Listening and Speaking

Listening and speaking are enhanced by bigger chunks of language such as stories narratives and poems. Activities like role play etc. engage the children with the language.

Learning Outcomes:

Children will be able to:

- ☑ tell a story, or recount an experience with appropriate and relevant facts;
- ☑ give descriptive details, speaking clearly at an understandable pace;
- ☑ speak clearly in front of an audience using volume and pitch suited to the purpose and respond to questions asked;
- ☑ narrate stories / recite poems aloud with expression for enjoyment;
- ☑ use grammatically correct language and specific vocabulary to communicate ideas and supporting details;
- ☑ engage in drama/ role play activities;
- ☑ take dictation of short stories.

Listening and Speaking		
Suggested Areas/Content	**Suggested Transactional Processes**	**Suggested Learning Resources**
▷ Picture stories ▷ Narrate stories on various themes with expressions and actions ▷ Narrate experiences with relevant facts, descriptive details. ▷ Recite poems aloud with the required expression. ▷ Drama/ role play activities based on poems, stories, incidents ▷ Dictation in content/short stories	▷ Reviewing and building on previous learning. ▷ Encouraging children to participate in role play /dialogue and contribute to conversations. ▷ Creating opportunities for listening to a poem/ story/ dialogue and enacting it. ▷ Setting a cooperative, positive classroom tone for discussion. ▷ Providing opportunities for children to share information that is relevant and interesting to them (e.g., asks children to share ideas, in small groups, about items, situations and experiences based on values and focusing on diversity). ▷ Providing opportunities for children to retell the stories orally, using props such as puppets, costumes, story maps, and felt boards. ▷ Using illustrations in a picture book to unfold the story with children. ▷ Developing childrens' background knowledge (schema) and vocabulary	▷ Audio/video clips/cartoons for poems/stories ▷ magazines, newspapers, picture books etc. ▷ Realia/ Flashcards/ Posters/ puppets/ Models/ Charts etc.

Listening and Speaking		
Suggested Areas/Content	**Suggested Transactional Processes**	**Suggested Learning Resources**
	related to the topic of the text and real life experiences.	
	➤ Periodically scheduling book talks, reading conferences, and literature circles, as appropriate for the physical, social, emotional and developmental needs of individual children or groups.	
	➤ Giving dictation of some familiar words and simple sentences to enable children to listen and write *(listening is linked to speaking and writing)*	
	➤ Setting aside time for extensive reading (reading for leisure /pleasure).	

NOTE: *The activities/tasks suggested above are not necessarily restricted to listening and speaking. As the language teacher is aware, all four language skills are inter-related and often overlap.*

Reading and Writing

Children read a text with fluency, interpret and raise critical questions. They write with sense of purpose that is drawn from personal experience.

Learning Outcomes:

Children will be able to:

- ☑ interpret a picture and raise critical thinking questions;
- ☑ read aloud appropriate level prose, poetry and other texts with fluency and expression;
- ☑ write a paragraph of approximately 100 words with one central idea that introduces a topic. makes use of linking words (e.g. 'because', 'and', 'also' etc.) to provide a sequence and a conclusion. topics could be personal, narrative or descriptive;
- ☑ draw from personal experiences or real life situations;
- ☑ write a simple letter (to a parent, friend, relative etc.).

Reading and Writing

Suggested Areas/Content	Suggested Transactional Processes	Suggested Learning Resources
▶ Picture reading with stimulating questions. ▶ Read aloud age appropriate prose and poetry with fluency and expression on themes. ▶ Paragraph writing of approximately 100 words with one central idea that introduces a topic. ▶ Use of linking words (e.g. 'because', 'and', 'also' etc.) to provide a sequence and conclusion. Topics could be personal narrative or descriptive. ▶ Draw from personal experiences or real life situations to express in writing. ▶ Write a simple letter (to a parent, friend, relative etc.	▶ Reviewing and building on previous learning. ▶ Supporting child's development as an independent reader with books that are consistent with developing her/his phonic knowledge. ▶ using films / documentaries to develop inference and critical skills. ▶ creating opportunities for children to ask questions about what they are reading. ▶ creating opportunities for recitation and performance. ▶ using drama to support writing. Inviting children to write in the role of real or imagined others. ▶ fostering talk amongst children to generate ideas, rehearse orally and to reflect on the process of writing. ▶ organizing of ideas-reading and reviewing. (e.g. using drama and role play, annotating text, teacher modelling, guided writing.)	▶ Picture reading books with chunks (group of words in language) ▶ Big books, Cartoons with audio or text. ▶ Self / teacher created materials. ▶ Magazines, newspapers ▶ Activities/tasks (*for recognizing words, associating letters and sounds with words*). ▶ Text types: Very short stories, articles, poems and songs, texts with visuals, etc. ▶ Age appropriate magazines, newspapers, picture books, story books etc. (*for reading and connect it to their own experiences.*) ▶ Realia/ Flashcards/ Posters/ Puppets/ Charts etc. (to *stimulate language*). ▶ Establish and use a Book /Reading Corner

Grammar and Vocabulary in Context

Use of vocabulary and grammar is supplemented with the introduction of Dictionaries. They distinguish between various uses of language functions.

Learning Outcomes:

Children will be able to:

- understand the concept of subject and predicate;
- learn to use collective nouns and material nouns;
- understand and apply the functions of nouns, pronouns, verbs, adjectives and adverbs in general and their use in a particular sentence;
- form and use regular and irregular and plural nouns, forms and uses simple tenses (past, present, future);
- learn the use of adjectives and their kinds.
- understand and use sequencing through an alphabetical order (first two letters of the words)
- distinguish between definite and indefinite articles and their appropriate use;
- use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.
- use vocabulary in context appropriate to their age level.
- learn to use an apostrophe to show singular possession and know the difference between plurals and possessives.
- learn to use prefixes and suffixes.

Grammar and Vocabulary in Context

Suggested Areas/Content	Suggested Transactional Processes	Suggested Learning Resources
Subject and predicate. Collective nouns and material nouns. Functions of nouns, pronouns, verbs, adjectives and adverbs in general. Regular and irregular and plural nouns. Singular possession. Difference between plurals and possessives. Simple tenses (past, present, future). Sequencing through an alphabetical order (first two letters of the words) Definite and indefinite articles and their appropriate use. Use of dictionaries, glossaries both print and digital. Vocabulary in context appropriate to the age level e.g. prefixes and suffixes.	Reviewing and building on previous learning. Providing visuals/ verbal clues to introduce use of grammatical elements at this level. Providing worksheets with pictures, illustrations etc. to help children use grammar in context. E.g.: using pictures to teach position. *The cat is sitting on the table.* Giving /Assigning meaningful exercises that allow / encourage children to practice grammar, vocabulary and specific language points. Providing authentic and real-world / practical / assignments/ tasks to make children aware of their usefulness.	Self / teacher created materials e.g. worksheets, activities and tasks. Audio, video, print / text. Authentic tasks and activities of short duration (*These would bring in an engagement with* *words,* *expressions in dialogue.* *formula use* *collections* *word chunks* *word / Languages games.*) Realia/ Flashcards/ Posters/ puppets/ Charts etc. (*to stimulate language.*)

Grammar and Vocabulary in Context		
Suggested Areas/Content	**Suggested Transactional Processes**	**Suggested Learning Resources**
❯ Dictation of language chunks.	❯ Giving dictation of language chunks. ❯ Generating ideas about a potential topic, using a variety of strategies and resources *(e.g., formulate and ask questions to identify personal experiences, prior knowledge, and information needs and to guide searches for information; brainstorm and record ideas on the topic)*	

थीम 1: सुनना और बोलना

बच्चे विभिन्न संदर्भों में परस्पर बातचीत, कविता, कहानी आदि को ध्यानपूर्वक सुनकर समझते हैं और अपनी प्रतिक्रिया देते हैं। कहानी, कविता, संवाद आदि को भावपूर्ण ढंग से सुनाते हैं। पूछे गए प्रश्नों के स्पष्ट उत्तर देते हैं।

अधिगम उपलब्धियाँ (Learning outcomes):

- ☑ **अपरिचित संदर्भों और विषयों पर सुनी गई बात को समझकर अपनी प्रतिक्रिया दे सकेंगे।**
- ☑ विद्यालय में दिन-प्रतिदिन के संवाद में सक्रिय रूप से भाग ले सकेंगे।
- ☑ **सूचनाओं व जानकारियों और औपचारिक तथा अनौपचारिक संदेशों को सुनकर समझ सकेंगे तथा अपने सहपाठियों और अभिभावकों को स्पष्ट रूप से संप्रेषित कर सकेंगे।**
- ☑ **अपरिचित शब्दों का अर्थ विशेष संदर्भ में अनुमान द्वारा समझ सकेंगे।**
- ☑ पिछली कक्षा की अपेक्षा अधिक लंबी एवं अमूर्त विषयों (प्रेम, सौहार्द, एकता आदि) पर कविताएँ सुनेंगे और उचित हाव – भाव और लय के साथ सुना सकेंगे।
- ☑ भिन्न – भिन्न अवसरों पर कविता, कहानी, गीत, वक्तव्य चुटकुले, पहेलियाँ आदि सुना सकेंगे।
- ☑ नाटक में भाग लेंगे और अपने चरित्र के अनुसार संवाद बोल सकेंगे।
- ☑ भिन्न – भिन्न स्थानों के अनुभवों को याद कर कक्षा में सुना सकेंगे।
- ☑ सुनी हुई घटनाओं, कहानियों आदि को उचित क्रम से स्पष्ट शब्दों में अभिनयात्मक ढंग से सुना सकेंगे।
- ☑ **सुनी गई पाठ्य सामग्री के मुख्य भाव को समझ सकेंगे और बता सकेंगे।**
- ☑ पाठ्य पुस्तक एवं उससे इतर बाल साहित्य की रचनाओं के पठन को रुचि के साथ सुनकर **प्रश्न कर सकेंगे, अपने तर्क दे सकेंगे तथा अपने विचार प्रस्तुत कर सकेंगे।**
- ☑ नई कहानियाँ (फंतासी, ऐतिहासिक आदि), प्रसंग, घटनाएँ, वर्णन आदि सुनकर समझ सकेंगे और विस्तृत जानकारी तथा जिज्ञासा शांत करने के लिए प्रश्न पूछ सकेंगे।
- ☑ संचार माध्यमों के द्वारा आयोजित बाल कार्यक्रमों जैसे – तरंग आदि के कार्यक्रम देखकर समझ सकेंगे और उन पर अपने विचार प्रस्तुत कर सकेंगे।
- ☑ अध्यापक द्वारा पढ़ाए जा रहे पाठों को ध्यान से सुनकर पूछे गए प्रश्नों का अपने शब्दों में स्पष्ट उत्तर दे सकेंगे।

सुनना और बोलना		
सुझावित विषय / क्षेत्र	**सुझावित शिक्षण-अधिगम प्रक्रिया**	**सुझावित अधिगम स्रोत**
▸ अपने अनुभवों एवं कल्पनाओं का प्रत्यास्मरण ▸ सुनी हुई कविताएँ एवं गीत ▸ समाचार पत्रों, पाठ्य पुस्तक एवं पाठ्य पुस्तक से इतर सामग्री से पढ़ी गई कविता, कहानी, तुकबंदी, गीत	▸ भिन्न-भिन्न संदर्भों में भाषा के मौखिक रूप के प्रति समझ बनाने के अवसर दें (विभिन्न स्रोतों द्वारा कविता, कहानी, नाटक, घटना आदि)। ▸ अपरिचित शब्दों / नामों का अर्थ जानने-समझने के अवसर दें। ▸ अपने अनुभवों को साझा कर करने के अवसर प्रदान करें।	▸ सी०डी०, शब्दों के कार्ड, अपरिचित वस्तुओं के नामों की सूची, समाचार-पत्र, बाल-साहित्य कठपुतलियाँ, मुखोटे, कंप्यूटर, टीवी, राष्ट्रीय त्योहारों, ऋतुओं आदि के चित्र

सुनना और बोलना		
सुझावित विषय / क्षेत्र	**सुझावित शिक्षण-अधिगम प्रक्रिया**	**सुझावित अधिगम स्रोत**
➤ रोचक पहेलियाँ ➤ सांस्कृतिक आयोजन ➤ नाटक एवं संवाद ➤ विद्यालय द्वारा आयोजित भ्रमण के अनुभव जैसे – पुस्तक मेला, ऐतिहासिक स्थल आदि ➤ फंतासी पर आधारित कहानियाँ ➤ परिचित स्थितियों पर आधारित संदेश ➤ दूरदर्शन, कंप्यूटर, इंटरनेट, सिनेमा पर दिखाई जाने वाली, मेले, त्योहार, खेल, स्वच्छता, स्वास्थ्य आदि सामग्री पर प्रतिक्रिया ➤ सरल एवं परिचित विषयों पर प्रश्न निर्माण	➤ कविताओं और गीतों की प्रस्तुति के लिए कक्षा में कविता-पाठ और अंत्याक्षरी जैसे खेल खिलाएँ। ➤ समाचार-पत्र, पत्रिकाएँ, बाल-साहित्य आदि उपलब्ध करवाएँ। उसमें से रोचक सामग्री पढ़कर सुनवाएँ / सुनाएँ। बच्चों को ऐसे अवसर प्रदान करें जिसमें बच्चे समाचार, कहानी, कविता आदि का प्रत्यास्मरण कर सकें, जैसे – वर्षा पर कोई कविता सुनाओ या मित्रता विषय पर कोई कहानी सुनाओ। ➤ नाटकों का अभिनय करवाने के अवसर प्रदान करें। ➤ भ्रमण के लिए विभिन्न स्थलों जैसे- डाकघर, पुस्तक – मेला, कोई फैक्ट्री, ऐतिहासिक स्थल आदि ले जाएँ। वहाँ की कार्य – प्रणाली, कर्मचारी, प्रदर्शित वस्तुएँ / पुस्तकें आदि की विस्तृत जानकारी दें। ➤ समय-समय पर भ्रमण के अनुभव सुनाने के लिए प्रोत्साहित करें। ➤ बच्चों को सरल संदेशों को दूसरे व्यक्ति तक पहुँचाने के लिए प्रेरित करें और बच्चों को अवसर भी दें। ➤ सुनी गई सामग्री पर प्रश्न पूछने के लिए प्रेरित करें।	

थीम 2: पढ़ना एवं लिखना (पठन एवं लेखन कौशल)

बच्चे पाठ्य-सामग्री को प्रवाहपूर्ण ढंग से पढ़ते हैं और उनकी लिखित अभिव्यक्ति विकसित और स्पष्ट हो जाती है। **विराम चिह्नों और उचित आरोह – अवरोह के साथ हस्त लिखित और मुद्रित सामग्री को पढ़ते हैं।** पढ़े गए विषयों पर अपने विचार क्रमबद्ध रूप से लिख सकते हैं। **व्याकरणिक इकाइयों – कर्ता, कर्म, क्रिया आदि तथा काल की पहचान करते हैं** और उनके शब्द भंडार में उत्तरोत्तर वृद्धि होती जाती है।

अधिगम उपलब्धियाँ (Learning outcomes):

- ☑ विद्यालय, बाज़ार या अन्य स्थानों में प्रदर्शित विज्ञापनों / दीवार लेखन / होर्डिंग्स / सूचनाओं आदि को पढ़ सकेंगे।
- ☑ **अपने सहपाठियों का लेखन पढ़ सकेंगे।**
- ☑ रचनाओं को विराम चिह्नों का ध्यान रखते हुए सही उतार-चढ़ाव, लय, बलाघात से पढ़ सकेंगे।
- ☑ अपनी रुचि के अनुसार पाठ्य – पुस्तक के अतिरिक्त अन्य कहानी, कविताएँ, नाटक पढ़ सकेंगे।
- ☑ पठन सामग्री को पढ़कर उसकी मुख्य बात / विचार को समझ सकेंगे और घटनाओं के क्रम को समझेंगे।
- ☑ **आवश्यक नियमों और निर्देशों को क्रमवार सुना सकेंगे और उनका पालन कर सकेंगे और लिख सकेंगे।**
- ☑ विद्यालय के बरामदे, सभागार आदि में टँगे चित्रों को पढ़ कर उनका शीर्षक लिख सकेंगे।
- ☑ **चित्र कथाएँ, कार्टून पढ़ सकेंगे और स्वयं भी चित्र बनाकर उसकी प्रकृति के अनुसार संवाद / टिप्पणी लिख सकेंगे।**
- ☑ कहानी / कविता आदि को अपने अनुभव, कल्पना के आधार पर बदलते हैं और दिए गए विषयों पर वर्तनी और विराम चिह्नों का ध्यान रखते हुए छोटे अनुच्छेद व अनौपचारिक पत्र लिख सकेंगे रचनात्मक अभिव्यक्ति का विकास कर सकेंगे।
- ☑ तरह-तरह के भाषायी खेल खेल सकेंगे।

पढ़ना एवं लिखना

सुझावित विषय / क्षेत्र	सुझावित शिक्षण-अधिगम प्रक्रिया	सुझावित अधिगम स्रोत
▸ प्रदर्शित विज्ञापनों, सूचना पट्टों, होर्डिंग आदि पर लिखित सामग्री	▸ विज्ञापनों, सूचना पटों, होर्डिंग आदि मुद्रित सामग्री को पढ़ने के लिए प्रेरित करें।	▸ विज्ञापन, होर्डिंग, सूचना पट आदि। ऑडियो, वीडियो, सी०डी०, कार्ड, चित्र, पोस्टर, बुलेटिन बोर्ड आदि
▸ सहपाठियों द्वारा लिखित सामग्री जैसे – अनुच्छेद, कविता, पत्र आदि	▸ कक्षा के बच्चों की हस्तलिखित सामग्री एक दूसरे से पढ़वाएँ।	▸ बाल – साहित्य, समाचार – पत्र, पत्रिकाएँ
▸ विभिन्न विषयों जैसे – एकता, मित्रता, सहयोग, चतुराई, सूझ – बूझ, साहस, वीरता, देशभक्ति, आदि पर रचनाएँ	▸ कहानी, कविताओं आदि की पुस्तकें पढ़ने के लिए दें। कहानियों के मुख्य भाव / विषय पर प्रश्न पूछें। पात्रों / घटनाओं के बारे में बातचीत करें। घटनाओं को क्रमबद्ध करने के लिए कहें। घटनाओं और पात्रों को बदलकर कहानी को पुनः लिखने के लिए कहें। कहानी का अंत बदल कर लिखवाएँ।	▸ शब्द – संपदा के चार्ट आदि
▸ चित्र के साथ कविता / संवाद / कार्टून / चित्रकथाओं का पठन एवं लेखन	▸ बच्चों को स्वयं छोटी छोटी-कविताएँ और	▸ पहेलियाँ / चुटकुले, कार्टून आदि

पढ़ना एवं लिखना

सुझावित विषय / क्षेत्र	सुझावित शिक्षण-अधिगम प्रक्रिया	सुझावित अधिगम स्रोत
- व्याकरणिक संरचनाओं पर चार्ट - सामाजिक जागरूकता से संबंधित विज्ञापन, समाचार पत्र, पत्रिकाओं आदि का पठन - दैनिक जीवन की अनिवार्य सूचनाएँ एवं नियमावली, जैसे – ☛ ट्रैफ़िक के नियम ☛ विद्यालय के नियम - अपने साथियों के साथ खेले जा रहे खेलों के नियमों का पठन एवं लेखन - परिचित विषयों पर तुकबंदियों का निर्माण **संदर्भ में व्याकरण** - पूर्व कक्षाओं में सीखी व्याकरण की अवधारणाओं की पुनरावृत्ति एवं अभ्यास - किसी वाक्य में कर्ता, कर्म एवं क्रिया की पहचान - वर्तमान, भूत, भविष्य काल की पहचान, जैसे - ☛ कहानी में काल परिवर्तन कर कहानी का आनंद लेना - शब्द संपदा में वृद्धि। समानार्थी विलोम, अनेक शब्दों के लिए एक शब्द, अनेकार्थी - वचन की समझ और प्रयोग - योजक शब्दों की पहचान और अनुप्रयोग **रचनात्मक लेखन** ☛ पत्र लेखन – अनौपचारिक (अपने पालतू पशु को, मित्र, या सहपाठी, पारिवारिक सदस्य को)	- तुकबंदियाँ बनाकर लिखने के लिए कहें। (फूल, वर्षा, बादल, मोर, गिलहरी, गेंद, माँ आदि विषयों पर)। - किसी व्यंजन को बनाने की विधि बताएँ और लिखने को कहें। - बच्चों से चित्र, कहानी, कविता से संबंधित चित्र बनवाएँ। उनके द्वारा बनाए गए चित्रों को प्रदर्शित करें। - चित्र और कार्टूनों को देखकर बच्चों से उसका वर्णन अलग-अलग विधाओं में करवाएँ। जैसे – कविता, कहानी, संवाद आदि। - समाचार पत्रों से सामाजिक जागरूकता से संबंधित विज्ञापन पढ़वाएँ और उनपर चर्चा करें, जैसे – पल्स-पोलियो अभियान, स्वच्छता अभियान, वन महोत्सव, जल-संरक्षण, पर्यावरण, प्रदूषण आदि। - पाठ्य – सामग्री में से संज्ञा, सर्वनाम, विशेषण और क्रिया शब्दों को छँटवाएँ। - वाक्य में कर्ता और कर्म की पहचान करवाएँ जैसे – अक्षिता खाना खाती है - वाक्य में 'अक्षिता' कर्ता और 'खाना' कर्म है। - बच्चों को काल की जानकारी दें और वाक्यों में पहचान करवाएँ। - थिएट्रिकल एवं चित्रकारी से संबंधित गतिविधियों के माध्यम से विशेषण का अभ्यास करवाएँ। - शब्द – संपदा में वृद्धि के लिए विभिन्न भाषायी खेल करवाएँ जैसे – वर्गपहेली से शब्द बनाना, विलोम छाँटना, समानार्थी शब्दों से वर्ग पहेली भरना आदि। शब्द – सीढ़ी, शब्द – लड़ी आदि। - अनेकार्थी शब्दों का भिन्न – भिन्न अर्थों में वाक्य प्रयोग करवाएँ करवाएँ, जैसे – आम – एक फल, साधारण फल – खाने वाले फल और नतीजा या परिणाम।	

पढ़ना एवं लिखना		
सुझावित विषय / क्षेत्र	सुझावित शिक्षण-अधिगम प्रक्रिया	सुझावित अधिगम स्रोत
☛ अनुच्छेद लेखन ☛ अनुभव लेखन – भ्रमण, अवलोकन आदि के अनुभव	▸ अनुच्छेद लिखवाएँ, जैसे – मेरी पहली बस यात्रा, विद्यालय में खाने की छुट्टी, खेल के मैदान की कोई याद, घर का प्रिय कोना, कक्षा का पहला दिन, मेरा नया मित्र आदि। ▸ बच्चों को पत्रों का प्रारूप समझकर अलग-अलग विषयों पर पत्र लेखन करवाएँ। विराम चिह्नों और वर्तनी पर विशेष ध्यान दिलवाएँ। ▸ बच्चों को किसी स्थान की यात्रा, घटना आदि से संबंधित अनुभव लिखने को कहें।	

Theme 1: Numbers

This theme aims at developing the abilities of children to learn three and four digit numbers. They will be through the use of materials be provided opportunities for observing patterns in two digit numbers and extending it to three digit numbers for everything that includes comparing, forming smallest and greatest numbers using given digits.

Learning Outcomes:

Children will be able to:

📝 work with four digit numbers:
- ☛ read and write numbers up to 9999 using place value;
- ☛ identify the greater and smaller number, of two given numbers, using place value;
- ☛ form different numbers using given digits with and without repetition.

Numbers

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
⯈ 4 digit numbers (up to 9999). ⯈ Place value and expanded form of number. ⯈ Count numbers in different ways-starting from any number. ⯈ Comparison of numbers and arrange them in ascending and descending order. ⯈ Greatest and smallest numbers that can be formed by using given digits (with or without repeating digits).	⯈ Using place value cards (popularly known as arrow cards) to make 4 digit numbers, show their expanded form and place value and face value of digits. ⯈ Discussing examples where numbers occur in thousand in real life contexts. ⯈ Involving children in making rules based on patterns may be evolved for comparing numbers. ⯈ Providing opportunities for sequencing of these numbers in ascending or descending orders. ⯈ Providing two sets of number cards to groups of children to explore 4 digit numbers and finding out the greatest and the smallest numbers. ⯈ Using games and activities to create 4-digit numbers with specific characteristic like numbers with 5 at hundredths place, numbers not having 2, 4, 6, 8 and 0 at ones and tens place etc.	⯈ 36 Number cards 1 to 9, 10 to 90, 100 to 900, and 1000 to 9000 ⯈ Videos and PPTs related to 4 digit numbers.

Theme 2: Number Operations

This theme aims at reinforcement of children's understanding about adding and subtracting two digit numbers and further establishing the algorithms to add three digit numbers may be undertaken. The development and strengthening of algorithm for multiplication is also necessary to clear concepts. A variety of ways for the construction and use of multiplication facts of single digit numbers will be developed in children. Division is introduced as inverse process of multiplication and children learn to divide numbers. Application of learning about four digit numbers and operations on them should form the basis in the teaching – learning process.

Learning Outcomes:

Children will be able to:

- solve simple daily life problems using addition and subtraction of three digit numbers with and without regrouping, sums not exceeding 999;
- construct and use the multiplication facts(tables) of 2, 3, 4, 5 and 10 in daily life situations;
- analyse and apply the appropriate number operation in their situation/ context;
- explain the meaning of division facts by equal grouping/sharing and find it by repeated subtraction;
- add and subtract small amounts of money with or without regrouping;
- make rate charts and simple bills.

Number Operations

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
▷ Addition and Subtraction of numbers (up to 3 digits). ▷ Place value to add and subtract numbers by using standard algorithm. ▷ Problem solving involving addition and subtraction operations in different real life contexts presented through visuals and stories. ▷ Multiplication tables of 2, 3, 4, 5, 7, 9, 10 using different strategies like repeated addition, skip counting, patterns etc. ▷ Multiplication of a two-digit number with a one-digit number using standard algorithm and other methods (lattice method).	▷ Encouraging estimation of addition and subtraction followed by verification. ▷ Creating real life context based problems involving addition and subtraction (by children) and exchanging among them to encourage visual illustration of the problem. ▷ Discussing what "3 times 4", "4 ×6" and so on means may take place result in introduction of sign of multiplication. Asking children to practice and then explain the same to one another in groups while the teacher monitors and provides feedback. ▷ Encouraging children to construct/develop multiplication tables using different strategies. Remembering tables through memory may be discouraged. ▷ Creating contexts from real life in which multiplication facts have to be	▷ Beads, attachable cubes (unifix cubes), spike abacus. ▷ Napier Strips. ▷ Videos and PPTs.

Number Operations

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
- Division of numbers in the context of equal grouping and equal sharing. - Division facts using grouping and multiplication tables. - Relation in multiplication with division of numbers. - Mental computation of sum and difference of two digit numbers using different strategies but without using paper and pencil and crammed facts. - Mental multiplication of two numbers without use of paper and pencil and rote memorized facts. - Estimation of sum, difference and product of two numbers and verification by actually computing them.	used e.g. what is price of 4 note books if price of one note book is known. - Explaining and demonstrating the multiplication of two numbers with one digit in expanded notation so as to create a mathematical understanding of standard algorithm. - Providing and demonstrating concrete examples of equal sharing/ grouping which can be co-related with division and the sign of division may be introduced. - Explaining and discussing with children the interrelationship of division with multiplication and multiplication facts / division facts may be taken up together. - Providing opportunities to children in groups/individually to create real life contexts so as to add/subtract without paper pencil e.g. situation of shopping and finding the total cost amount left etc. For example- I have a hundred rupee note and bought two pencils and two note books, what amount will be left with me after paying the price of the two items? - Creating contexts where double or thrice of a number is needed and encouraging children not to use paper pencil but do the calculation mentally. For example, six children planted one sapling each for three days, how many saplings have been planted by the children?	

Theme 3: Geometry

Children learn to complete the Level 0 (Visualization) of Van Heile hierarchical model of geometric thinking. They recognize and identify two-dimensional shapes and three dimensional figures by their appearance as a whole. Level 0 represents the geometric thinking of many children in the early primary grades. The naming of 2-D and 3-D shapes is also included and their recognition in children's vicinity.

Learning Outcomes:

Children will be able to:

- recognise 2D shapes like straight and curved lines;
- identify and make 2D-shapes by paper folding, paper cutting on the dot grid, using straight lines etc.;
- describe 2D shapes by counting their sides, corners and diagonals;
- fill a given region leaving no gaps using a tile of a given shape and forms various shapes using tangram pieces.

Geometry

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
▸ Make straight lines, curved lines and different shapes on a dot grid. ▸ Various shapes using tangram shapes. ▸ Compare two or more shapes to match their properties like sides and corners etc. ▸ Tessellation: Tiling a given region using the tile of a given/ particular shape. ▸ Identification of shapes that tile and that do not tile. ▸ Simple map reading (may not be to a scale). ▸ Line-drawings of 3D objects on paper or on flat surface.	▸ Conducting activities to use dot grids, straight lines, curved lines and shapes to create different sceneries. ▸ Promoting the use of tangram shapes to make shapes/objects. This will help children in creating an understanding about shape. ▸ Facilitating the creation of different shapes by children using broom-sticks, drinking straws etc. and their shapes maybe discussed with respect to their physical attributes like sides/corners. ▸ Conducting activities to use similar shapes (created / processed) for covering a particular flat surface (as a group work) without any gaps and over lapping in the shapes. ▸ Discussing in groups the shapes that can tile or that cannot tile. Questions like "Why it is so?" should also be discussed ▸ Assigning a task to each child to make a map (not to scale) related to their daily life experiences. For example, map of how to reach "home to school" and then exchange it with other children. Each child gets to read 2-3 maps. This can be followed by holding a discussion on "What makes a map easy to read?"	▸ Tangrams with 5 or 7 pieces. ▸ Broom sticks, drinking straws, ice cream sticks etc. ▸ Cardboard pieces. (*to make number of tiles of same shape and size.*) ▸ Clippings of different maps being published/ printed in various magazines and newspapers. ▸ Geoboard with rubber band. ▸ Maths kit

Integration: Arts Education

Life Skills: solving daily life problems

Theme 4: Measurement

Children learn to use a standard unit for measuring length. The comparison of weight is also to be done not only on the basis of the size but using a simple balance. The measures of capacity in terms of non uniform units like capacity of a bucket in terms of jugs/mugs, volume of cold drink in a bottle in terms of number glasses/cups etc. The measure of time using a calendar or a watch/clock is in child's daily life activities will also be emphasised.

Learning Outcomes:

Children will be able to:

- estimate and measure length and distance using standard units like centimetres or metres;
- weigh objects using simple balance;
- compare the capacity of different containers in terms of non uniform units;
- identify a particular day and date on a calendar;
- read the time correctly to the hour using a clock/watch.

Measurement

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
(a) Length ▷ Need for standard units for measuring length. ▷ Measurement of lengths & distances using appropriate units like centimeter and meter. ▷ Use of measuring tools like scale or measuring tape. ▷ Estimation of the length of various objects and distances in near vicinity and verification by actual measurement. ▷ The relationship between metre and centimeter (b) Mass/ Weight ▷ Non-standard units to weigh different objects in the environment. (c) Capacity/Volume ▷ Measurement and comparison of the capacity of different containers using	▷ Encouraging children (in groups) to make a meter long paper strip using 10cm/20cm long paper strips. Then use this paper strip (metre) to estimate and measure various objects in the environment small objects in cm and longer objects / distances in metres. ▷ Providing opportunities to discover relationships between metre and centimetre. ▷ Using simple balances (made by children) for weighing objects in the environment using a stone or non-standard weight / objects thus establish the need for a standard uniform measure. ▷ Using different small containers to measure the capacities of different	▷ Papers, glue sticks. ▷ Markers of different colours. ▷ Thick strings, plastic plates, wooden sticks for making balance. ▷ Different sized spoons, containers like bowls, glasses etc. water containers. ▷ Toy clock constructed by children to read time. ▷ Calendar of the current year. ▷ Geoboard with rubber band. ▷ Maths kit. ▷ Videos/PPTs.

Measurement		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
non-standard units. ❯ Conservation of volume. (d) Time ❯ A calendar to find a particular day and date. ❯ Read and write time am/pm and 12 hr and 24 hr clock time. ❯ Conversion of 12 hr clock time into 24 hr clock time and vice versa. ❯ Conversion of days to hours and hours to minutes.	containers. For example, capacity of a big-glass may be measured by a small spoon/big spoon/small bowl. ❯ Organizing discussion in class to draw an inference about conservation of volume. ❯ Involving children to read a clock and a calendar and to tell time and day corresponding to a date. ❯ Conducting activities of reading a railway/bus time table in which time is given in 24-hour clock.	

Integration: Science (Forms of Matter)

Social Studies (Understanding Changes)

Life Skills: solving daily life problems

Theme 5: Data Handling

This theme will focus on children developing skills to collect information for a purpose, present it so that it is easily understandable and finally draw out relevant conclusions from it is part of daily life. The level and quantum of information collected, its ways of representation and level of inferences drawn from it change progressively.

Learning Outcomes:

Children will be able to:

- acquire understanding about data handling;
- record data using tally marks, represent it pictorially and draw conclusions.

Data Handling

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
- Data collection and its representation in form of pictograph and tables. - Classification and comparison of data. - Recording data using tally marks, representing it pictorially and drawing conclusions.	- Encouraging children to collect data and represent it by paper strips, string lengths, pictures etc. and making a pictograph or a bar chart. - Questions about the graphical representation may be discussed in the class in groups or with the whole class.	- Coloured papers, markers, stickers of different objects. - Videos and PPTs.

Integration: Arts Education
Life Skills: Interpretation and analysis, presentation skills

Theme 6: Patterns

As number concepts and skills increase in complexity, children find patterns and relationship between numbers. Thus patterns go side by side with learning of all aspects of Mathematics like, numbers, number operations and geometrical ideas. Patterns in multiplication facts help children in multiplying two-digit numbers and apply the algorithm for addition and subtraction to three or more digit numbers. Children will also be able to see the beauty in patterns around them and create their own patterns.

Learning Outcomes:

Children will be able to:

- ☑ observe and identify patterns with a "unit of repeat";
- ☑ extend patterns using "unit of repeat";
- ☑ create patterns having a "unit of repeat".

Patterns

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
▶ Patterns with unit of repeat. ▶ Extension of pattern using some rule.	▶ Conducting activities to find answers to questions like "what is being repeated in a given patterns like △ ☐ △ ☐ △ ☐ .... Or A, B, A, B, ... 2, 4, 2, 2, ... ▶ Providing opportunities to children to create their own patterns using vegetable cut outs like ladyfinger, potatoes etc. with ink of water colours on a flat surface/paper.	▶ Shapes, materials, colours, stamp pads. ▶ Sharp edge to get section of vegetables and to carve designs on surface of potatoes etc. to use it as a stamp for creating patterns. ▶ Geoboard with rubber band.

Integration: Arts Education

Theme 1: Living and Non-Living things

The objective of this theme is to help children identify living and non-living things in the surroundings and also develop an understanding of the concepts related to living and non–living things based on observable features. The emphasis is more on development of various processes/ skills such as observation, discrimination, and classification, etc.

Learning Outcomes:

Children will be able to:

- ☑ enlist living and non-living things seen in the surroundings;
- ☑ identify characteristics of living and non-living based on observable features and their classification;
- ☑ cite examples of living/non-living based on observation;
- ☑ draw pictures of living/non-living and name them;
- ☑ describe features of living/non-living in their own words;
- ☑ develop sensitivity towards plants, animals and the environment.

Living and Non-Living things		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
Living and Non–living things in the surroundings: ☛ Examples of living and non-living. ☛ Features of living and non-living. ☛ Difference between living and non-living	• Revisiting Class II concepts. • Building on previous learning. • Providing opportunities to children to share personal experiences. • Organizing visits to the school garden/nearby areas to observe some living and non-living things. • Organizing activities related to identifying objects and things and classifying them according to living/non-living. • Encouraging children to describe observable features of living beings in their own words. • Conducting group work (on chart to differentiate between living (visuals) and non-living things. • Drawing pictures of objects/living beings and naming them.	• Pictures / photos of living and non-living. • Boards to display pictures of living and living/non-living things. • Drawings made by the children and the teacher. • Worksheets on new concepts.

Life skills: Inculcation of culture for working together, Care and compassion towards animals, sensitivity towards plants, animals and the environment.

Theme 2: Human Body

The prime focus of this theme is to acquaint children with the location, structure, and function of the different internal organs in the human body. Emphasis has been laid on understanding the process of respiration through a working model (in non-technical language). The underlying idea is to inculcate healthy habits related to the breathing process and develop core skills of science learning i.e. observation, explanation, discussion, etc.

Learning Outcomes:

Children will be able to:

- ☑ indicate and identify various internal organs of the human body in the picture/diagram/model;
- ☑ locate the position of internal organs on the cut out/model of human body;
- ☑ draw pictures of major internal organs and label them;
- ☑ draw and label the parts of respiratory system (organs);
- ☑ discuss the need for breathing process for human beings;
- ☑ explain (in their own words) the process of breathing;
- ☑ discuss causes and problems of air pollution for living beings in daily life;
- ☑ suggest ways to reduce air pollution in the surroundings.

Human Body		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
⮞ Internal organs of the Human body: general structure, location and functions of the different internal organs. ⮞ Respiratory system: Parts /organs of the respiratory system, (nose, windpipe, lungs) and their functions, process (inhale & exhale) of breathing. ⮞ Diagram and labelling of organs of the respiratory system ⮞ Simple process of deep breathing. ⮞ Working model of the respiratory system. ⮞ Air Pollution - Causes and problems *.	⮞ Revisiting previous concepts learnt in Class II. Building on previous learning by initiating discussion on the learning of Class II concepts. ⮞ Providing opportunities to children to share their personal experiences. ⮞ Drawing pictures of internal organs on charts and labelling them with the support of teacher/ elders / peer group. ⮞ Explaining the process of breathing by using a model. ⮞ Demonstrating the process of inhalation/exhalation in class. Asking children to follow. ⮞ Initiating a discussion (in small groups) on the need for proper breathing process. ⮞ Developing models of the respiratory system in groups. ⮞ Discussing in small group problems and causes of air pollution and sharing the information in the Class (only awareness level). ⮞ Conducting activities with cards.	⮞ Charts/pictures of various internal organs of human body. ⮞ Picture cards of different internal organs. ⮞ Cut outs of the human body depicting position of internal organs. ⮞ Working model of the respiratory system. ⮞ Improvisation of model of respiratory system (with the support of elders). ⮞ Worksheets/ assignments.

Integration: Languages, Health and Physical Education, Social Studies (The Environment)
Note: *Air Pollution - Causes, effects and ways to prevent air pollution have been discussed in Classes IV in Social Studies.

Theme 3: Animals: Birds

This theme is aimed at providing information and developing awareness regarding birds seen in the surroundings/ environment. It is also expected to develop an understanding of the specific features of birds (which make them fly), body parts, food habits and where they live. Development of core skills such as, observation, discrimination, identification, by using content identified under the theme is also an inherent part of this theme.

Learning Outcomes:

Children will be able to:

- ☑ recognize and name common birds seen in the surroundings;
- ☑ draw pictures of common birds and label their body parts;
- ☑ discuss and describe food habits of some common birds (in their own words);
- ☑ recognize nests/ pictures of some birds;
- ☑ identify nests of interesting birds and draw them;
- ☑ make model of nests using locally available material;
- ☑ develop care and compassion/empathy towards animals / birds.

Animals: Birds		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**

▶ Animals: Birds Common birds*, local / Indian.
 ▶ Body parts – beaks, feet, feathers.
 ▶ How birds fly.
 ▶ Food habits.
 ▶ Nests of some interesting birds (weaver, tailor, woodpecker birds).
 ▶ Some other interesting facts about birds (eggs, sounds, habitat).
 ▶ Bird bath and care for animals.
	▶ Organizing visits to the park or garden to observe birds and identify them.
	 ▶ Organizing activities with children individually and in groups:
	   ☞ To group bird's cards based on their beaks, feathers, claws.
	   ☞ Making diagrams of some common birds and labelling their parts.
	 ▶ Providing opportunities and encouraging children to find additional facts on birds (internet) and share the same in the class.
	 ▶ Group discussion on how and why birds fly.
	 ▶ Sharing experiences narratives/ stories to inculcate values for care and compassion towards animals,
	 ▶ Creating situations and providing live examples.
	 ▶ Providing opportunities to children to develop/solve puzzles, riddles, poems on birds, to develop creative expression.
		▶ Pictures of various birds.
		 ▶ Nests of some birds.
		 ▶ Scrap book on pictures of birds.
		 ▶ Documentary films.
		 ▶ e-material on birds' life.
		 ▶ Children's drawings and paintings.

Integration: Languages

Life skills: Sensitivity towards environment and birds

Note: *The idea of including common birds under this theme is to provide teachers with the flexibility to select them as per the children's contexts.*

Theme 4: Animals: Common Insects

This theme aims at providing interesting facts related to some common insects observed in the surroundings in order to develop an understanding and also sensitivity in children towards animals and the environment. The theme is also expected to develop the skills of observation, discussion, care and concern for other living beings and the environment.

Learning Outcomes:

Children will be able to:

- ☑ name some common insects seen in the surroundings;
- ☑ identify some insects seen at home;
- ☑ draw pictures and label main parts of insects;
- ☑ discuss harmful effects of some insects (termites, mosquitoes, housefly, etc.) on humans;
- ☑ suggest remedies to prevent harmful effects of insects on human beings;
- ☑ discuss some social insects (butterfly, honeybee) which are useful for human beings;
- ☑ explain the life cycle of honey bee in their own words;
- ☑ develop compassion for animals;
- ☑ develop a sensitivity towards the environment and living beings.

Animals: Common Insects

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
▸ Common Insects*: ants, beetles, bees, flies, mosquitoes, butterfly. ▸ Body parts of an insect: head, thorax, abdomen, legs, wings. ▸ Life cycle of a butterfly. ▸ Some social insects (ants, bees), at home and in the environment. ▸ Harmful effects of insects. (mosquitoes, termites, lice, cockroaches, houseflies, bedbugs). ▸ Remedies.	▸ Organizing group discussions to share children's personal experiences. ▸ Providing material, visual, e-content/ film to children and sharing the same to construct new knowledge and know more facts about insects. ▸ Assigning project work both individually and in groups on this theme. ▸ Providing opportunities to find out (internet) the life cycle of ants, bees and discuss the same in class. ▸ Collecting information/ stories/ poems on the life of ants/ bees as social animals. ▸ Narrating/ sharing experiences of harmful effects of some insects experienced at home. ▸ Encouraging children to suggest remedies to overcome harmful effects at home/ in the surroundings. ▸ Discussing interesting facts regarding insects ▸ Developing a scrapbook	▸ Photos/ charts/cards on different kinds of insects. ▸ Picture of different parts of common insects (mosquito, house fly). ▸ Scrap book on insects. ▸ e-material. ▸ Picture / charts on the life cycle of honey bee, butterfly. ▸ Children's drawings ▸ Development of scrapbook.

Integration: Languages
Life Skill: Sensitivity towards animals and the environment.
***Note:** *The idea of putting common insects under the theme is to provide freedom to the teacher to select them as per the children's contexts.*

Theme 5: Plants in the Surroundings

The theme 'Plants in the Surroundings' is aimed at developing an awareness and understanding in children about various parts of plants including seeds. In addition, it aims to develop sensitivity towards plants and environment and other skills such as, observation, experimentation and discussion.

Learning Outcomes:

Children will be able to:

☑ appreciate the beauty of plants (flowers, leaves);
☑ identify different parts and sub-parts of a plant and label them;
☑ explain functions of each part of a plant in their own words;
☑ demonstrate creative expression (leaf, floral design);
☑ locate position of the seed in the plant;
☑ draw picture of a seed and label the main parts;
☑ distinguish different kinds of seeds (gram, green pea) seen at home/in the kitchen;
☑ develop sensitivity towards plants and the environment;
☑ perform simple experiments to demonstrate the process of germination (with the help of elders).

Plants in the Surroundings		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
➤ Parts of Plants. ➤ Structure and function of each part of the plant (root, stem, leaf, flower and fruit). ➤ Structure of a seed. ➤ Kinds of seeds. ➤ Process of germination, need of water, air, warmth for germination. ➤ Care of plants.	➤ Providing opportunities to children to observe parts and sub-parts of plants and draw them. ➤ Discussing functions of different parts of plants. ➤ Providing opportunities to children to share their personal experiences related to seed germination/ formation of sprouts in different seasons. ➤ Setting up experiments on seed germination with the involvement of the teacher/elders. ➤ Providing hands on experiences (different types of seeds) to children to do activities on seed germination individually and in groups and recording their observations and inferences in their own words in a table. ➤ Collecting poems/ stories related to care of plants. ➤ Doing activities related to creative expression by using leaves and flowers.	➤ Different types of plants ➤ Children's drawings. ➤ Narratives related to care of plants and environment. ➤ Various kinds of seeds observation of (soaked/ unsoaked). ➤ Simple experiment to demonstrate seed germination. ➤ Pictures/charts showing various kinds of plants.

Integration: Languages
Life skills: Care and sensitivity towards plants and environment.

Theme 6: Food we get from Plants

The theme 'Food we get from Plants' is aimed at familiarising children with the various uses of different parts of plants as an environmental resource. The theme will also help develop the skills of observation, experimentation, care and sensitivity towards plants, and also healthy habits related to food.

Learning Outcomes:

Children will be able to:

- ☑ identify plants as herbs, shrubs, trees and climbers and give examples of each;
- ☑ draw pictures of each kind of plant (herbs, shrubs, climbers, trees);
- ☑ draw pictures of some fruits and colour them;
- ☑ enlist leaves, seeds, fruits, flowers and roots of plants used in and as food items;
- ☑ name plants used for medicinal purposes (oil, spices);
- ☑ enlist some medicinal seeds, leaves, buds etc., and name the plants;
- ☑ develop sensitivity towards plants;
- ☑ show respect and value for food and avoid wastage of food.

Food We get from Plants		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
❯ Plants as herbs, shrubs, trees and climbers and their examples. ❯ Parts of plants used as food items: leaves, roots fruits, seeds, flowers. ❯ Plant products such as oil, spices, pulses and other edible things (medicinal leaves, seeds).	❯ Citing sharing and discussing with children examples of different kinds of plants. ❯ Encouraging children to draw pictures of flowers, fruits and other parts of plants used as food. ❯ Organising small group discussions on uses of parts of plants. ❯ Providing materials to observe kinds of plants (herbs, shrubs, climbers) and drawing them. ❯ Enlisting various parts of plants used for medicinal purposes. ❯ Organising group activities to classify plant products as pulses, grains, leaves, fruits, seeds, roots and identify the plants. ❯ Organising activities by involving children to develop creative expression e.g. thumb, finger impression to create flowers, leaves, making designs using colours. ❯ Visiting to an open area (garden) to observe various kinds of plants	❯ Pictures/ photos of different kinds of fruits/ flowers. ❯ Actual flowers and fruits of various kind. ❯ A herbarium. ❯ Pictures of herbs, shrubs, trees, climbers. ❯ Plant products as edible and non-edible parts. ❯ Narratives on care of plants.

Integration: Languages, Social Studies (The Environment)

Theme 7: Forms of Matter: Solids, Liquids and Gases

The theme 'Forms of Matter' is expected to develop an understanding of different forms of matter found in day to day life along with their examples. The theme would also provide an awareness about observable properties of different forms of matter. The focus of the theme is to develop concept formation related to different forms of matter, to enable children link the forms with their daily life. It also aims at developing skills of observation, classification and experimentation.

Learning Outcomes:

Children will be able to:

- ☑ identify natural and man-made things in the surroundings;
- ☑ distinguish and classify solids, liquids and gases based on their observable properties;
- ☑ cite an example of each form based on observation in the surroundings;
- ☑ draw pictures of experiments that show the properties of each form;
- ☑ explain uses of solids/ liquids/ gases in daily life.

Forms of Matter: Solids, Liquids and Gases		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
▶ Forms of Matter: solids liquids and gases. ▶ Examples of solids and their properties. ▶ Examples of liquids and their properties. ▶ Examples of gases and their properties. ▶ Uses of matter.	▶ Providing opportunities to children to share their personal experiences by asking them to enlist solids, liquids and gases seen at home. ▶ Demonstrating the properties (through simple experiments) of solid, liquid and gases (with the support of teachers). ▶ Conducting activities/ experiments to observe forms of matter (e.g. ice. water and vapour) ▶ Conducting discussion about the distinction between solids, liquids and gases based on their observable physical properties. ▶ Sharing narratives, materials/ e-material on different forms of water. ▶ Assigning individual and/or group projects on how to save water (making slogans, writing success stories, etc.). ▶ Discussing various kinds of materials in different forms (solid, liquid, gas) available in school/ home/ surroundings	▶ Pictures, charts and materials on solids, liquids and gases. ▶ Experiments that depict simple properties and forms of matter ▶ Project work. ▶ E- material / visuals on the concerned theme.

Note: *Focus of the theme should be on observation and simple experimentation.*

Theme 8: Some Properties of Water

The theme 'Properties of Water' is aimed at providing an understanding of some properties of water which can be easily observed by children through activities. Children would also get an understanding of the conditions that affect making of a solution. The theme further aims to discuss 'what floats and what sinks' in water, in a fun and interesting manner.

Learning Outcomes:

Children will be able to:

- ☑ identify different properties of water (based on observations);
- ☑ classify materials based on solubility in water (soluble and not soluble in water);
- ☑ demonstrate (through experiments) properties of some materials that dissolve in water and some that do not;
- ☑ classify objects that float/sink in water (experimentally);
- ☑ conduct simple experiments on their own to make simple solutions using common substances (salt, sugar).

Some Properties of Water		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**

Revision of Class II learning
▷ Physical Properties of water (occupy space, take shape of the container)
▷ Water and water solutions.
▷ Conditions that affect making of a solution (stirring, warm water).
▷ Common soluble and insoluble substances in water (simple experiments).
▷ Objects that float, sink in water (through simple activities).
	▷ Revisiting concepts learnt in Class II.
	▷ Conducting activities/ experiments (in group) to demonstrate some physical properties of water (occupy space, take shape of the container).
	▷ Conducting activities to demonstrate objects that sink/float.
	▷ Demonstrating:
	  ☛ *how to make solution of common substances.*
	  ☛ *soluble and insoluble substances in water and with examples.*
	  ☛ *various conditions that affect making solution of water (warm / cold water, stirring / not stirring)*
		▷ Solution of water (salt, sugar).
		▷ Collection of soluble and non-soluble substances.
		▷ Water, objects that sink and float.
		▷ Containers of different sizes.

Note: *This theme should be covered in class as a fun and play activity. The focus is not on drawing inferences.*

Theme 9: Water as a Resource

This theme is aimed at creating awareness regarding different forms of water and their applications in day-to-day life. The theme is also expected to throw some light on the process of evaporation and condensation in simple terms. Causes of water impurities and ways to purify water, along with uses of water harvesting as a way to protect and conserve the water resources in the environment will form a part of the theme. Children will also develop skills of discussion, explanation and experimentation through this theme.

Learning Outcomes:

Children will be able to:

- ☑ discuss properties of different forms of water (solid, liquid, gas);
- ☑ explain the water cycle (as seen in daily life) in their own words;
- ☑ draw a picture of the water cycle and label different forms of water in the water cycle;
- ☑ discuss reasons for water impurities in the environment;
- ☑ explain ways of water purification used at home/school;
- ☑ appreciate the use of rainwater harvesting in daily life;
- ☑ suggest ways to conserve water.

Water as a Resource		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
Revisit learning of Class II ▷ Change of state of water: evaporation, condensation through simple activities (using non-technical terms). ▷ Water impurities: types and causes. ▷ Purification of water: various ways and processes (layers cloth, boiling, chlorine.) ▷ Rainwater harvesting: need and ways of doing it.	▷ Revisiting concepts/learning in Class II. ▷ Building on previous learning. ▷ Demonstrating pictures/ films/ chart of water cycle and the process of formation of different forms of water. ▷ Drawing a picture of water cycle. ▷ Demonstrating different ways of purification of water (at home/ school) followed by group activity by children. ▷ Organising visits to show / ways/ process of rain water harvesting; and making models. ▷ Discussing various ways to purify water at home and drawing pictures of demonstrations. ▷ Providing opportunities to discuss /share, ask questions from teacher, elders regarding water impurities, causes, and types of impurities seen in daily life ▷ Encouraging children to write ways and slogans to save water.	▷ Picture/film ▷ Children's drawings on water cycle, ways of purification. ▷ A chart/pictures on the process of rain water harvesting. ▷ Model of rainwater harvesting.

Integration: Languages, Health and Physical Education, Social Studies (The Environment)

Life Skills: Sensitivity towards environment (saving water)

Theme 10: Sun as a Natural Resource

The theme 'Sun as a Natural Resource' is expected to develop an understanding of the the importance of the sun, its various uses in daily life and how the sun can be used as a renewable resource of energy. The theme would also expect to develop an understanding of energy, both renewable and non-renewable.

Learning Outcomes:

Children will be able to:

- ☑ explain the concept of energy in their own words.
- ☑ enlist what activities can be done in the sun in different seasons;
- ☑ appreciate the use of solar energy in daily life (solar cooker, solar cell, solar heater, solar panels on crossings of roads, on roof tops);
- ☑ discuss ways to save energy at home/school;
- ☑ explain that the sun is needed for the process of photosynthesis in plants;
- ☑ give reasons why the sun is necessary for living organisms;
- ☑ enlist uses of solar cell, solar cooker, etc. to save electricity/energy;
- ☑ discuss other sources of energy (renewable & non-renewable).

Sun as a Natural Resource		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
Revisit learning of class II ▷ Sun as a natural source of energy. ▷ Sun for growth, photosynthesis, in plants. ▷ Use of sun for solar cooker/ cooking, drying. ▷ Solar cells as a source of electricity. ▷ Renewable & non-renewable sources of energy (meaning in non-technical terms with examples). ▷ Conservation of energy.	▷ Revisiting concepts learnt in Class II. ▷ Building on previous learning. ▷ Providing opportunities to children to share personal experiences related to sun (in different seasons) ▷ Demonstrating how the solar cooker and solar cell work and discussing their uses in daily life. ▷ Discussing how use of solar cooker, solar cell, solar panel etc. can save electricity and save the environment. ▷ Showing pictures of different seasons, to show the effect of sun on human activities. ▷ Assigning projects (individual/ group) on: 　☞ Ways to save energy. 　☞ Use of Sun in daily life 　☞ Diagram to show conservation of solar energy	▷ Discussion on children's personal experiences. ▷ Children's drawings. ▷ Pictures and Scenes of different seasons and sun. ▷ Written description about sun. ▷ Pictures of the Solar cooker and its uses. ▷ Pictures of the Solar cell, solar panel and its uses.

Integration: Languages
Life Skills: Sensitivity towards environment (saving energy)

Theme 11: Cleanliness, Health and Hygiene

The theme aims to inculcate in children healthy habits related to oneself and the surroundings, by using their personal experiences and narratives as learning resources. The theme is also expected to develop sensitivity towards environment by using various action-oriented activities. Skills such as observation, discussing, appreciation will also be developed.

Learning Outcomes:

Children will be able to:

- demonstrate personal cleanliness of body parts;
- identify causes of unclean surroundings;
- enlist 'do's and 'don'ts' to keep the surroundings clean;
- suggest ways to keep the public places clean;
- discuss what makes the body healthy;
- follow/appreciate need for healthy living;
- appreciate the need of exercise / yoga / recreational activities for healthy living.

Cleanliness, Health and Hygiene		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
▶ Personal cleanliness: Hand washing, nails, hair, clothes, other body parts. ▶ Looking after your body in terms of food, rest, exercise, recreational activities. ▶ Cleanliness in the surroundings; causes of unhealthy surroundings (use of polythene, spitting, garbage). ▶ Ways to improve the surroundings. ▶ Knowledge about the Swachchh Bharat Abhiyan: activities for clean surroundings.	▶ Discussing and sharing the personal experiences of children. ▶ Organizing small survey (group/work) involving visiting some places near the school and sharing the status of cleanliness. This will be followed by a discussion. ▶ Assigning individual/group projects to children to meet 5 families & suggest ways to reduce garbage on the roads/surroundings. ▶ Making slogans / posters on personal hygiene and on keeping the surroundings clean. ▶ Organizing survey of some places in the school (tap, toilets, garden, playground, dustbins, etc.) and discussing in class their state of cleanliness. ▶ Discussing "Swachchh Bharat Abhiyan Mission" in the class and suggesting how to make it successful by their contributing to it through small actions. ▶ Organising visit to public places (Railway station, bus stop, open places)	▶ Personal experiences of children. ▶ Pictures depicting healthy habits (yoga, exercise personal cleanliness). ▶ Talk by a doctor/ teacher. ▶ Steps taken by parents for a clean home.

Integration: Languages, Health and Physical Education, Social Studies (The Environment)
Life Skills: Cleanliness, health and hygiene for healthy living, environmental sensitivity

Theme 1: Understanding Changes

"Understanding Changes" involves children to accept changes taking place over a period of time in their own families, in local life styles and conditions. These have been supplemented with anecdotes about famous personalities and importance of National days and celebrations. Children will relate to sequencing of events, calendar, drawing a time – line and concept of AD and BC. It is expected that by understanding variations, differences and changes in society children will appreciate and adapt to changes in their life.

Learning Outcomes:

Children will be able to:

- ☑ identify and compare - Nuclear, Joint and Single Parent Families;
- ☑ share and reflect on changes in family, neighbourhood and environment;
- ☑ discuss and compare changes in lifestyle, food, shelter, clothing, transport and entertainment;
- ☑ reflect positively and verbally on gender related issues;
- ☑ draw a timeline to depict the birthdates of family members;
- ☑ discuss and list important holidays and festivals.

Understanding Changes

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
Changes in a Family ☛ Joint Families ☛ Nuclear families ☛ Working parents ☛ Birth of a sibling ☛ Marriage in the family	❯ Revisiting earlier concepts and building on previous learning. ❯ Showing video clips of family types, followed by classroom discussions on the different types of families and their lifestyles. ❯ Facilitating group discussions with children on changes within families. ❯ Arranging visits to each other's homes to understand different family lifestyles (working parents, single parents and homemakers). ❯ Drawing a family tree of two and three generations, pasting pictures of family members, writing names and date of birth of family members. ❯ Discussing with elders and peer group.	❯ Children's' daily life experiences. ❯ Videos. ❯ Pictures of present and past dresses, means of transport and other objects that relate to the lifestyle of families. ❯ Audio visual aids. ❯ Newspaper cuttings on changes and displacement. ❯ Materials required to draw and paint a family tree and family pictures.
Changes in neighbourhood and school ☛ Changes in lifestyle, food, work, clothes, houses and traditions, etc. ☛ Reasons for changes, changing school,	❯ Encouraging class discussions to enable children share their experiences of shifting to new places/ homes and changing of schools. ❯ Showing pictures or documentaries on different lifestyles, food, clothes, traditions, etc. ❯ Appreciating the diversity observed in	❯ Newspaper cuttings, documentaries and pictures of different types of houses, clothes, food, etc. ❯ Elders, local community members and neighbours.

Understanding Changes		
Key Concepts/Concerns	**Suggested Transactional Processes**	**Suggested Learning Resources**
classroom, etc. ☛ Making new friends ☛ Adapting to change	various changes children have experienced and shared. ❯ Discussing with elders and neighbours ❯ Organising a change for children in school by making them sit in another classroom situation and then asking them to share their thoughts about the changes they experienced.	
❯ Changes in the Transport system	❯ Showing videos and PPTs on changes in transportation /modes of transport down the ages. ❯ Engaging children in class discussions on the benefits of walking and cycling for good health and how motorized transport causes air pollution. ❯ Organising visit to a rail museum, bus stand, railway station, etc.	❯ PPTs, videos, pictures, magazines, etc. ❯ Rail museum, bus stand, railway station.
❯ Gender sensitivity related to work and play	❯ Guiding children to enact role plays in class to enable them understand that gender is not a barrier for any occupation. ❯ Showing videos of women participating in modern day sports and employed in various professions. ❯ Organizing street play on gender parity, and discouraging the use of motorised vehicles, instead using cycles for shorter distances.	❯ Motivational pictures, newspaper clippings. ❯ Audio-visual aids
❯ **Concept of Time:** Sequence of events taking place over a period of time ☛ Tracing one's own timeline ☛ Tracing the date of birth of family members on a timeline	❯ Guiding children through a simple story sequencing activity to enable them to understand the concept of chronology of events. ❯ Helping children to paste their own pictures in a book/album from infancy to the present class. ❯ Helping children to design a chart with pictures and ages and dates of birth of their family members. ❯ Discussing with elders in the family and with peer group	❯ Materials required to draw a timeline. ❯ Chart papers, albums, children' photographs.

Understanding Changes		
Key Concepts/Concerns	**Suggested Transactional Processes**	**Suggested Learning Resources**

▷ **Calendar**
  ☞ Identifying and marking important events
  (a) Family events
  (b) National events
  (c) School events
	▷ Sharing celebration of family events by children with peers in the class.
	▷ Celebrating national days and festivals in class or school.
	▷ Organizing activities to share photographs of family events (i.e., birthday, marriage etc.)
	▷ Drawing/ pasting or making a collage of pictures of various festivals and national days by children in groups/individually.
	▷ Celebrating national days and social festivals in schools.
		▷ Documentaries on famous personalities involved in the Freedom Movement.
		▷ Calendar/school calendar.
		▷ Pictures, videos, magazines relating to national, family and school events.

Integration: Languages, Mathematics (Measurement), Science, Arts Education

Life Skills: Respect, empathy, sensitivity, compassion, adaptability to changes and appreciation for diversity and life, time management

Theme 2: Community: Helping Each Other

This theme will enable children to understand and appreciate the interdependence in community life and identify value and respect the role each citizen plays in their day to day lives. It will also sensitize children in developing and showing empathy towards one another and being a proactive citizen whose contribution will benefit society at large.

Learning Outcomes:

Children will be able to:

- ☑ identify and appreciate different people in community who help us and show respect towards them;
- ☑ discuss and acknowledge the interdependence between people in society for various services;
- ☑ value and show respect for different types of work;
- ☑ display sensitivity, care and concern towards the old, sick, needy and differently abled persons.

Community: Helping Each Other

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
▷ Community helpers e.g., Soldiers, Farmers, Teachers, Doctors, Policemen, Fire fighters and what they do. ▷ Care of and compassion for the old, sick, needy and differently abled people in the community. ▷ Value and respect for work and dignity of labour.	▷ Revisiting previous concepts from Classes I to II in EVS. ▷ Building on previous learning. ▷ Showing videos on the contribution of community helpers in our daily lives. ▷ Discussing the interdependence in community life. ▷ Sensitising children to help the old, sick and the needy people. ▷ Discussing who the differently abled people are and ways of helping them. ▷ Discussing and sensitising children on values and principles and show respect for all kinds of work and labour. ▷ Designing thank-you cards for the support staff in school and for domestic workers at home and giving it to them at an appropriate time. ▷ Planning and conducting an assembly by children on labour day and honouring the support staff. ▷ Conducting a "Cleanliness Drive' to clean the surroundings. ▷ Sharing and giving gifts i.e. utility items to the support staff on festivals/ special events. ▷ Role play of a school student and a rag picker child to inculcate a sense of empathy.	▷ Materials required for making Thank-you Cards ▷ Assembly as an important event. ▷ Related Videos and PPTs. ▷ Pictures of different Community helpers such as- police, farmer, soldier, doctor, nurse, teacher, fire fighters amongst others. ▷ Pictures of the differently abled. ▷ Toys for learning.

Integration: Languages
Life Skills: Empathy, sensitivity, compassion

Theme 3: Safety Rules

Safety rules will focus on helping children understand the need and ways to remain safe at home, in school or on the road. The theme will enable children to obey signs and rules on the road and to be cautious at home and in school. Understanding of a good or a bad touch will help them to be aware of safety threats from people in their surroundings.

Learning Outcomes:

Children will be able to:

- ☑ discuss the need for observing rules on safety at home, in school and on the road;
- ☑ demonstrate safe ways of using different objects;
- ☑ explain the need of safe use of ICT and multimedia;
- ☑ identify and obey the signs and rules of road safety;
- ☑ share experiences on bullying by the peer group and learn interpersonal and intra personal skills;
- ☑ identify and differentiate between a good touch and bad touch.

Safety Rules

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources

➤ Safety at home:
  ☛ Kitchen appliances, Knives, Blades, Irons, Inflammable objects, etc.
  ☛ Toilet cleaners
  ☛ Electronic gadgets
  ☛ ICT: mobiles, tablets, computers and the Internet
➤ Safety at School:
  ☛ Safety in the classroom, laboratories, playgrounds, staircases.
➤ Safety on the Roads:
  ☛ Rules while crossing the road – walking, cycling etc.
  ☛ Traffic symbols – basic understanding
➤ First aid
➤ Emergency numbers
➤ Good or bad touch
	➤ Demonstrating safe ways of using different objects / items.
	➤ Encouraging children to share their own experiences with peers.
	➤ Discussing the need to use gadgets and appliances safely and under supervision.
	➤ Facilitating a class discussion on the safe use of internet under adult supervision.
	➤ Showing a video that highlights bullying to sensitise children in schools.
	➤ Motivating children to sign a pledge against bullying in school.
	➤ Sensitising children through open discussions on how to differentiate between a good or bad touch.
	➤ Demonstrating safe traffic rules through class trips or showing of videos or a mock road drill in class.
	➤ Discussing on do's and don'ts related to safety rules
	➤ Discussing simple first aid measures that can be used at home.
	➤ *Organising Activities:*
	  ☛ Children will design a traffic signal cut out and write a poem or song
		➤ Drawings of traffic symbols and signals.
		➤ Social awareness campaigns.
		➤ Audio visual aids related to the theme.
		➤ Poems/Songs/Slogans on safety rules.

Safety Rules		
Key Concepts/Concerns	**Suggested Transactional Processes**	**Suggested Learning Resources**
	or slogan ☞ Encourage children to write poems on safety ☞ Making a chart of dos and don'ts and putting it on wall magazine ☞ Making a first aid kit ☞ Noting down emergency numbers in school diary ☞ Preparing a chart, depicting emergency numbers. For e.g., 101, 102, 103, etc.; along with description and putting it on the classroom wall	

Integration: Computer Studies, Languages
Life Skills: Self-awareness

Theme 4: India- A Land of Rich Heritage

Our Heritage familiarizes and inculcates a sense of respect among children for the country's rich national, historical and cultural heritage. In these days of globalized lifestyles, this understanding is critical for children to be good future Indian citizens. The pedagogies help children become sensitive and proactive citizens who take pride and respect their rich cultural heritage.

Learning Outcomes:

Children will be able to:

- ☑ enlist important local and national festivals; epics and folk tales; and national symbols;
- ☑ appreciate the rich and glorious art and architecture of our country;
- ☑ expresses verbally or in writing the feeling of pride regarding the rich heritage;
- ☑ outline the accomplishments of great national leaders;
- ☑ appreciate the diverse traditions, festivals and celebrations.

India- A Land of Rich Heritage

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources

▶ Meaning and understanding of Heritage.
▶ Buildings and monuments.
▶ Great National leaders and their achievements.
▶ Epics and folk tales, e.g. Panchatantra and Jataka tales
▶ National symbols.
▶ Festivals and community celebrations, etc.
	▶ Organising presentation of PPTs, videos and pictures, etc. on the rich heritage of our country.
	▶ Asking children to collect pictures of historical buildings, monuments, national symbols, festivals, etc. and make a collage.
	▶ Celebrating national and cultural festivals in the school and organizing discussions on them with children.
	▶ Discussion on books like the Ramayana, Mahabharata, Panchatantra and Jataka Tales in class.
	▶ Exchanging photos and videos of festival celebrations by children.
	▶ Enacting role play on some of our important national leaders – showing their achievements.
	▶ Showing documentaries / videos of monuments and historical sites.
	▶ Organising trips and visits to historical sites, monuments and national festivals and cultural events
	▶ *Organising Activities like:*
	  ☞ *Reading of Panchatantra.*
	  ☞ *Reading of Amar Chitra Katha.*
	  ☞ *Showing videos of Teejan Bhai.*
	  ☞ *Puppet shows based on folk tales.*
	  ☞ *Storytelling by Grandparents.*
		▶ Videos, PPTs, pictures on heritage.
		▶ Materials for wall magazine.
		▶ Charts on historical buildings and monuments, national symbols and festivals.
		▶ Folk lores
		▶ Puppet shows.
		▶ Role playing.
		▶ Books and magazines.

Integration: Languages
Life Skills: respect, empathy, sensitivity, compassion

Theme 5: The Earth – An Introduction

'The Earth – An Introduction' has been introduced to make children understand that the earth is a celestial body and an important part of the Solar System. A comparative study of the earth and other planets will enable them to understand the uniqueness of the Earth. Children will also familiarise themselves about a Globe and maps.

Learning Outcomes:

Children will be able to:

- ☑ list out the planets in the Solar System;
- ☑ explain the uniqueness of the earth in the solar system;
- ☑ compare and identify Physical and Political maps;
- ☑ differentiate between a globe and a map and develop skills for their use.

The Earth – An Introduction

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
➤ **The Earth and the Solar System** ☛ The Sun and the solar system ☛ The planets ☛ The satellites ☛ The stars ➤ **Our Earth – A Unique Planet** ☛ Our Planet: The Earth (presence of air, water, distance from sun) ☛ Shape of the Earth ➤ **Knowing our Earth** ☛ Globes and Maps ☛ Directions and Compass	➤ Facilitating a class activity to make a model of the Solar system (charts/models/ power point presentations). An interclass exhibition can also be planned. ➤ Explaining that a globe is a 3D model of the earth. ➤ Explaining that a map is a 2D presentation of the earth. Which may be used to represent parts of the earth. ➤ Facilitating discussions on the features of globes and maps. ➤ Comparing and enlisting the uses of a map and the globe. ➤ Visit to a Planetarium followed by discussions on the Solar System.	➤ Audio-Visual aids. ➤ PPTs. ➤ Wall map of the world. ➤ Charts and /or models. ➤ Globe and maps to be displayed in the class. ➤ Digital Globe e.g. Google Earth.

Integration: Mathematics (Geometry-map reading), Arts Education.

Theme 6: The Environment – An Introduction

'The Environment – An Introduction' aims at enabling children to appreciate their immediate surroundings and the importance of hygiene and cleanliness. It will help them identify the causes and effects of all types of pollution. Children are future global citizens and must be encouraged to play an active role to strive for a clean environment.

Learning Outcomes:

Children will be able to:

- ☑ identify and reflect on the causes of pollution, i.e., air, water, noise;
- ☑ reflect positively on the necessity of a clean environment;
- ☑ take initiative in tree plantation;
- ☑ inculcate healthy habits related to environment.

The Environment – An Introduction

Key Concepts/Concerns	Suggested Transactional Processes	Suggested Learning Resources
▶ Environment – meaning. ▶ Pollution (introduction). ▶ Types of pollution (air, water, noise) ▶ Plantation to save the environment (case study). ▶ Need for cleanliness in the surroundings.	▶ Facilitating a class discussion on the importance of cleanliness. ▶ Sensitising children through a video/narrative on the life of rag pickers and discuss related issues in the classroom. ▶ Showing a video and newspaper clippings to sensitize on the pollution caused by cars and factories –to be followed by the children penning down or drawing their thoughts and reflections. ▶ Organising a class demonstration of how loud horns or loud music can be disturbing. This can be followed by a class discussion on the effects of noise pollution. ▶ Providing opportunities to observe stagnant water pools to understand the importance of cleanliness and hygiene. Discussing how cleanliness in the surroundings can be undertaken. Discussing the Chipko movement and the Van Mahotsav festival to enable children to understand the importance of green belts.	▶ Collecting information and pictures on popular plantation and anti-pollution campaigns/movements and cleanliness drives. ▶ Materials used for cleaning. ▶ Relevant videos and newspaper clippings. ▶ Plant Saplings.

The Environment – An Introduction		
Key Concepts/Concerns	**Suggested Transactional Processes**	**Suggested Learning Resources**
	Organising Activities ☛ Organising a school cleanliness drive by involving all the children and assigning responsibilities to each one. ☛ Tree Plantation Drive - Organising a plantation drive in school or local community with help from respected community members.	

Integration: Science (Human Body-Respiration, Food we get from plants, Water as a Resource, Cleanliness, Health and Hygiene)

Life Skills: Concern for the Environment

Topic 1: A Computer System

A computer system is a complex system to perform specific tasks. It consists of hardware and software components. Hardware is the physical part of the computer whereas software is the program that makes the hardware work. According to Input-Process-Output (IPO) model, the computer system accepts data as input, processes it to provide the required output.

Learning Outcomes:

Children will be able to:

- ☑ locate input and output devices;
- ☑ define a computer system;
- ☑ describe briefly the components of the CPU;
- ☑ explain the working of a computer using an IPO model;
- ☑ explain the need of software to make the hardware work;
- ☑ correlate parts of a computer in terms of its hardware.

A Computer System		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
⮞ A Computer system – meaning ⮞ Hardware and software – meaning and examples ⮞ IPO cycle	⮞ Recapitulating the different types of Input and Output devices. ⮞ Explain the meaning of different terms of a computer system along with examples. ⮞ Demonstrating the working of hardware through visuals. ⮞ Discussing the computer system with the help of a labelled diagram ⮞ Explaining IPO model showing components of CPU (Control unit, Memory unit and Arithmetic logic unit) and flow of data. ⮞ Providing opportunities for practice worksheets on IPO model, etc. ⮞ Discussing a few commonly used software application software.	⮞ Computer/IWB with Internet connectivity. ⮞ Videos related to the Topic.

Life Skills: Technical awareness

Topic 2: GUI Operating System – An Introduction

An operating system (OS) is an interface between the hardware and user. It is responsible for the management and coordination of activities and the sharing of the resources of a computer. The Graphical User Interface (GUI) operating system has a visual environment using windows, buttons, and icons.

Learning Outcomes:

Children will be able to:

- ☑ describe the basic terminologies related to GUI;
- ☑ list different types of OS and their functions;
- ☑ use various power modes of the computer.

GUI Operating System – An Introduction

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
▸ Graphic user interface (GUI) ▸ An Operating System (OS) ▸ OS is a software which makes the computer work with a special reference to GUI. ▸ Desktop and its components ▸ the desktop and its components (icons, taskbar, start button) ▸ Basic operations on the desktop ▸ the basic operations on the desktop like opening, moving and arranging desktop icons and setting wallpaper and screensaver.	▸ Illustrating / discussing the key concepts of OS, Desktop its components and basic operations. ▸ OS is a software which makes the computer work with a special reference to GUI. ▸ Putting up charts and diagrams and asking some of the children to explain the concepts to others in the class. ▸ Explaining briefly the distinction between safe mode and normal mode. ▸ Inculcating the habit of systematically switching on (Login) and off (Shut down) the computer.	▸ Computer /IWB with a GUI operating system. ▸ Hands on experiences. ▸ Worksheets.

Life Skills: Working tgether, Creative thinking

Topic 3: Word processor – An Introduction

Word processor is a software program used to store, format or manipulate a text document such as a letter, a resume or a report. It provides tools for typing, copying, deleting and various types of formatting and editing. Saving is a concept of moving data from a temporary storage area to a permanent one so that continuation or editing of a file is possible later on.

Learning Outcomes:

Children will be able to:

- ☑ explain the purpose of word processor;
- ☑ describe the components of word processor window;
- ☑ create, save and close a file;
- ☑ differentiate between save and save as;
- ☑ open and edit an existing file.

Word processor – An Introduction

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
▸ Introduction to the word processor and its purpose ▸ Opening and exiting the software ▸ Components of word processor window. ▸ Create, save and close a file ▸ Open and edit existing files.	▸ Explaining that the Word Processor as a software is used for creating documents. ▸ Illustrating different components of the word processor window and their functions. ▸ Demonstrating the editing features using an existing file. ▸ Explaining on a monitor the concept of Save and Save as ▸ Providing opportunities for hands on experience for creating, editing, saving and closing a file. ▸ Encouraging children to enter simple text using appropriate keys. ▸ Inculcating the habit of not to touch (open/ edit/ delete, etc.) others file.	▸ Computer system/IWB with word processor. ▸ Working on a "Word" software

Life Skills: Working together

Topic 4:   The Internet – An Introduction

The Internet is a global system of interconnected computer systems. It is used for many constructive purposes like collecting and sharing information. It is important to be responsible and follow Netiquettes for safe browsing on the Internet.

Learning Outcomes:

Children will be able to:

- ☑ explain the purpose of the Internet;
- ☑ list its advantages and disadvantages;
- ☑ classify basic terminologies;
- ☑ open a website using the web browser;
- ☑ list the best practices while using Internet;
- ☑ list out safety precautions;
- ☑ give reasons for following safety precautions while working online.

The Internet – An Introduction		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
⮞ Brief introduction to the Internet (collecting information, communication, sharing information, e-commerce etc.) ⮞ Uses of Internet ⮞ Advantages and disadvantages of the Internet ⮞ Basic terminologies related to the Internet like web Browser, website, webpage, home page, and search engines etc. ⮞ Open web page using web address ⮞ Best practices related to online safety ⮞ Responsibilities of a good digital citizen	⮞ Discussing the Internet and its usage and its application in our daily lives. ⮞ Interacting with the children to get an overview of the advantages and disadvantages of the Internet. ⮞ Demonstrating the basic terminologies through visual representation. ⮞ Assisting children to open appropriate sites related to the Topics. Assisting them whenever necessary. ⮞ Explaining the need for best practices and the importance to follow them. ⮞ Sensitising children towards the responsibilities of a good digital citizen. ⮞ Facilitating a quiz game amongst children in teams on: uses of internet, advantages and disadvantages, basic terminologies, best practices and responsibilities of a good digital citizen.	⮞ Computer system/IWB with internet connection. ⮞ Search appropriate sites under adult supervision. ⮞ Discussions on best practices.

Integration: Social Studies, Languages

Topic 5: Fun with Paint

Paint software is a utility software used to draw, copy and edit pictures using various tools. While saving the file various file extensions are used based on the type of software. For example, digital pictures can be stored in formats like .png,.jpg etc. This would be helpful in organising the files in the computer.

Learning Outcomes:

Children will be able to:

- ☑ use various tools of Paint to draw and modify a picture;
- ☑ save a file in different formats.

Fun with Paint		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
▶ Recapitulation of skills learnt in Paint software earlier. ▶ Tools of Paint software like, colour picker, callout etc. ▶ Different file formats like .jpg, .png, etc.	▶ Demonstrating the use of different Paint tools ▶ Showing how to modify a picture by: ▶ copying and moving pictures ▶ free form selection ▶ resizing the pictures ▶ Discussing how to save files in different file formats ▶ Conducting hands on practice /activities with children on the computer either individually or in groups.	▶ Computer system/IWB with any Paint software.

Integration: Arts Education
Life Skills: Creative thinking

Topic 6: File Management – Organisation of Folders

As files are documents, presentations, etc. created using a software, folders are hypothetical spaces at desired locations to store information in the computer. Folders are used to organize files that may contain other folders/ individual files.

Learning Outcomes:

Children will be able to:

☑ explain the concept of a folder;
☑ save a file in the folder using a specified path.

File Management – Organisation of Folders		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
❯ Concept of a folder ❯ Creating, saving and opening a file and folder	❯ Discussing the purpose of saving a file in a folder. ❯ Demonstrating the path for the file to be saved. ❯ Providing Hands on experience on computers to each child in the class on creating, saving and opening a file and folder.	❯ Computer / IWB

Life Skills: Organisational skills