Description
The Tangram Puzzle	GCompris-go to amusement activities-the tangram puzzle game	Creativity, Identification of Shapes and Patterns, Problem Solving,	The game is the form given shape using the seven pieces given in the form of shapes. Instruct the students to select the tangram form then move a piece by dragging it. Then they need to right-click on it to create a symmetrical item. Select an image and drag around it to show the rotation they want. Once they have shown what shape they want, the computer will create it. If they need help, they can click on the shape button, and the border of the shape will be drawn.
Sudoku, Place Unique Symbols in a Square	Open eduActiv8-puzzles-sudoku-place-unique symbols in a Square	Shape Identification, problem-solving, pattern	The game is arranged shapes that are unique in a row and a column. Complete the puzzle, for these symbols, must be unique in a row, columns and each region. Select the symbol on the left and click on its target position. For the higher levels click on an empty square to give it the keyboard focus. Then enter a possible letter or number.



Name of the game	Game path	Learning Outcome	Description
Image Patterns (With mirrored images)	Open eduActiv8-second option-patterns-image pattern with mirrored images	Identify different image patterns and understand the concept of mirrored image	A series of images are given in two lines with a few of the images missing from the top line. Players have to guess and then complete the pattern in the top line by dragging and dropping the required images from the bottom line, all the while keeping in mind the orientation of the images required to complete the pattern as the images provided are mirrored.
Shape Patterns	Open eduActiv8-second option-patterns-shape pattern	Identify what the pattern is and predict what should come next	A series of images are given in two lines with a few of the images missing from the top line. Players have to guess and then complete the pattern in the top line by dragging and dropping the required images from the bottom line.
Bar Game	GCompris-strategy games-bar game	Develop logical reasoning	Place balls in the holes. You win if the computer has to place the last ball. If you want Tux to begin, just click on him.

Name of the game	Game path	Learning Outcome	Description
Colour Patterns	Open eduActiv8-second option-patterns-colour pattern	Identify different colours and arrange them according to a given pattern	A series of images of colour splashes are given in two lines with a few of the images missing from the top line. Players have to guess the next colour and then complete the pattern in the top line by dragging and dropping the required splashes of colour from the bottom line.
Image Patterns	Open eduActiv8-second option-patterns-image pattern	Understand the concept of pattern-based designs	A series of images are given in two lines with a few of the images missing from the top line. Players have to guess and then complete the pattern in the top line by dragging and dropping the required images from the bottom line.
Letter Patterns	Open eduActiv8-second option-patterns-letter pattern	Identify the letters patterns	A series of alphabet patterns are given in two lines with a few of the alphabets missing from the top line. Players have to guess and then complete the pattern in the top line by dragging and dropping the required alphabet from the bottom line.

Name of the game	Game path	Learning Outcome	Description
Miscellaneous Activities	GCompris-go to discovery activity-got to miscellaneous activities-go to the algorithm	Get to know patterns	Find the next symbol in a list.
Number Patterns	Open eduActiv8-second option-patterns-number pattern	Identify the number patterns and arrange accordingly	A series of number patterns are given in two lines with a few of the numbers missing from the top line. Players have to guess and then complete the pattern in the top line by dragging and dropping the required number from the bottom line.
Fraction Patterns	Open eduActiv8-second option-patterns-fraction pattern	Understand the concept of fraction along with pattern based designs	A series of fraction patterns are given in two lines with a few of the patterns missing from the top line. Player has to guess and then complete the pattern in the top line by dragging and dropping the required pattern from the bottom line.
Connect 4	GCompris-strategy games-connect 4	Making pattern, problem-solving, Develops sportsman spirit	The game is to arrange four coins in a row. When the player clicks a green ball falls at the bottom of the grid and soon a red ball falls on its own. The challenge is to arrange four coins in a row and win the game.

Name of the game	Game path	Learning Outcome	Description
Connect 4 { 2 Players}	GCompris-strategy games-Connect 4 (2 players)	Making pattern, problem-solving, Develops sportsman spirit	The game is to arrange four coins in a row. When the player clicks a green ball falls at the bottom of the grid and soon a red ball falls on its own. The challenge is to arrange four coins in a row and win the game.

Theme : Measurement (Money)



Name of the game	Game path	Learning Outcome	Description
Go to money activities	GCompris-mathematics-numeration-go-to money activities-MONEY	Build a concept of money	Click on the coins or paper money at the bottom of the screen to pay the money for the given items.

Name of the game	Game path	Learning Outcome	Description
Give tux his chance	Gcompris-mathematics-numeration-give tux his chance	Practice usage of money	Tux bought different items from you and showed his money. Players have to give him back the change for which they can use coins and paper notes shown at the bottom of the screen. At the higher levels, several items are displayed, and they must calculate the total price.
Give tux his chance, including cents	Gcompris-mathematics-numeration-give tux his chance including cents	Practice usage of money	Tux bought different items from you and showed his money. Players have to give him back the change for which they can use coins and paper notes including cents shown at the bottom of the screen. At the higher levels, several items are displayed, and they must calculate the total price.
Money	Gcompris-mathematics-numeration-money	Practice money usage including cents	Click on the coins or paper money at the bottom of the screen to pay the money for the given items.

Theme : Numbers (Ratio)



Name of the game	Game path	Learning Outcome	Description
Match Ratios	Open eduActive-mathematics-ratio-match ratio	Learn to relate Between two numbers to show how much one bigger than other	The ratio of two numbers with different colours have shown on the screen, there are several balls in the same ratio all the players need to do is to match the number with the correct picture showing that ratio.
Group Ratio Together	Open eduActive-mathematics-ratio-Group ratio together	Learn to relate between the two shaded pictures and write them in the ratio	There are few shaded pictures shown and a particular ratio is also given, all the players need to do is to pick out the pictures which are showing the same given ratio and put them together.
Ratios	Open eduActiv8-login-option2-ratios-experiment with ratios	Get to know about the basics of how to relate between two numbers and apply them in their real life	Look at the numbers given and the coloured dots and change the numbers to see how the coloured dots change as well and provide different relations every time.
Ratios	Open eduActiv8-login-option2-ratios-match ratios	Get to know how different ratios can be	Look at the numbers and ratios shown on the screen and match the ratio with the correct image.



Name of the game	Game path	Learning Outcome	Description
How Clock Work?	Open eduActiv8-second option-time-clock-how clock works	Identify the placement of Able to do multiplication and division of integers numerals and hands on an analogue clock, able to know the concept of seconds, minutes and hours	The activity helps students to explore the concept of time and clock, along with their English names (quarter to, quarter past etc). Students can turn the clock hands to see what happens. They can also use the increase and decrease options around the written time to see if there are any changes in the clock hands and learn what it's called in English.
Clock (Learn To Set The Clock)	Open eduActiv8-second Option-time-clock-learn to set clock	Experience in a digital Way the value of the intervals of minutes and hours, learn to set the time by dragging the hands of the clock	The activity helps students to explore the concept of time and clock. Players will be given a specific time and to pass the level they have to move the clock hands to set the given time. Students can also use the increases and decrease options around the written time to set the given time. Use the left click on the mouse to hold the hands of the clock and then start dragging.

Name of the game	Game path	Learning Outcome	Description
Clock (Time In Text Version Only)	Open eduActiv8-second option-time-clock-clock (time in text version only)	Learn the meanings of expressions such as half past, quarter past etc.	The activity helps students to explore the concept of time and clock. Players will be given a specific time and to pass the level they have to move the clock hands to set the given time. Time will not be given to them in numerical form. The text version of the time is mentioned on the screen, players need to read the time and show that time on the clocks by dragging the hands of the clock.
Clock (Learn To Set The Clock)	Open eduActiv8-second option-time-clock-learn to set the clock	Listen and comprehend the right time by setting the clock	The activity helps students to explore the concept of time and clock. There is a speaker sign adjacent to the clock, which the player has to click on to Listen to what time they have to set then move the clock hands to set that time. When they are done they can click on the green tick sign at the top left corner to submit and verify their result. Time will not be provided to them in either textual or numerical form, so they have to listen to the time carefully.

Name of the game	Game path	Learning Outcome	Description
Clock (Learn To Read The Time)	Open eduActiv8-second option-time-clock-learn to read the time	Learn to tell the time using analogue and digital clock	The activity helps students to explore the concept of time and clock. The clock shows a specific time, students are required to read the clock and type the time in the boxes provided adjacent to the clock for hours and minutes. Students can also use the increases and decrease options above and below the boxes to set the required time.
Time Matching	Open eduActiv8-second option-time-clock-time matching	Match the correct time with the given clock	The activity contains images of clocks showing different times as well as their jumbled up numeral versions on the screen. The students need to figure out which clock represents which time, then, click first on the clock and then on the time to make a match. When they are done with all the matches they will automatically move to the next level.

Name of the game	Game path	Learning Outcome	Description
Time Matching	Open eduActiv8-second option-time-clock-time matching	Able to read number names and match the time with clock accordingly	The activity contains images of clocks showing different times as well as their jumbled up text versions on the screen. The students need to read out which clock represents which time, then, click first on the clock and then on the time to make a match. When they are done with all the matches they will automatically move to the next level.
Experiment With Elapsed Time (Visualised On A Clock Dial)	Open eduActiv8-second option-time-calculating with time-experiment with elapsed time	Define the elapsed time and understand the concept of used time (time gap)	The activity contains two clocks representing different times. The time represented by these two clocks is also written above the images with increase and decrease options above and below both units (hour and minutes). The next half of the screen represents the elapsed time or the time difference between the two clocks. Students can change time in both or either clock to see what happens to the elapsed time or how it changes.

Name of the game	Game path	Learning Outcome	Description
Calculate Elapsed Time (Visualized On A Clock Dial)	Open eduActiv8-second option-time-calculating with time-calculated elapsed time	Calculate the elapsed time by subtracting the time from the given endpoint	The activity contains two clocks representing different times. The next half of the screen represents the elapsed time or the time difference between the two clocks. Below the two clocks are two boxes, one for the hour and the next for minutes. Students are required to observe the time difference or elapsed time from either the watches or the visual representation of elapsed time and type it in the boxes for hours and minutes, respectively. Then, click on the green OK sign to submit and verify your results.
Experiment With Elapsed Time 2 (Visualized On Two Number Lines)	Open eduActiv8-second option--calculating with time-experiment with elapsed time 2	Define the elapsed time using the number line	The activity contains two clocks representing different times. The time represented by these two clocks is also written above the images with increase and decrease options above and below both units (hour and minutes). At the bottom of the screen, there are two number lines (for hour and minutes) which represent the elapsed time or the time difference between the two clocks. Students can change time in both or either clock to see what happens to the elapsed time or how it changes.

Name of the game	Game path	Learning Outcome	Description
Calculate Elapsed Time (Visualized On Two Number Lines)	Open eduActiv8-second option-time-calculating with time-calculated elapsed time	Calculate the elapsed time by using number line concept	The activity contains two clocks representing different times. At the bottom of the screen, there are two number lines (for hour and minutes) which represent the elapsed time or the time difference between the two clocks. Adjacent to the two clocks are two boxes, one for the hour and the next for minutes. Students are required to observe the time difference or elapsed time from either the watches or the visual representation of elapsed time (the number line) and type it in the boxes for hours and minutes, respectively. Then, click on the green OK sign to submit and verify your results.
Calculate Elapsed Time (With No Visualization)	Open eduActiv8-second option-time-calculating with time-calculated elapsed time (option 9)	Write the elapsed time either using digital clock or analogue clock or both of them	The activity contains two different times (either represented by a clock or in the form of numbers). Adjacent to the two given times are two boxes, one for the hour and the next for minutes. Students are required to observe the time difference or elapsed time from the given times and type it in the boxes for hours and minutes, respectively. Then, click on the green OK sign to submit and verify your results.

Name of the game	Game path	Learning Outcome	Description
Calculate Elapsed Time (Visualized On Two Number Lines)	Open eduActiv8-second option-time-calculating with a time-calculate elapsed time (digital clock)	Differentiate between analogue and digital clock, calculate the elapsed time by using both clocks	The activity contains two different times. At the bottom of the screen, there are two number lines (for hour and minutes) which represent the elapsed time or the time difference between the above written times. Adjacent to the two given times are two boxes, one for the hour and the next for minutes. Students are required to observe the time difference or elapsed time from either the given times or the visual representation of elapsed time (the number line) and type it in the boxes for hours and minutes, respectively. Then, click on the green OK sign to submit and verify your results. As the level advances, you can encounter a mixture of written times and clocks.
Time (Clock) First Circle	Open eduactive8-second circle-time circle-clock circle-how clock works first circle	Understanding how the clock works, learn to drag the mouse	There is a clock which can be manipulated by either moving the hour and the minute hand of the clock or by changing the digits on the right-hand interface. When the pink coloured digits are changed the hour hand moves and when the blue coloured digits are changed the minute hand moves.

Name of the game	Game path	Learning Outcome	Description
Experiment With Elapsed Time (Visualized On A Number Line)	Open eduActiv8-second option-time-calculating with time-calculate elapsed time (option 6)	Differentiate between hours and minutes, Visualize the time elapsed with the help a number line	The activity contains two clocks representing different times. The time represented by these two clocks is also written above the images with increase and decrease options above and below both units (hour and minutes). At the bottom of the screen, there is a number line which represents the elapsed time or the time difference between the two clocks. Students can change time in both or either clock to see what happens to the elapsed time or how it changes.
Calculate Elapsed Time (Visualized On A Number Line)	Open eduActiv8-second option-time-calculating with a time-calculate elapsed time (option 7)	Calculate the elapsed time by using number line concept	The activity contains two clocks representing different times. The time represented by these two clocks is also written above the images with increase and decrease options above and below both units (hour and minutes). At the bottom of the screen, there is a number line which represents the elapsed time or the time difference between the two clocks. Students can change the elapsed time to see what changes occur in the clocks or time.

Name of the game	Game path	Learning Outcome	Description
Calculate Elapsed Time (Visualized On A Number Line)	Open eduActiv8-second option-time-calculating with a time-calculate elapsed time (option 8)	Differentiate between analogue and digital clock, calculate the elapsed time by using both clocks	The activity contains two different times. At the bottom of the screen, there are two number lines (for hour and minutes) which represents the elapsed time or the time difference between the above written times. Adjacent to the two given times is two boxes, one for the hour and the next for minutes. Students are required to observe the time difference or elapsed time from either the given times or the visual representation of elapsed time (the number line) and type it in the boxes for hours and minutes, respectively. Then, click on the green OK sign to submit and verify your results. As the level advances, you can encounter a mixture of written times and clocks.
Time (Clock) Second Circle	Open eduactive8-second circle-time circle-clock circle-how clock works for the second circle	Understanding how the clock works learn to drag the mouse	There is a clock which can be manipulated by either moving the hour and the minute hand of the clock or by changing the digits on the right-hand interface. When the pink coloured digits are changed the hour hand moves and when the blue coloured digits are changed the minute hand moves.

Name of the game	Game path	Learning Outcome	Description
Time (Clock) Third Circle	Open eduactive8-second circle-time circle-clock circle-how clock works third circle	Understanding how the clock works, learn to drag the mouse	There is a clock which can be manipulated by either moving the hour and the minute hand of the clock or by changing the digits on the right-hand interface. When the pink coloured digits are changed the hour hand moves and when the blue coloured digits are changed the minute hand moves.
Experiment With Elapsed Time 2 (Visualized On Two Number Line)	Open eduActiv8-second option-time-calculating with time-experiment with elapsed time 2 (option 10)	Determine the time before or after an interval of hours	The activity contains two clocks representing different times. The time represented by these two clocks is also written below them with increase and decrease options above and below both units (hour and minutes). At the bottom of the screen, between the numerical form of time, there are two number lines (for hour and minutes) which represents the elapsed time or the time difference between the two clocks. Students can change time in both or either clock to see what happens to the elapsed time or how it changes. At the same time, they can also change the elapsed time to see what changes occur in the clock or the numerical form of the time.

Name of the game	Game path	Learning Outcome	Description
Experiment With Elapsed Time 2 (Visualized On A Number Line)	Open eduActiv8-second option-time-calculating with time-experiment with elapsed time 2(option 11)	How to determine the time at the end of an interval of hours and minutes	The activity contains two clocks representing different times. The time represented by these two clocks is also written below them with increase and decrease options above and below both units (hour and minutes). At the bottom of the screen, between the numerical form of time, there is a number line which represents the elapsed time or the time difference between the two clocks. Students can change time in both or either clock to see what happens to the elapsed time or how it changes. At the same time, they can also change the elapsed time to see what changes occur in the clock or the numerical form of the time.
Miscellaneous Activities	Educational Suite GCompris-go to discovery activity go to miscellaneous activities-go to learning clock	Get to know how to tell time, get to know about day and night	Set the clock to the time given, in the time-units shown (hours: minutes or hours:minutes:seconds). Click on the different arrows, and move the mouse, to make the numbers go up or down.

Name of the game	Game path	Learning Outcome	Description
Find The Start Or The End Time	Open eduActiv8-second option-time-calculating with time-find the start or the end time(option 12)	Calculate the start time and end time using the given elapsed time	The activity contains two different times. At the bottom of the screen, there is a number line which represents the elapsed time or the time difference between the above written times. Adjacent to the two given times is two boxes, one for the hour and the next for minutes. Students are required to observe the time difference or elapsed time from either the given times or the visual representation of elapsed time (the number line) and type it in the boxes for hours and minutes, respectively. Then, players can click on the green OK sign to submit and verify their results. As the level advances, players can encounter a mixture of written times and clocks.



Name of the game	Game path	Learning Outcome	Description
Sheep Maze	Open eduActiv8-third option- games and mazes - sheep maze	Spatial understanding. A sense of direction, better memorising power	There is a sheep at the top left corner of the screen and the rest of the herd at the lower right of the screen. Players have to guide sheep to reach the herd. They can use a mouse and keyboard to guide sheep. Once the sheep reaches the herd, the next level will come automatically.
Mouse Maze	Open eduActiv8-third option- games and mazes - mouse maze	Spatial understanding. A sense of direction, better memorising power	There is a mouse at the top left corner of the screen and cheese at the lower right of the screen. Players have to guide the rat to get cheese. They can use a mouse and keyboard to guide the mouse. Once the mouse reaches the cheese, the next level will come automatically.
Learn New Words: Nature	Open eduActiv8-first option-learn new words-nature	Classification and naming of objects and places related to nature.	The screen has a picture of terrain or an object related to nature and its name at the bottom. There are also two buttons, one for moving to the next word, once players have learnt the name of the terrain or the object and one for going back if they want to visit the previous one.

Name of the game	Game path	Learning Outcome	Description
Go To Discovery Activity	GCompris-go to discovery activity-go to maze activities-3D maze	Get to learn directions and problem-solving skills	Just press the up, down, right and left arrows to move to each exit door.
Go To Discovery Activity	GCompris-go to discovery activity-go to maze activities-3 stars	Get to know the sense of direction and problem-solving skills will enhance	Just press the up, down, right and left arrows to move to reach the exit door.
Go To Discovery Activity	GCompris-go to discovery activity-go to maze activities-go to maze with an orange star	Get to know the functions of the keyboard with a sense of direction and enhancement of problem-solving skills	Just press the up, down, right and left arrows to move to reach the exit door.

Name of the game	Game path	Learning Outcome	Description
Miscellaneous Activities	GCompris-go to discovery activity-go to miscellaneous activities-go to find your left hand and right hand	Get to know directions	Players can see a hand: is it a left hand or a right hand? They have to click on the left button or the right button depending on the displayed hand.

Theme : Symmetry

Name of the game	Game path	Learning Outcome	Description
Fine Lines Of Symmetry	Open eduActiv8-second circle (123 icons)-symmetry-find lines of symmetry	Different lines of symmetry, identification of shapes, the concept of mirror images	In this activity, the students are required to find and select all lines of symmetry for a displayed shape. Click on the arrows around the drawing area to select them. Then click on the green OK sign at the top left corner of the screen to submit and verify results. Once done, the next shape will come automatically.

Name of the game	Game path	Learning Outcome	Description
Reflection Symmetry - Draw With Shapes	Open eduActiv8-second circle (123 icons)- symmetry-reflection symmetry draw with shapes	Explore ideas of angles and shapes, Identifies 2D shapes from the immediate environment, the concept of reflecting shapes, improvement of visualising skill	The activity contains a grid sheet in which players can draw different shapes (3-10 sided) and according to the symmetry type they have selected a portion of the sheet will reflect it's the symmetric shape. There are several options which the players can use to change the type and number of symmetrical figures (vertical, horizontal, diagonal etc.) that they want. They can also change the colour of shapes using the colour chart provided in the rightmost column.
Symmetrical Shapes Missing Half	Open eduActiv8-second circle (123 icons)- symmetry-symmetrical shapes missing half	Concept of reflection symmetry and shapes, improvement of visualising skill, the concept of the cartesian plane	In this activity, the students have to draw a shape that is a reflection of the one already displayed. The red line is the mirror line. Once they are done, they can click on the arrow displayed at the right side of the grid sheet to move to the next level. If students couldn't draw it right the first time, they can click on the redo sign to reset the page.

Name of the game	Game path	Learning Outcome	Description
Reflect Shapes	Open eduActiv8-second circle (123 icon)-symmetry-reflect shapes	Reflection symmetry and shapes, improvement of visualising skill, the concept of the cartesian plane	In this activity, the students have to draw a shape that is a reflection of the one already displayed. The red line is the mirror line. Once the players are done, they can click on the arrow displayed at the right side of the grid sheet to move to the next level. If they couldn't draw it right the first time, they can click on the redo sign to reset the page.

Theme : Mental Maths



Name of the game	Game path	Learning Outcome	Description
Fifteen	Open eduActiv8-third circle (Puzzle icon)-games and mazes- fifteen	Logical thinking, Mapping mind, arranging numbers in increasing order or sequencing	Rearrange the numbers so that they are in the right order. Players can use a mouse to drag numbers. Number of grids increases as they move to a higher level.

Name of the game	Game path	Learning Outcome	Description
Fifteen With A Twist	Open eduActiv8-third circle (puzzle icon)-games and mazes- fifteen with a twist	Logical thinking, Mapping mind, arranging numbers in increasing order or sequencing	Rearrange the numbers so that they are in the right order. Players can use a mouse to drag numbers. Number of grids increases as they move to a higher level.
Sliced Images Numbers	Open eduActiv8-third circle (puzzle icon)-games and mazes- sliced images numbers	Identification of numbers and mind mapping	A number has been given in the lower part of the game. Observe the given number and rearrange the sliced images of the same number in the above part to give them the original image.
Connect (Numbers)	Open eduActiv8-third option-games and mazes(option3)-connect numbers	Identify the same colour and join the numbers accordingly	There are numbers in different coloured boxes. Players have to drag the numbers (of the same colour) together. After putting the number in the right box, the colour of the string will change from black to the colour of that number. They can move to another level when they successfully drag the numbers to the correct boxes. As players move to a higher level, the number of boxes increases.

Name of the game	Game path	Learning Outcome	Description
Connect (Numbers)	Open eduActiv8-third option-games and mazes (option 3)-connect numbers	Recognise the same colour and drag the mouse and connect the same number	There are numbers in different coloured boxes. Players have to drag the numbers (of the same colour) together. After putting the number in the right box, the colour of the string will change from black to the colour of that number. They can move to another level when they successfully drag the numbers to the correct boxes. As players move to a higher level, the number of boxes increases.
Connect (Balloons With Threads)	Open eduActiv8-third option-games and mazes-connect (BALLOONS WITH THREAD)	Identification of the same colour thread and application in the real-life situation	There are balloons of different colours. Players have to drag the winch (of the same colour) in the box linked with the same colour balloon. After putting the winch in the right box, the colour of the string will change from black to the colour of the balloon. Players can move to another level when they successfully drag winch to the balloon. As they move to a higher level, the number of balloons and winches increases.

Name of the game	Game path	Learning Outcome	Description
Addition And Subtraction Memory Game	GCompris-mathematics-calculation activities-mathematics memory activities-addition and subtraction memory game	Addition and subtraction of the one-digit numbers	In this game, these cards are hiding the two parts of an operation. Players need to find the two parts of the operation and bring them together again. Click on a card to see what number it's hiding.
Division Memory Game	GCompris-mathematics-calculation activities-mathematics memory activities-division memory game	Division of one-digit numbers	In this game, these cards are hiding the two parts of an operation. Players need to find the two parts of the operation and bring them together again. Click on a card to see what number it's hiding.
All Operation Memory Game	GCompris-mathematics-calculation activities-mathematics memory activities-all operation memory game	Addition, subtraction, multiplication and division of the one-digit numbers	Players can see some cards, but they can't see what's on the other side of them. Each card is hiding an operation, or the answer to the sum. Find operation until all cards are gone. When they do that both those cards disappear. When the player has made them all disappear, found more than, Tux and then they have won the game.

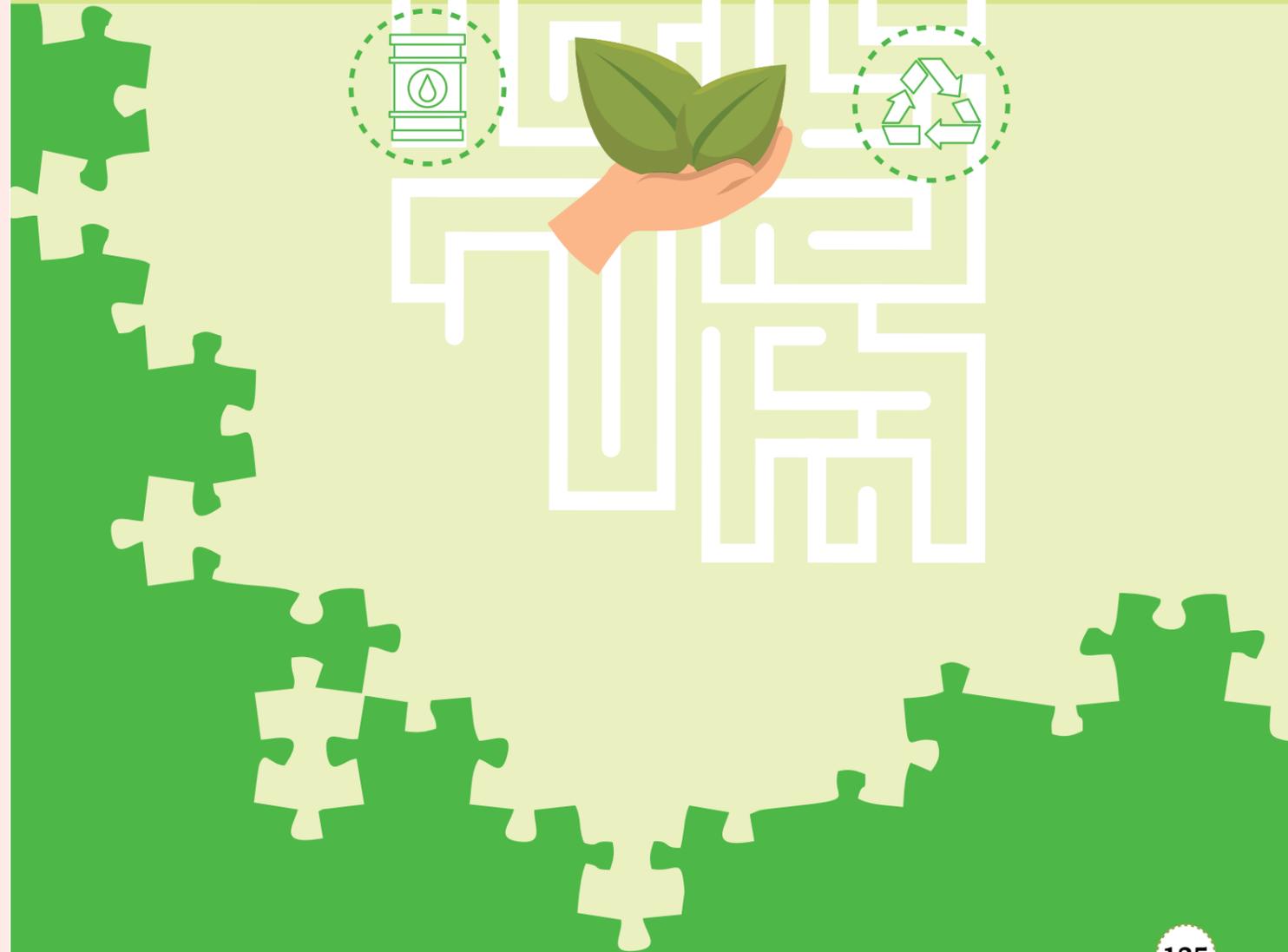
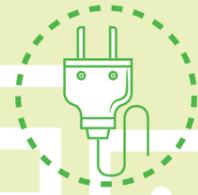
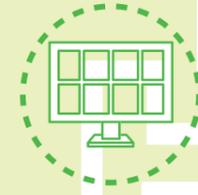
Name of the game	Game path	Learning Outcome	Description
Subtraction Memory Game	GCompris-mathematics-calculation activities-mathematics memory activities-subtraction memory game	Subtraction of one-digit numbers	In this game, these cards are hiding the two parts of an operation. The players need to find the two parts of the operation and bring them together again. Click on a card to see what number it's hiding.
Multiplication Memory Game	GCompris-mathematics-calculation activities-mathematics memory activities-multiplication memory game	Multiplication of the one-digit number	In this game, these cards are hiding the two parts of an operation. The players need to find the two parts of the operation and bring them together again. Click on a card to see what number it's hiding.
Multiplication And Division Memory Game	GCompris-mathematics-calculation activities-mathematics memory activities-multiplication and division memory game	Multiplication and division of the one-digit number	Players can see some cards, but they can't see what's on the other side of them. Each card is hiding an operation, or the answer to the problem. Players have to find the two parts of an operation until all cards are gone. When they do that both those cards disappear. When the players have made them all disappear they have won the game.

Name of the game	Game path	Learning Outcome	Description
Division Game Against Tux	GCompris-mathematics-calculation activities-mathematics memory activities against tux-division memory game against tux	Division of the one-digit number	Players can see some cards, but they can't see what's on the other side of them. Each card is hiding an operation, or the answer to the problem. Players have to find the two parts of an operation until all the cards are gone. When they do that both those cards disappear. When they've made them all disappear and found more than Tux then the player has won the game.
Addition Memory Game Against Tux	GCompris-mathematics-calculation activities-mathematics memory activities against tux-addition memory game against tux	Addition of the one-digit number	Players can see some cards, but they can't see what's on the other side of them. Each card is hiding an adding-up sum or the answer to the sum. Add until all cards are gone.
Subtraction Memory Game Against Tux	GCompris-mathematics-calculation activities-mathematics memory activities against tux-subtraction memory game against tux	Subtraction of the one-digit number	In this game, these cards are hiding the two parts of an operation. Players need to find the two parts of the operation and bring them together again. Click on a card to see what number it's hiding.

Name of the game	Game path	Learning Outcome	Description
Addition And Subtraction Memory Game Against Tux	GCompris-mathematics-calculation activities-mathematics memory activities against tux-addition and subtraction memory game against tux	Addition and subtraction of the one-digit number	Players can see some cards, but they can't see what's on the other side of them. Each card is hiding an operation, or the answer to the problem. Players have to find the two parts of an operation until all the cards are gone. When they do that both those cards disappear. When they've made them all disappear and found more than Tux then the player has won the game.
Multiplication Memory Game Against Tux	GCompris-mathematics-calculation activities-mathematics memory activities against tux-multiplication memory game against tux	Multiplication of the one-digit number	Players can see some cards, but they can't see what's on the other side of them. Each card is hiding an operation, or the answer to the problem. Players have to find the two parts of an operation until all the cards are gone. When they do that both those cards disappear. When they've made them all disappear and found more than Tux then the player has won the game.

Name of the game	Game path	Learning Outcome	Description
Multiplication And Division Memory Game Against Tux	GCompris-mathematics-calculation activities-mathematics memory activities against tux-multiplication and division memory game against tux	Division and multiplication of the one-digit number	Players can see some cards, but they can't see what's on the other side of them. Each card is hiding an operation, or the answer to the problem. Players have to find the two parts of an operation until all the cards are gone. When they do that both those cards disappear. When they've made them all disappear and found more than Tux then the player has won the game.

Environmental Studies





Name of the Game	Game path	Learning Outcome	Description
Learn new words	Open eduActiv8-first option-learn new word-construction	Shows sensitivity for plants, animals, the elderly, differently-abled and diverse family setups in surroundings. (For the diversity in appearance, abilities, choices - likes- dislikes, and access to basic needs such as food, shelter, etc.) Can identify and name objects in the given pictures. can use vocabulary in the day to day life, can associates words with a picture, can guess the name of the types of construction they saw like street, school, door	The screen has a picture and its name at the bottom. There are also two buttons, one for moving to the next word, and one for going back if the player wants to visit the previous one. When the player clicks on the word, they can listen to the pronunciation of the given word.



Name of the Game	Game path	Learning Outcome	Description
Discover the Braille System	GCompris-go to discovery activities- discover the Braille system-the history of Louis Braille	The students will be able to tell who was Louis Braille and how he discovered the braille script even when he was blind	Players read the history of Louis Braille, his biography and discovery of the Braille system. Click on the previous and next buttons to move to the respective story page. In the end, arrange the sequence in chronological order by moving the boxes up and down and finally click the ok button.
Discover the Braille System	GCompris-go to discovery activities-discover the Braille system-discover the braille system	The students will be able to know how blind people can also write and read even without their senses and they can reproduce the braille characters	Click on the dots in Braille Cell to produce letters and the numbers and compare how they are similar.
Discover the Braille System	GCompris-go to discovery activity-discover the braille system-braille fun	The students will be able to learn to write the braille words	Braille the falling letters. Enter the braille code in the tile for the corresponding falling letters. Check the braille chart by clicking on the toggle button for help.

Name of the Game	Game path	Learning Outcome	Description
Discover the Braille System	GCompris-go to discovery- discover the braille system- braille lotto	The students will be able to recognise the braille numbers and will be able to apply this in the game	Discover the Braille system for numbers. Each player must find if the proposed number is on their board. If the code is on the board, just click on it to validate it. The player who crosses all the Braille numbers correctly wins the game. Check the Braille table by clicking on the toggle button in the control bar.
Learn new words	Open eduActiv8- first option-learn new word-people	Identifies relationships with and among family members. Describes the roles of family members, family influences (traits/ features habits / practices), need for living together, through oral/ written/ other ways. can guess what the person in the picture is called, can associate the word with pictures, can use new vocabulary in day to day life	The screen has a picture and its name at the bottom. There are also two buttons, one for moving to the next word, and one for going back if the player wants to visit the previous one. When the player clicks on the word, they can listen to the pronunciation of the given word.

Theme : Family and Friends(Animals)



Name of the Game	Game path	Learning Outcome	Description
Go To Memory Activity	GCompris-go to discovery activity-go to memory activities-go to memory game with images	Remember and recall all the animals behind the cards	Some cards are given with animals on all the cards. The contents of each card are hidden. Match the cards with the same animals on them.
Go to Sound Activities	GCompris-go to discovery activity-go to sound activities-Explore farm activities	Exploring farm animals, their names, their sounds and their characteristics, Recalling the animal sounds and the related information about them.	Some farm animals are given. Click on each to know about their characteristics and sounds they make. Remember and recall to complete Level 2 and Level 3.
Move The Mouse	GCompris-discover computer-mouse manipulation activities-move the mouse	Identification of the animals, moving the mouse in a controlled manner.	The game is to erase the hindrance in front of a picture to reveal what is hidden behind it. The hindrances can be easily erased just by moving the mouse to it.

Name of the Game	Game path	Learning Outcome	Description
Click The Mouse	GCompris-discover computer-mouse manipulation activities-click the mouse	Identification of the animals, clicking the mouse at the desired place	The game is to erase the hindrance in front of a picture to reveal what is hidden behind it. The hindrances can be easily erased by putting the mouse on the object and by clicking on it.
Miscellaneous Activities	GCompris-go to discovery activity-go to miscellaneous-go to explore world animals	Get to know about animals around the world and where they can be found and locating them on a map	Just click on the items shown on the screen and get to know about different types of animals.
Match Animals	eduActiv8-third option-memory- match animals	Identifies simple observable features and matches the animals.	A set of cards are given. Players have to find and twin the cards that have the same animal hidden behind them. The number of cards increases as the level progresses.
Sliced Images-Animals	eduActiv8-third option-games and mazes-sliced images-animals	Enhancing problem-solving skills. can observe, calculate/ visualize and predicts the next step, acquire the understanding of puzzles	The sliced images of animals have to be arranged correctly to give the original shape, which is shown at the bottom of the screen.

Name of the Game	Game path	Learning Outcome	Description
Match Animals-find all matching animals	educActiv8-third option-games and mazes-match animals-match animals-find all matching animals	Observe and identify the same pictures	Players need to observe and identify the same pictures.
Match animals to their shadows	educActiv8-third option-games and mazes-match animals-match animals to their shadows	Observe and identify and guess the correct shadow of the animals according to the animal's body structure	Players have to observe and identify and guess the correct shadow of the animals according to the animal's body structure.
Match animals to their shadows	educActiv8-third option-games and mazes-match animals-help me find my shadows	Identifies different features (beaks/teeth, claws, ears, hair, nests/shelters, etc.) of birds and animals.	The screen has a picture and its name at the bottom. There are also two buttons, one for moving to the next word, and one for going back if the player wants to visit the previous one. When the player clicks on the word, they can listen to the pronunciation of the given word.
Find all matching animals	educActiv8-third option-games and mazes-match animals-find all matching animals	Observe and identify the same pictures	The animal images have to be matched by clicking on them. If they are right both the images fade.

Name of the Game	Game path	Learning Outcome	Description
Match animals to their shadows	educActiv8-third option-games and mazes-match animals-match animals to their shadows	Observe and identify and guess the correct shadow of the animals according to the animal's body structure	The animal images have to be matched with their shadows by clicking on them. If they are right both the images fade.
Help me find my shadows	educActiv8-third option-games and mazes-match animals-help me find my shadows	Observe and identify and match the animals' shadows according to the animal's body structure	Players have to match the shadows of the animals at the top with their images, by dragging them.
Sliced Images-animals	educActiv8-third option-games and mazes-sliced images-animals	Identify the animal parts and arrange them in proper order.	The sliced images of animals have to be arranged correctly to give the original shape.
Word Builders (Listening Exercise)-Animals	Open eduActiv8-first option-word builders (listening exercise)- animals	Relate the audio with the words, can spell the words correctly, can generally use the words orally or in writing in their lives	There are words with some letters missing. The missing letters are given below it, these have to be dragged and placed correctly to make the correct word.

Name of the Game	Game path	Learning Outcome	Description
Animals-Complete The Word	Open eduActiv8-first option-word builders-animals	Spell the names of different type of animals, where they live, if they are pet or wild animals, can use the information in daily life too	Children have to drag the alphabets to the correct place to complete the names to win the game.
Animals-Matches Animal To The Word	Open eduActiv8-first option-word matchers-animals	Read and identify the correct spelling of animals name with their pictures, can read and use the vocabulary in daily life	The activity contains a picture and its name is at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the part and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more letters are missing from the word until the player has to make the whole word by themselves.

Name of the Game	Game path	Learning Outcome	Description
Animal- Match Sound To The Word	Open eduActiv8-first option-word matchers (listening exercise)-animal	Read, identify and associate the audio, spelling and pictures with each other, can spell the animal's name correctly, can use vocabulary in daily life	Children have to match the pronunciation audio of different animals name on the left side with different animals name in words given on the right side if the correct audio and name is matched the photo of the animal appears which when press audio can still be heard.



Theme : Family and Friends (Work and play)

Name of the Game	Game path	Learning Outcome	Description
Learning Chess	GCompris-strategy games-practice chess-learning Chess	Learns to drag and drop using a mouse, develops sportsman spirit, takes initiative to learn a new game	A game of chess can be played on the computer. The student needs to know about chess to play the game.

Name of the Game	Game path	Learning Outcome	Description
Penalty Kick	GCompris discover Computer-mouse manipulation activities-penalty Kick	Learns basic functions of a mouse and coordinating left and right mouse buttons while working	The game is to double click the mouse on the football to score a goal. On the first click, a bar starts moves in from the side. If the mouse is clicked a second time before the bar has reached its end the ball will move towards aside and if the mouse is clicked after the bar has reached its end the ball will land in the hands of the penguin. If the ball is in the hands of the penguin the ball has to be clicked to bring it back to the penalty point.
Learning Chess	GCompris-strategy games-practice chess-learning chess	Learns to drag and drop using the mouse, Develops sportsman spirit, takes initiative to learn a new game with all its rules and play fair, Develops problem-solving skills	A game of chess can be played on the computer. The students need to have advanced knowledge of chess to play the game.
Learning Chess	GCompris-strategy games-practice chess-learning chess	Learns to drag and drop using the mouse, Develops sportsman spirit, takes initiative to learn a new game with all its rules and play fair, Develops problem-solving skills, Predict the opponent's moves	A game of chess can be played on the computer. The students need to have advanced knowledge of chess to play the game.

Name of the Game	Game path	Learning Outcome	Description
Learn New Words	Open eduActiv8-first option-learn new word-jobs	Identifies objects, signs (vessels, stoves, transport, means of communication, transport, signboards etc.); places (types of houses/shelters, bus stand, petrol pump etc.) activities (works people do, cooking processes, etc.) at home/school/The neighbourhood, can associate words with pictures, can recognise and name the jobs they are familiar with, can understand the need of different professions around us.	The screen has a picture and its name at the bottom. There are also two buttons, one for moving to the next word, and one for going back if the player wants to visit the previous one. When the player clicks on the word, they can also listen to the pronunciation of the given word.
Body-Learn New Words	Open eduActiv8-first option-learn new word-body	Identify and name body parts in the given pictures. can use new vocabulary in the day to day life, can associates words with a picture, can guess the name of the body part	The screen has a picture and its name at the bottom. There are also two buttons, one for moving to the next word, and one for going back if the player wants to visit the previous one. When the player clicks on the word, they can also listen to the pronunciation of the given word.

Name of the Game	Game path	Learning Outcome	Description
Sports-Learn New Words	Open eduActiv8-first option-learn new word-sports	Name the sports/games they have played or seen or are familiar with, can use new vocabulary in daily life, can say a few things about their favourite games	The screen has a picture and its name at the bottom. There are also two buttons, one for moving to the next word, and one for going back if the player wants to visit the previous one. When the player clicks on the word, they can also listen to the pronunciation of the given word.
Job-Complete The Word	Open eduActiv8-first option-word builders (listening exercise)-jobs	Relate the audio with the words, can spell the words correctly, can generally use the words orally or in writing in their lives	There are words with some letters missing. the missing letters are given below, these have to be dragged and placed correctly to make the correct word.
Sports-Complete The Word	Open eduActiv8-first option-word builders (listening exercise)-sports	Learn the names related to the sports by listening to the word pronunciation.	There are words with some letters missing. the missing letters are given below, these have to be dragged and placed correctly to make the correct word.

Name of the Game	Game path	Learning Outcome	Description
Job-Complete The Word	Open eduActiv8-first option-word builders-jobs	Spell the names of different type of jobs, can describe what they do, why we need them, can use the information in daily life too	Children have to drag the alphabets to the correct place to complete the names and win the game.
Sports-Complete The Word	Open eduActiv8-first option-word builders- sports	Spell the names of different type of sports, can label them as indoor or outdoor, will know the different numbers of players to play a particular game, can use the information in daily life too	The activity contains a picture and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the part and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more letters are missing from the word until children have to make the whole word by yourself.

Name of the Game	Game path	Learning Outcome	Description
Jobs-Match Image To The Word	Open eduActiv8-first option-word matchers-jobs	Can read and identify the correct spelling of different jobs, names with the given pictures can read and use the vocabulary in daily life	The activity contains a picture and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the part and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more letters are missing from the word until children have to make the whole word by yourself.
Sports-Match Sounds With Words	Open eduActiv8-first option-word matchers (listening exercise)-sports	Can read, identify and associate the audio, spelling and pictures with each other, can use the vocabulary in daily life, can spell the name of sports correctly	Children have to match the pronunciation audio of different sports names on the left side with sports names in words given on the right side if the correct audio and name is matched the photo of sports appears which when pressed can still be heard.

Name of the Game	Game path	Learning Outcome	Description
Sports-Match Image To The Word	Open eduActiv8- first option-word matchers-sports	Can read and identify the correct spelling of different sports name with their pictures can read and use the vocabulary in daily life	The activity contains a picture and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the part and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more letters are missing from the word until children have to make the whole word by yourself.
Job-Match Sounds With Words	Open eduActiv8- first option- word matchers (listening exercise)-job	Can read, identify and associate the audio, spelling and pictures with each other, can spell the jobs name correctly, can use vocabulary in daily life	Children have to match the pronunciation audio of different jobs name on the left side with different types of jobs name in words given on the right side, if the correct audio and name are matched the photo of jobs appears which when pressed audio can still be heard.

Theme : Travel



Name of the Game	Game path	Learning Outcome	Description
Go To Memory Activity	GCompris-go to discovery activity-go to memory activities-go to railway	Enhancing constructivism, development of motor skills, sequence and order of things	Look at the train on the screen carefully, then click on the train and select the correct item based on the structure of the train shown at the beginning or deselect it by clicking on it.
Lights Off	GCompris- puzzles-sudoku- lights off	Patterns, social value to save electricity	The game is to identify a pattern to switch off the lights. This game aims to switch off all the lights. Press on the bulbs showing on the screen the effect of pressing the button is to toggle the state of that button, and its immediate vertical and horizontal neighbours. The sun and the colour of the sky are independent of the number of clicks needed to solve the puzzle. When the user clicks on the Tux, the solution is shown.

Name of the Game	Game path	Learning Outcome	Description
Learn about an electrical system based on renewable energy	GCompris-go to experiential activities-learn about an electrical system based on renewable energy	Can guess renewable sources, the process of electricity generation, can explain the use of different technology, predict next steps, explain phenomena as evaporation, suggest ways for saving the resources, identifies different places like Dam, windmill, establish the relationship between cause and effect (evaporation), can use information day to day life, can create posters, models.	The game demonstrates how water cycles work, children can guess the properties of renewable energy, and how different technology works for different purposes like electricity generation.Children have to click on elements to start the electricity generation cycle by renewable sources. There are three levels which tell about the three different kinds of renewable energy sources. The child has to click on the sun to make water vapours, then on water vapours to make a cloud, then on the cloud to rain, next on the dam to generate electricity, then on the transformer UP to send the electricity to various places, then click on transformer DOWN to send the electricity to houses, this is how tux will have a supply of electricity to light his lamp. The process of how water cycles work, can guess properties of renewable energy, how we use different forms of technology for different purposes like electricity generation.

Name of the Game	Game path	Learning Outcome	Description
Miscellaneous Activities	GCompris-go to discovery activity-go to miscellaneous activities-go to Chrono	Get to know how things come to life in chronological order and when the things around us were discovered	Pick from the pictures on the left and put them on the red dots.
Miscellaneous Activities	GCompris-go to discovery activity-go to miscellaneous activities-go to find the details	Get to know about some famous paintings of Van Gogh, get to know how to appreciate art	Complete the puzzle by dragging each piece from the set of pieces on the left, to the matching space in the puzzle.
Miscellaneous Activities	GCompris-go to discovery activity-go to miscellaneous-go to locate the region	Get to know about maps of different countries and the names of the places	Just drag and drop the coloured shapes in the right places to make a meaningful match.

Name of the Game	Game path	Learning Outcome	Description
Miscellaneous Activities	GCompris-go to discovery activity-go to miscellaneous-go to locate the countries	Get to know about world map and continents and oceans	Just drag and drop the coloured shapes in the right places to make a meaningful match.
Follow the arrows	Open eduActiv8-second circle-follow the arrow	Identifies directions, location of objects/ places in simple maps (of home/ classroom/ school) using signs/symbols/verbally	Help the owl to remember and recall the directions for which the arrow blinks. Click on the arrows following the same order they were blinked before. The speed increases as the level progress.
Transport- complete the word	Open eduActiv8-first option-word builders-transport	Can spell the names of different modes and type of transport, can use the information in daily life too	Children have to drag the alphabets to the correct place to complete the names.
Transport- match image to the word	Open eduActiv8-first option-word matchers-transport	Can read and identify the correct spelling of different mode of transport name with their pictures, can read and use the vocabulary in daily life	Students have to match the words on right with the images on left. If they are right they get a green tick with images fading.

Name of the Game	Game path	Learning Outcome	Description
Transport- learn new words	Open eduActiv8-first option-learn new word-transport	Identifies objects, signs (vessels, stoves,transport, means of communication,transport, signboards etc.); places (types of houses/shelters, bus stand, petrol pump etc.) activities (work people do,cooking processes, etc.) at home/school/Neighbourhood.	The screen has a picture and its name at the bottom. There are also two buttons, one for moving to the next word, and one for going back if the player wants to visit the previous one. When they click on the word, children can listen to the pronunciation of the given word.
Transport- complete the word	Open eduActiv8-first option-word builders (listening exercise)transport	Can identify and name the types of transportation they have seen /used or are familiar with, can differentiate between the different types of transportation like air / land/water, can tell/guess the properties of transport like land transport needs a tyre, air transport needs wings.	There are words with some letters missing. the missing letters are given below it, these have to be dragged and placed correctly to make the correct word. Children can also listen to the audio.

Name of the Game	Game path	Learning Outcome	Description
Transport- match image to word	Open eduActiv8- first option- word matchers (listening exercise)-transport	Can read, identify and associate the audio spelling and pictures with each other, can spell the modes of transport correctly, can use the vocabulary in day to day life	Children have to match the pronunciation audio of different modes of transport name on the left side with different modes of transport name in words given on the right side if the correct audio and name is matched the photo of the mode of transport appears which when pressed, audio can still be heard.
Transport- make a sound to the word	Open eduActiv8- first option- word matchers (listening exercise)-transport	Can read, identify and associate the audio spelling and pictures with each other, can spell the modes of transport correctly, can use the vocabulary in day to day life	Children have to match the pronunciation audio of different mode of transport name on the left side with different modes of transport name in words given on the right side if the correct audio and name is matched the photo of the mode of transport appears which when pressed, audio can still be heard,

Theme : Food



Name of the Game	Game path	Learning Outcome	Description
Match Fruits	Open eduActiv8- third option- memory-match fruits	Identifies simple observable features and match the fruits	A set of cards are given. Children have to find and twin the cards that have the same fruit hidden behind them, to eliminate that set. The number of cards increases as the level progresses.
Sliced Images -fruits	Open eduActiv8- third option- games and mazes-sliced images -fruits	Enhancing problem-solving skills. can observe, calculate/ visualize and predicts the next step, acquires the understanding of puzzles	The sliced images of fruits have to be arranged correctly to give the original shape as shown below.
Food- Match Sounds To The Image	Open eduActiv8- first option- word matchers (listening exercise)-food	Can read, identify and associate the audio, spelling and pictures with each other, can spell the name of food, can use the vocabulary in day to day life	Children have to match the pronunciation audio of different food names on the left side with different food names in words given on the right side if the correct audio and name is matched the photo of food appears which when pressed, audio can still be heard.

Name of the Game	Game path	Learning Outcome	Description
Learn A New Word	Open eduActiv8-first option-learn new word-fruits and vegetables	Identify and name the different kinds of fruits and vegetables they have seen and can associate the given word with a picture.	The screen has a picture and its name at the bottom. There are also two buttons, one for moving to the next word, and another for going back if the player wants to visit the previous one. When they click on the word, children can also listen to the pronunciation of the given word.
Food- Learn a New Word	Open eduActiv8-first option-learn new word-food	Describes the need for food for people of different age groups; animals and birds, availability of food and water and use of water at home and surroundings.	The screen has a picture and its name at the bottom. There are also two buttons, one for moving to the next word, and another for going back if the player wants to visit the previous one. When they click on the word, children can also listen to the pronunciation of the given word.
Fruits And Vegetables- Complete The Word	Open eduActiv8-first option-word builders (listening exercise)-fruits and vegetables	Can relate the audio with the words,can spell the words correctly, can generally use the words orally or in writing in their lives	The game displays some words with missing letters. And those missing letters are given below the incomplete word, these letters have to be dragged and placed correctly to make the correct word. Children can also listen to the audio.

Name of the Game

Game path

Learning Outcome

Description

Food- Complete The Word	Open eduActiv8-first option-word builders (listening exercise)-food	Can relate the audio with the words, can spell the words correctly, can generally use the words orally or in writing in their lives	The game displays some words with missing letters. And those missing letters are given below the incomplete word, these letters have to be dragged and placed correctly to make the correct word. Children can also listen to the audio.
Fruits And Vegetables- Complete The Word	Open eduActiv8-first option-word builders-fruits and vegetables	Can spell the names of different type of vegetables and fruits, can tell when they get this in a market particular season, can use the information in daily life too	The activity contains a picture and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the part and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more letters are missing from the word until the player has to make the whole word by themselves.

Name of the Game	Game path	Learning Outcome	Description
Food- Complete The Word	Open eduActiv8-first option-word builders-food	Can spell the names of different type of food, can guess the ingredients, can use the information in daily life too	The activity contains a picture and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the part and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more letters are missing from the word until the play has to make the whole word by themselves.
Fruits And Vegetables-match Image To The Word	Open eduActiv8-first option-word matchers-fruits and vegetables	Can read and identify the correct spelling of different fruits and vegetable name with their pictures, can read and use the vocabulary in daily life	The Players have to match the words on right with the images on left. If they are right they get a green tick with the image fading.

Name of the Game	Game path	Learning Outcome	Description
Food- Match Image To The Word	Open eduActiv8-first option-word matchers-food	Can read and identify the correct spelling of different type of food name with their pictures, can read and use the vocabulary in daily life	The Players have to match the words on right with the images on left. If they are right they get a green tick with the image fading.
Fruits And Vegetables-match Sounds To The Image	Open eduActiv8-first option-word matchers (listening exercise)-fruits and vegetables	Can read, identify and associate the audio, spelling and pictures with each other, can spell the fruits and vegetables correctly, can use the vocabulary in day to day life	Children have to match the pronunciation audio of different fruits and vegetable names on the left side with different fruit and vegetable names in words given on the right side if the correct audio and names are matched the photo of fruits and vegetables appears which when pressed, audio can still be heard.
Match Vegetables	Open eduActiv8-third option-memory-match vegetables	Identifies simple observable features and match the vegetables	A set of cards are given. Children have to find and twin the cards that have the same fruit hidden behind them, to eliminate that set. The number of cards increases as the level progresses.

Theme : Water



Name of the Game	Game path	Learning Outcome	Description
Learn About Water Cycle	GCompris-go to experiential activities-learn about the water cycle	Can predict steps, can describe phenomena like evaporation, can make a model or poster, can find the relation between different elements like water, sun, cloud, etc. Can explain the use of a water cleanup station, water pump station etc.	To play this game children have to go on elements stepwise like the first click on Sun, that will make the sunrise, then clicking on water vapours which will make a cloud, then click on the cloud to rain, after that click on the water pump system which will make water go to the elevated water storage container, then click on the water cleanup system, then on tux's shower switch. It will complete the cycle when the water cycle is complete tux will have water in his shower and children will be able to understand the relation between the different elements.

Theme : Observation and Practice



Name of the Game	Game path	Learning Outcome	Description
Go-To colour Activities	GCompris-go to discovery activity-go to colour activities-colours	The students will be able to identify different types of colours and discover what type of animal is a duck and will be able to tell where they can see and find them	The game allows children to discover colours and learn the name of colours. Instruct the students to select the duck of the same colour as asked by clicking on it and then clicking OK.
Go-To colour Activities	GCompris-go to discovery activity-go to colour activities-mixing colours of light-	The students will be able to mix and match colours in the game as well as in real life and can make their colours as well	Check out the colour given in the box at the top of the screen and try to mix up the colours by increasing or decreasing the number of colours given in the coloured torches.
Go To colour Activities	GCompris-go to discovery activity-go to colour activities-rebuild the mosaic	This will enhance the memory of the students	Instruct the students to click the colour which they see below and then click the empty boxes on the right to make a similar pattern as given on the left side.

Name of the Game	Game path	Learning Outcome	Description
Go To colour Activities	GCompris-go to discovery activity-go to colour activities-mixing colour of paint	The students will be able to mix and match colours in the game as well as in real life and can make their colours as well	Instruct the students to check out the colour given in the box above and try to mix up the colours by increasing or decreasing the number of colours given in the coloured tubes.
Go To colour Activities	GCompris-go to discovery activities-go to colour activities	Get to know about advanced colours	Click the 'i am ready to box', read the line given above the box of butterflies and click on the coloured butterfly and then click the OK icon.
The Football Game	GCompris-go to amusement activities-the football game	Mouse manipulation, problem-solving skill and enhancement of motor skills	The game is to put a football into a hole. Instruct the students to click on the ball at the right place to put the ball in the hole.
Hexagon	GCompris-Go to amusement activities-Hexagon	Clicking the mouse at the desired place	The game is to find strawberries under the blue fields by clicking on them. The fields become redder as we get closer to the strawberry. When the strawberry is found the game is over and then we move on to the next level.

Name of the Game	Game path	Learning Outcome	Description
Create A Drawing Or An Animation	GCompris-Go to amusement activities-Create a Drawing or an Animation	Creativity, eye-hand coordination	The programme can be used for drawing and for creating animations. It has several options for making shapes such as rectangles, circles and lines. It has the option to put texts in too. It also has several inbuilt images which can be used as objects for creating animations and drawings. Students can also fill colours in the shapes. At the bottom, there are 43 frames which are there as steps for each next while creating an animation.

Theme : Computer-Based Skills



Name of the Game	Game path	Learning Outcome	Description
Chat and draw with your friends	GCompris-go to amusement activities-chat and draw with your friends	Creativity, collaboration, sharing	The programme can be used to create, collaborate and share things.

Name of the Game	Game path	Learning Outcome	Description
Control The Hose Pipe	GCompris-discover computer-mouse manipulation activities-control the hosepipe	hosepipe	The game is to remove the hindrance in a hose pipe so that it can be used to water the flowers. The hindrance can be removed by just moving the mouse over the hose pipe. As the hindrance is removed water can be seen falling on the flowers. Initially, the hose pipe is straight but as the level changes the curves in the hose pipe increases.
Mining For Gold	GCompris-discover computer-mouse manipulation activities-mining for a gold	Usage of the mouse wheel to zoom in and zoom out, learning to multitask using a mouse.	In the game, gold needs to be found. On the starting screen, something shining is seen and the area that is shining has to be zoomed in using the mouse wheel. As the area is zoomed in gold nuggets are revealed. These need to be clicked to move on to the next level.

Name of the Game	Game path	Learning Outcome	Description
Click And Draw	GCompris-discover computer-mouse manipulation activities-click and draw	Increases imagination, mouse control, colour identification	In the game, initially, one blue point and several green points are seen. As the player clicks on the blue dot, another blue dot appears. The aim is to click on each subsequent blue dot to make a picture.
Double Click The Mouse	GCompris-discover computer-mouse manipulation activities-double click the mouse	Identification of the animals, double-clicking the mouse at the desired place and pace, explore different functions of the mouse.	The game is to erase the hindrance in front of a picture to reveal what is hidden behind it. The hindrances can be easily erased by putting the mouse on the object and by double-clicking on it.
Click On Me	GCompris-discover computer-mouse manipulation activities-click on me	Visual Discrimination, functions of the mouse (left click) and hand-eye coordination	The game is to click on the fish to delete it. Initially, the fish gets deleted on one click but as we move on to the next level, the mouse needs to be clicked twice to delete the fish.

Theme : Logical Thinking



Name of the Game	Game path	Learning Outcome	Description
Assemble The Puzzle	GCompris- assemble the puzzle	Problem-solving, the arrangement of the pieces	Drag and drop the items to rebuild the original painting. Drag the image parts from the board given at the left side of the screen to create the painting on the mainboard.
Build The Same Model	GCompris- build the same model	Matching, sense of directions like left, right, up, down	The game is to identify a picture and match it in the given format. Instruct the students to move the items in the bottom left frame to copy their position in the top right model. Below the crane itself, they will find the arrows that will let them select the item that they want to move, just click on it. If the player prefers they can use the arrow keys and space or the tab key instead.
Simplified Tower Of Hanoi	GCompris- puzzles- simplified tower of Hanoi	Identification and matching, eye-hand coordination	The game is to reproduce a given tower by identifying the required shape and then removing the others to reproduce a given tower. Instruct the students to build the same tower in the empty area as the one seen on the right-hand side. To do this they will have to drag and drop one piece at a time, from one peg to another, to reproduce the tower on the right in the space on the left.

Name of the Game	Game path	Learning Outcome	Description
Photo Hunter	GCompris- puzzles-photo hunter	Visual discrimination	The game is to identify the missing part in two similar pictures as well as finding the differences between two pictures. Instruct the students to observe the two pictures carefully. There will be slight differences which the students have to identify and when they find the difference they have to click on it.
A Sliding Block Puzzle Game	GCompris- puzzles-a sliding block puzzle game	Problem Solving, know the concept of spacing out, logical thinking	The game is to get a red block out through a space given in the right. Remove the red car through the parking gate on the right side of the screen. Each car can move either vertically or horizontally. The player must make some room to let the red car move through the gate on the right.
The Tower Of Hanoi	GCompris- the Tower of Hanoi	Problem-solving, understand the arranging the things in systematic order	The game is to reproduce the tower on the right side by following the rules. The player needs to reproduce the tower given at the left to the right side of the screen. They have to drag and drop the top pieces only from one peg to another, to reproduce the tower on the right space on the left.

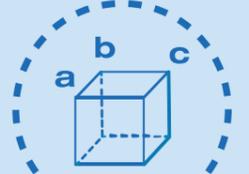
Name of the Game	Game path	Learning Outcome	Description
Super Brain	GCompris-puzzles-super brain	Problem-solving	The game requires the player to flip the colours given in the circle to make the correct pattern, if the correct pattern is identified, the corresponding circle will have a black outer covering. Players have to find the several items hidden by Tux in the correct order. To do so, they need to click on the items until they find what they think is the correct answer. Then click on the OK button in the control bar. In the lower levels, Tux gives the player an indication if they found the hiding place by marking the item with a black box. Players can use the right mouse button to flip the colours in the opposite order.
Miscellaneous Activities	GCompris-go to discovery activity-got to miscellaneous activities-go to matching items	Relate the words with their pictures, learn about the functions of the mouse	Instruct the students to drag the items given on the left side and drop them below the related items given in the middle.

Name of the Game	Game path	Learning Outcome	Description
Miscellaneous Activities	GCompris-discovery activity-go to miscellaneous activities-go to complete the puzzle	Get to know how things can be the same but looks different but does the same work, can relate to the real-life things around them	Complete the puzzle by dragging each piece from the set of pieces on the left, to the matching space in the puzzle.

Integrated Activity

Hello

2+2



Name of the Game	Game Path	Learning Outcome	Description	Theme
Learn New Words: Nature	Open eduActiv8-first option-learn new words-nature	Classification and naming of objects and places related to nature.	The screen has a picture of terrain or an object related to nature and its name at the bottom. There are also two buttons, one for moving to the next word, once the player has learnt the name of the terrain or the object and one for going back if they want to visit the previous one.	English/ Vocabulary
Learn New Words; Fruits And Vegetables	Open eduActiv8-first circle (book icon)- learn new words- fruits and vegetables	Identification of fruits and vegetables, associating words with their pictures, vocabulary building, colours of different fruits and vegetables, the concept of small and big size, categorize fruits and vegetables.	The screen has a picture of a fruit or a vegetable and its name at the bottom. There are also two buttons, one for moving to the next word, once the player has learnt the name of that fruit or vegetable and one for going back if they want to visit the previous one.	Writing/ Vocabulary

English Alphabet 2	Open eduActiv8-first option-discover letters-English alphabet 2	Recognises alphabet with pictures (a-z)	The game aims to teach letters with Flashcards. Alphabets from A to Z (both upper and lower case) are written in the left half of the screen. The right half shows a flashcard of a word starting with whatever alphabet is highlighted on the left side. Players can click on any letter from the left half and Listen to how it is read as well as learn a word starting from that letter with the help of the picture displayed on the flashcard.	Listening / Reading
Learn To Write	Open eduActiv8-first option-discover letters-learn to write	Learn to trace alphabets in upper and lower case in cursive and numbers 1 -12, command on mouse dragging	Trace Letters and Numbers. Instruct the students to click on the Letter or Number that they want to trace. The numbers and letters to be traced are in a Cursive font.	Writing / Numbers (Basic)

Name of the Game	Game Path	Learning Outcome	Description	Theme
Word Builders (Complete The Words): Nature	Open eduActiv8- first option-word builders-nature	Identification of a picture and write the correct spelling, words are repeating which helps the students to memorise the spellings	The activity contains a picture of a terrain or an object/organism related to nature and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the terrain or an object/organism and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more letters are missing from the word until players have to make the whole word by themselves.	Writing / Spelling

Name of the Game	Game Path	Learning Outcome	Description	Theme
Word Builders (Complete The Words): Fruits And Vegetable	Open eduActiv8- first circle (book icon)-word builders-fruits and vegetable	Identification of fruits and vegetables, vocabulary building, associate words with pictures, try to speak the word by connecting letters	The activity contains a picture of a fruit or a vegetable and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete are given in a random arrangement. Instruct the students to identify the fruit or the vegetable and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more letters are missing from the word until the player has to make the whole word by themselves.	Writing / Spelling
Word Matchers (Listening Exercises): Body	Open eduActiv8- first option- word matchers (listening exercise)-body	listening and responding orally	Match sounds to words. Instruct the students to click on any one of the speaker signs, Listen to the word carefully, then click on the corresponding written word to make a match.	Listening/ Speaking

Name of the Game	Game Path	Learning Outcome	Description	Theme
Word Matchers (Listening Exercises): Clothes And Accessories	Open eduActiv8-first option-word matchers (listening exercise)-clothes and accessories	listening and responding orally	Match sounds to words. Instruct the students to click on any one of the speaker signs, Listen to the word carefully, then click on the corresponding written word to make a match.	Listening/ Speaking
Word Builders (Listening Exercises): Body	Open eduActiv8-first option-word builders (listening exercise)-body	listen and write the correct spelling	Instruct the students to listen to the word and fill in the missing letters to complete the written version of that word by dragging and dropping the missing letters from the alphabets provided at the bottom of the screen.	Listening/ Writing
Word Builders (Listening Exercises): Clothes And Accessories	Open eduActiv8-first option-word builders (listening exercise)-body	Listen and write the correct spelling	Instruct the students to listen to the word and fill in the missing letters to complete the written version of that word by dragging and dropping the missing letters from the alphabets provided at the bottom of the screen.	listening/ writing

Name of the Game	Game Path	Learning Outcome	Description	Theme
Addition And Subtraction Review	Tux maths	Able to addition and subtraction	This game is time-based. Instruct the students to use a keyboard to type the Addition/Subtraction of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. As level increases, the number of asteroids and the speed of falling asteroids also increases.	Numbers (Addition/ Subtraction)
Word Matchers: Fruits And Vegetables	Open eduActiv8-first circle (book icon)-word matchers-fruits and vegetables	Able to associate words with their pictures, identification of fruits and vegetables will come to know the colours of different fruits and vegetables, shapes and sizes of different fruits and vegetables.	Match images to words. Instruct the students to click on any one of the images given in the left half of the screen then click on the name corresponding to that image, provided in the right half of the screen, to make a match.	Writing/ Vocabulary

Name of the Game	Game Path	Learning Outcome	Description	Theme
Word Builder	Open eduActiv8-first circle (book icon)-word builders-sports	Able to associate words with their pictures, identification of different types of sports and equipment used in different sports, developing interest in different types of sports, comprehend the necessity of sports, vocabulary building	There are a jumble of Lowercase and Uppercase letters given at the bottom of the screen and a word along with empty boxes on the upper side. Instruct the students to click and drag the letters towards the empty boxes to make the meaningful word as per the given pictures i.e. they have to identify the pictures of different sports, equipment and actions used in daily life and complete their spellings. If spelling goes wrong then it will show the errors by reflecting the symbols 'right' 'wrong' in the boxes. After that, the player can correct the word by dragging the wrong alphabets to their right positions.	Writing / Spelling

Name of the Game	Game Path	Learning Outcome	Description	Theme
Word Builder	Open eduActiv8-first circle (book icon)-word builders-actions	Able to associate words with their pictures, identification of different actions, vocabulary building	Instruct the students to look at the picture given on the screen and guess the name of the action/activity and then write the word by dragging the letters given below to make the correct word. If spelling goes wrong then it will show the errors by reflecting the symbols 'right' 'wrong' in the boxes. After that, the player can correct the word by dragging the wrong alphabets to their right positions.	Writing / Spelling
Learn New Words: Action	Open eduActiv8-first option-learn new words-action	Associate words with pictures and enhancement of vocabulary related to action words	The screen has a picture of an action (people performing that action) and its name at the bottom. There are two buttons, one for moving to the next word, once the player has learnt the name of that action and one for going back if they want to visit the previous one.	Writing/ Vocabulary

Name of the Game	Game Path	Learning Outcome	Description	Theme
Word Builders (Complete The Words): Action	Open eduActiv8- first option-word builders-action	Enhancement of vocabulary related to action words	The activity contains a picture of action and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the action and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more letters are missing from the word until the player has to make the whole word by themselves.	Writing/ Vocabulary
Falling Words	GCompris- discover computer- keyboard manipulation boards-falling words	Learns the positions of different letters on the keyboard, improve the speed of typing, check and improve vocabulary	The game is to type all the letters in a word before the word falls on the ground. Initially two or three letter words fall but as the player crosses the levels the words become bigger with more letters in the word and the difficulty level increases.	Reading/Writing

Name of the Game	Game Path	Learning Outcome	Description	Theme
Multiplication And Division Review	Tux maths	Able to multiply and divide numbers	This game is time-based. Instruct the students to use a keyboard to type the multiplication or division of numbers they see in falling asteroids. As they type the correct number the asteroid gets destroyed. With an increasing level, the number of asteroids and the speed of falling asteroids also increases.	Numbers (Multiplication/ Division)
Colour Matching	Open eduActiv8- third circle-art and colour- colour matching label the colours	Colour recognition, matching	The game displays five colours with their names given in jumbled order. The challenge is to identify the colour and its name in word and match the same. The matching is to be done by dragging the name to the colour splash. There are ten levels in this programme with four parts each. Initially, the names are in the same colour as the corresponding colour, but later the names are displayed in black only.	Drawing and painting

Name of the Game	Game Path	Learning Outcome	Description	Theme
Colour Matching	Open eduActiv8-third circle-art and colour-colour matching	Colour recognition, matching	The game displays a grid in which colour splashes and their names are given. The challenge is to match the colours with their names by first clicking on the colour and then on its name or vice versa. Initially, the name of the colour is in the colour of the splash but later all the names are displayed in a single colour. The number of colours also increases as the level increases.	Drawing and painting
Mixing Colours For Painting	Open eduActiv8-third circle-art and colour-mixing colours for painting	The outcome of mixing of colours in different proportions	The game displays an option to mix red, yellow, blue, black and white in various proportions to know what is the outcome of the mixing of different colours in different proportions. The mixing is to be done by dragging the glass on each colour. The outcome of the colour can be seen in a rectangular-shaped display on the right of the screen.	Drawing and painting

Name of the Game	Game Path	Learning Outcome	Description	Theme
Subtractive Colour Mixing	Open eduActiv8-third circle-art and colour-subtractive colour mixing	The outcome of mixing two or three colours in different proportions	The game displays an option to mix cyan, magenta and yellow in various proportions to know what is the outcome of the mixing of different colours in different proportions. The mixing is to be done by dragging the brush up on each colour. The outcome of the colour can be seen as concentric circles which are displayed on the right of the screen. The display shows the outcome of the mixing of two colours and all the colours.	Drawing and painting
Find The Colour Of The Circle In The Middle	Open eduActiv8-third circle-art and colour-find the colour of the circle in the middle	The outcome of mixing of colours in different proportions	This game challenges the player to adjust the amount of cyan, magenta and yellow paint to find the colour of the circle in the middle. There is a circle in the middle whose colour does not change. The colour and its intensity can be changed by manipulating the brush made on each colour.	Drawing and painting

Name of the Game	Game Path	Learning Outcome	Description	Theme
Additive Colour Mixing-light	Open eduActiv8-third circle-art and colour-additive colour mixing-light	The outcome of mixing of colours in light	The game deals with the concept of mixing colours in the light. There is an option to mix red, green and blue colours in light in various proportions to know what is the outcome of the mixing of different colours in different proportions in light. The mixing is to be done by dragging the bulb on each colour. The outcome of the colour can be seen in the form of concentric circles displayed on the right of the screen.	Drawing and painting
Find The Colour Of The Circle In The Middle	Open eduActiv8-third circle-art and colour-find the colour of the circle in the middle	The outcome of mixing of colours in light with different intensity	The game deals with the concept of mixing colours in the light. There is an option to mix red, green and blue colours in light in various proportions to find the colour of the circle given in the middle. The mixing is to be done by dragging the bulb on each colour. The outcome of the colour can be seen in the form of concentric circles displayed on the right of the screen.	Drawing and painting

Name of the Game	Game Path	Learning Outcome	Description	Theme
Word Number Memory Game	GCompris-go to reading activities-word number memory game	Integration of language and mathematical aspect, Remember and recall the cards seen and matching them accordingly.	Some cards are given to the players with letters and some with numbers on others. The contents of each card is hidden. Students have to match the numbers with the words.	English / Maths
Solids	Open eduActiv8-numbers-shapes and solids-solids	Identifies various (3-D) objects like sphere, cube, cuboid, cylinder, cone & explore the surface area and volume of a solid body.	The activity contains details about several solids. Students can explore each one with the help of flashcards. The flashcard shows the 3D shape, and the formula to measure the shape's surface area and volume as soon as they click on the figure.	Shapes and spatial understanding

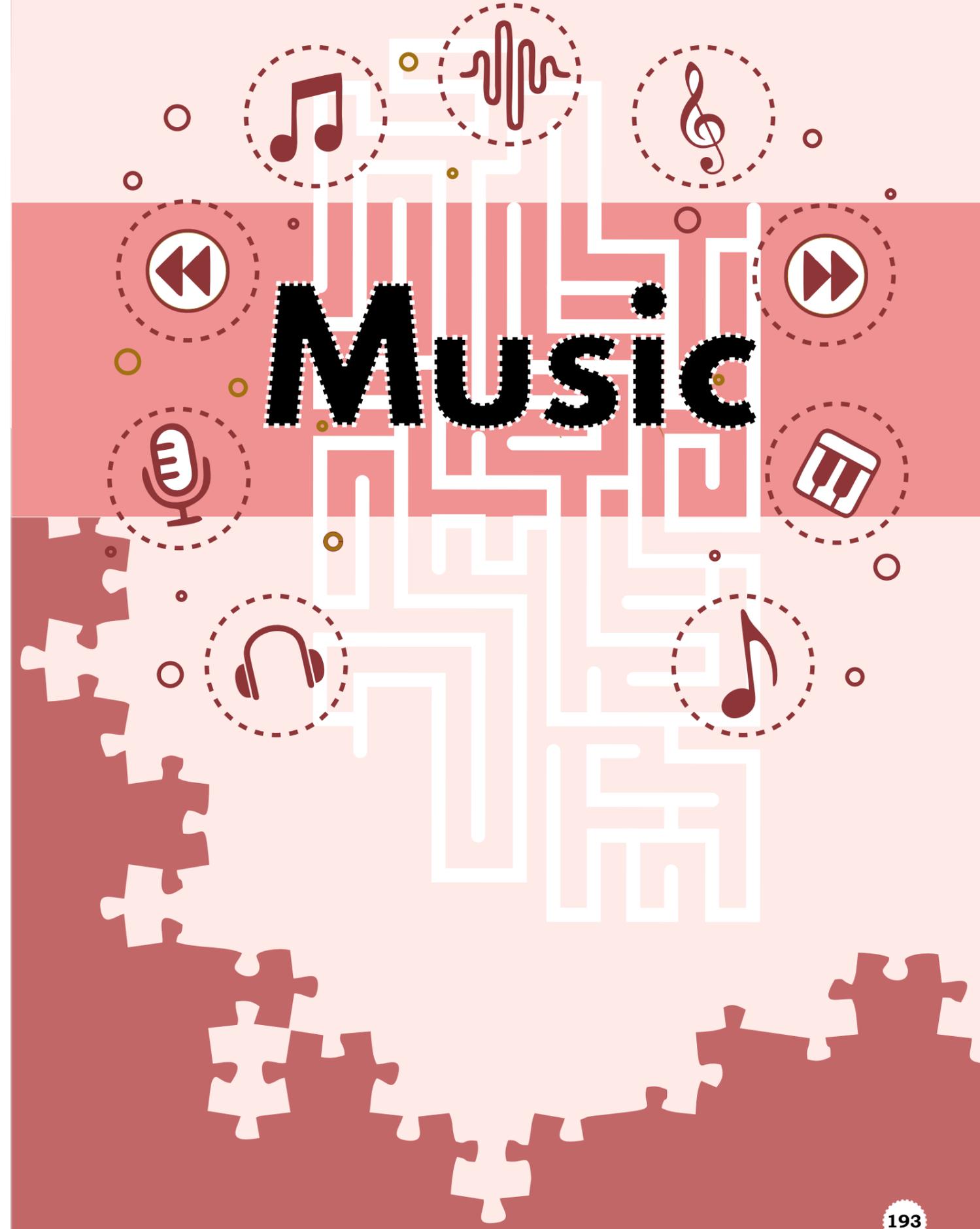
Name of the Game	Game Path	Learning Outcome	Description	Theme
Shapes	Open eduActiv8-numbers-shapes and solids-shapes	Acquires understanding about shapes around her/him. Explores the area and perimeter of simple geometrical shapes.	The activity contains details of several shapes. Students can explore each one with the help of flashcards. The flashcard shows the shape, and the formula to measure the shape's area and perimeter as soon as the player clicks on the figure.	Shapes and spatial understanding
Match Shapes To Their Names	Open eduActiv8-numbers-shapes and solids-match shapes to their names	Match shapes with their names based on their sides/angles.	The activity contains images of different shapes as well as their jumbled up names on the screen. Students need to figure out which name represents which shape, then, click first on the shape and then on the name to make a match. When they are done with all the shapes they will automatically move to the next level.	Shapes and spatial understanding

Name of the Game	Game Path	Learning Outcome	Description	Theme
Shape Maker	Open eduActiv8-numbers-shapes and solids-shape maker	Draw different shapes and learn their names. Identifies the centre, radius and diameter of the circle. Classifies angles into a right angle, acute angle, obtuse angle and represents the same by drawing and tracing.	There are three options in the leftmost column of the screen for drawing rectangular (4 sided), triangular (3 sided) and circular shapes. The player has to click on any one of them and try to make different four-sided, three-sided and circular figures (according to whatever option they have chosen) on the graphical sheet provided for this purpose. As soon as they have drawn a shape the page will reflect some information regarding it, including its name, the length of its sides etc. Players are also given tasks which if they can complete they can move to the next level.	Shapes and spatial understanding

Name of the Game	Game Path	Learning Outcome	Description	Theme
Nature- Complete The Word	Open eduActiv8- first option-word builders (listening exercise)-nature	Can relate the audio with the words, can spell the words correctly, can generally use the words orally or in writing in their lives	The game displays some words with some missing letters. The missing letters are given at the bottom of the screen, these have to be dragged and placed correctly by the player to make the correct word.	Family and friends 1.3 animals / 1.4 plants
Nature- Complete The Word	Open eduActiv8- first option-word builders-nature	Observe the images related to nature and learn their names.	The activity contains a picture and its name at the bottom with a few letters missing from the word. Below the incomplete word, the letters required to complete it are given in a random arrangement. Instruct the students to identify the part and then complete the word by clicking and dragging the letters in the right order to the empty boxes to finish the incomplete name. As the level advances, more and more letters are missing from the word until the player has to make the whole word by themselves.	Family and friends 1.3 animals / 1.4 plants

Name of the Game	Game Path	Learning Outcome	Description	Theme
Nature- Match Image To The Word	Open eduActiv8- first option-word matchers-nature	Can read and identify the correct spelling of different natural place's names with their pictures, can read and use the vocabulary in daily life	The player has to match the words on right with the images on left. If they are right they get a green tick with image fading.	Family and friends 1.3 animals / 1.4 plants
Nature- Match Sound To The Word	Open eduActiv8- first option-word matchers (listening exercise)-nature	Can read, identify and associate the audio, spelling and pictures with each other, can spell the name of natural places, can use the vocabulary in day to day life	This game requires the player to match the pronunciation in the audio of different natural places name on the left side with different natural places name in words given on the right side if the correct audio and name is matched the photo of natural places appears which when press audio can still be heard	Family and friends 1.3 animals / 1.4 plants

Name of the Game	Game Path	Learning Outcome	Description	Theme
Nature-learn New Words	Open eduActiv8- first option-learn new word-nature	Can identify and name the different types of natural places like hill, lake, can use the new vocabulary in daily life, can recognise and name the places they are familiar with. EVS:- will be curious to know/understand the formation of different kind of natural places, will understand the different kind of properties they have like sea have salty water, can differentiate between terms like the pond and lake /hill and mountain etc	The screen has a picture and its name at the bottom. There are also two buttons, one for moving to the next word, and one for going back if the player wants to visit the previous one.	Family and friends 1.3 animals/ 1.4 plants

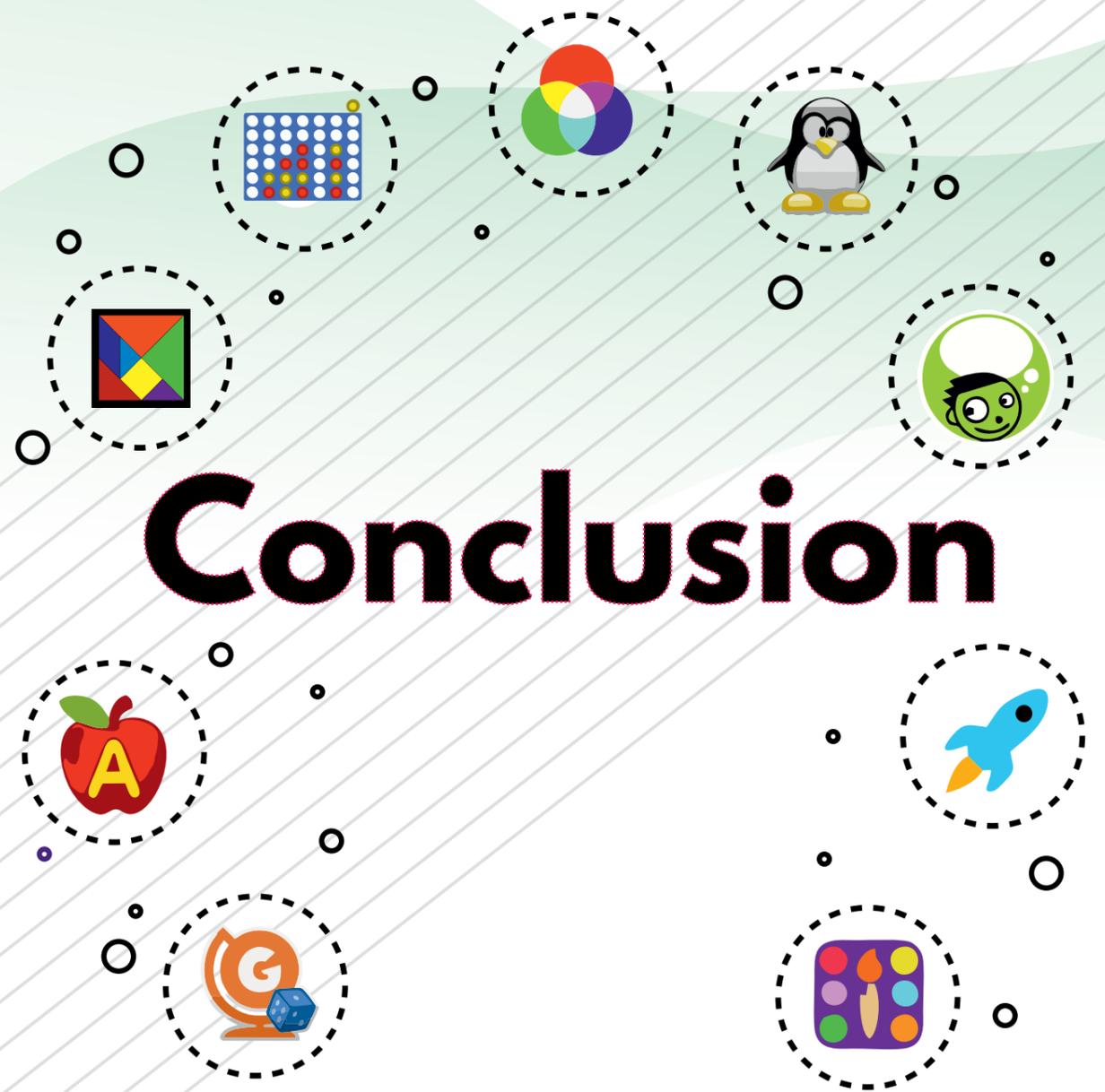


Name of the Game	Game path	Learning Outcome	Description
Go To Sound Activities	GCompris-go to discovery activity-go to sound activities-melody	Coordination of eye-ear and hand movements enhances creativity, speed and responsiveness.	Players have to listen to the sounds carefully and repeat the same melody by pressing the same elements. Speed increases as the level progresses.
Go To Sound Activities	GCompris-go to discovery activity-go to sound activities-play piano	Improves coordination among different body parts, learns to use the keyboard effectively, integration of music, arts, learn about piano, musical notes, treble clef and the bass clef.	Play "Piano Composition" first to understand this activity. Click the piano keys that match the written Musical notes. The level of the sounds increases as the player moves through the levels.

Name of the Game	Game path	Learning Outcome	Description
Go To Sound Activities	Educational Suite GCompris-go to discovery activity-go to sound activities-play rhythm	Know about the basic working of a drum and how the rhythm is produced, coordination enhancement, using the keyboard for carrying out functions.	Players have to listen to the rhythm and repeat it by tapping the drum to perform the identical rhythm. They have to be careful to click only when the line is in the middle of the notes.
Go To Sound Activities	Educational Suite GCompris-go to discovery activity-go to sound activities-explore world music	Know about the music from around the world, memorising skills	Instruct the students to click on the suitcases given and read about the music of different places while listening to it in the background. Players can use this information to complete Level 2 and Level 3.
Go To Sound Activities	Educational Suite GCompris-go to discovery activity-go to sound activities-music instruments	Know about different musical instruments and the sounds produced through them.	Instruct the students to click on the musical instrument being asked and identify using the sounds produced.

Name of the Game	Game path	Learning Outcome	Description
Go To Sound Activities	Educational Suite GCompris-go to discovery activity-go to sound activities-name that note	Learn about musical notes and the pitch names, improve coordination, and learn about piano basics.	Instruct the students to identify the name of the notes where Pitch names are colour-coded and in the later stages, there's no colour coding used.
Go To Sound Activities	Educational Suite GCompris-go to discovery activity-go to sound activities-piano composition	Learn about musical notes and the pitch names, improve coordination, learn about piano basics.	Instruct the students to make their music notes by clicking on the coloured keys of the piano given on the left side of the screen. Then they can also listen to it by clicking on the play button in the box given at the right lower side of the screen and delete the note one by one or all of them at the same time by the other two.

Conclusion





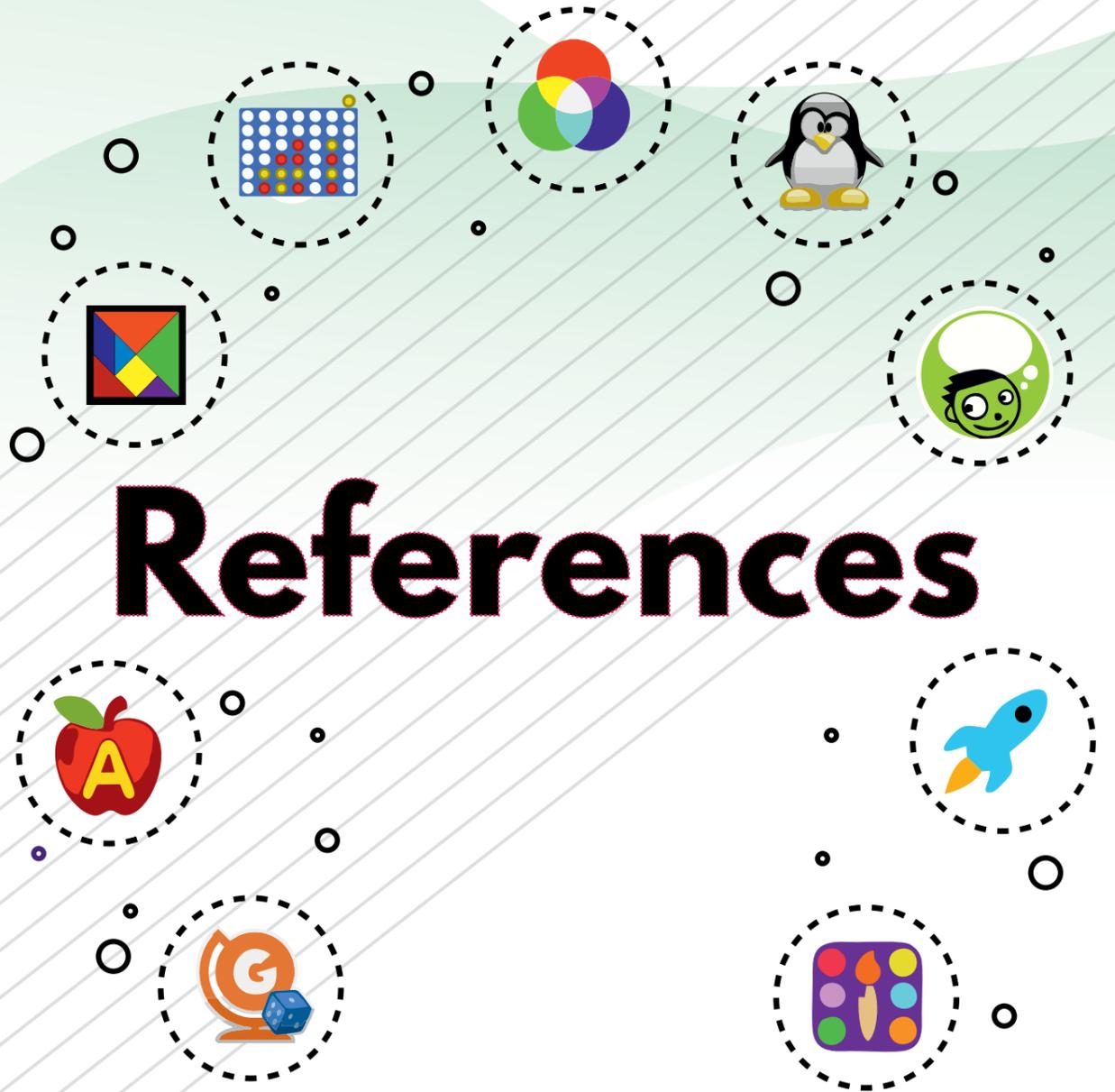
At this final stage, let's collate some of the key points drawn from the previous parts and reflect on the current state of digital games. It is important to highlight the overall key areas of information that involve some of the challenges for learning with digital games. Most importantly, the guide embeds practical examples from educators of what is the use and significance of games and how their design looks like in the classroom. This pairing of the pedagogical and practical theory underpins the use of digital games in learning that makes the guide especially useful. There is a link between certain types of games (digital games) and the constructivist learning theory. The document highlights the development of higher-level of skills such as evaluation, critical thinking, synthesis and analysis – that games have the most potential in higher education. Digital games have been found beneficial for both students and teachers. Learning becomes easy, attractive, interesting, challenging, flexible, effective, and enjoyable. It also helps in developing ICT skills and helps in developing various skills such as problem-solving, high order thinking, individual learning, collaborative learning and systematic thinking. Classroom environment also changes with a remarkably Students work individually and with peers in collaborative works, which helps in reformulating new strategies to solve problems. Digital games are effective as they contain different challenges, reward systems, competition, role-play, have a fun element. They provide better representation of abstract and complex concepts. Teachers also reformulate strategies, approaches and content to teach students through digital games and create an effective environment for learners. Assessment becomes easy and flexible and decreases the load of the teacher as well as students.

There have been successful outcomes of application of Digital game-based learning which has lead to an increased demand in the expansion of digital games. Free open software's have been identified by the internal team. The three main software GCompris, Tux math and eduActiv8 have been classified. Over 103 activities from GCompris, 192 activities from eduActiv8 and 58 activities from tux maths have been mapped with description and learning outcome while keeping in view the syllabus and NCERT textbooks to meet these demands in the modern classrooms.

This guide has explored the meaning of digital game for learning, with the help of definitions by many researchers. In the arena of higher education in particular, the acceptability of digital game-based learning is a key to an enhanced teaching-learning process.



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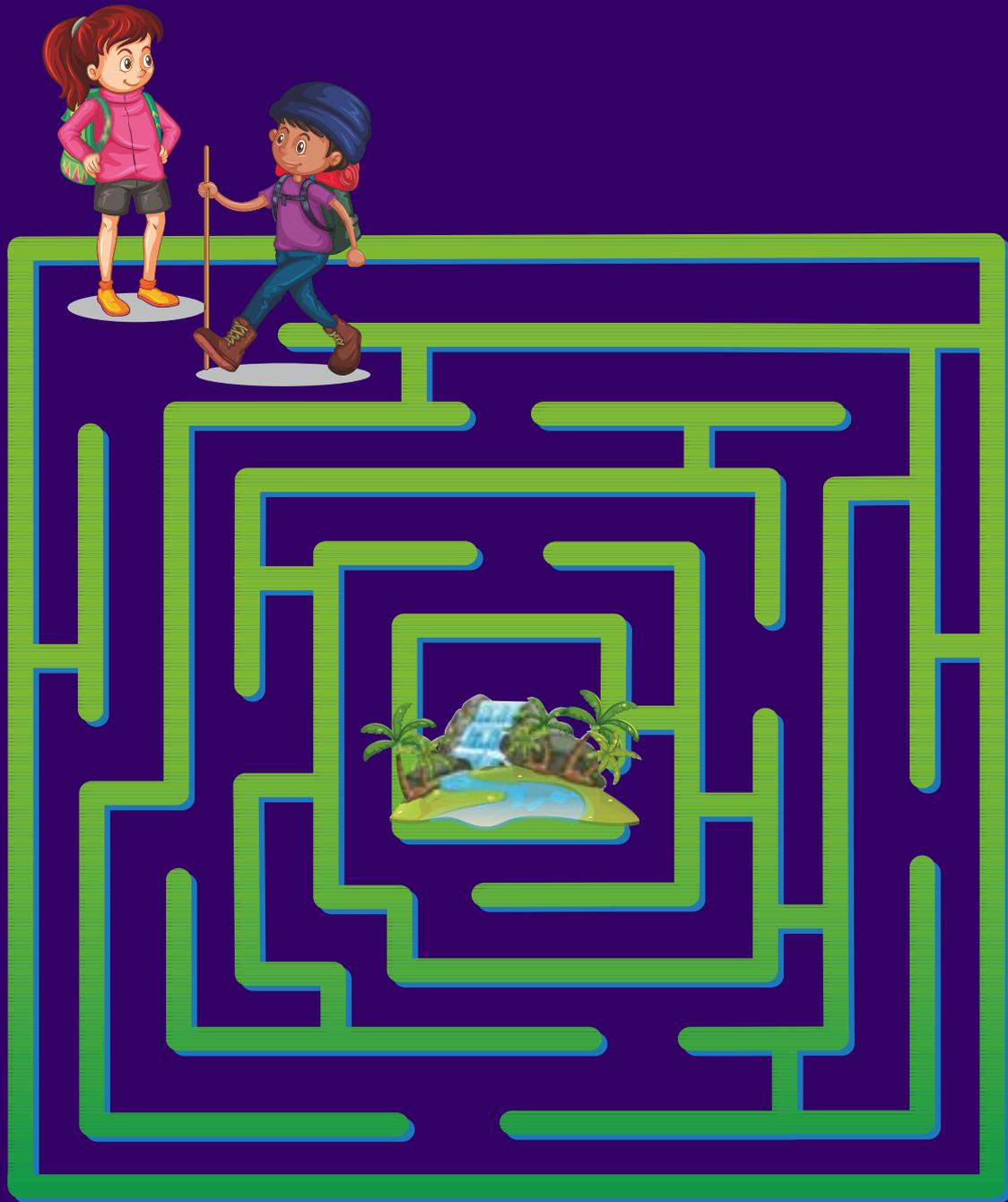
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एन सी ई आर टी
NCERT

**Central Institute of Educational Technology
National Council of Educational Research and Training
Sri Aurobindo Marg, New Delhi - 110016**

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