



The  
Millennium  
School

# SYLLABUS

CLASS-7

# ENGLISH Grammar

# Class 7

## S K I L L S

Ch.No.	Topic	Listening ↳ Visualisation ↳ Assimilation ↳ Critical thinking	Speaking ↳ Articulation ↳ Extempore ↳ Interactive communication	Reading ↳ Comprehension ↳ Interpretation ↳ Analysis	Writing ↳ Creative writing ↳ Academic writing ↳ Documentation	Apprentice Work
1.	<b>Determiners</b> • Types of determiners • Position of determiners	<ul style="list-style-type: none"> <li>• Describe something that he/she has heard</li> <li>• Spot the determiners</li> <li>• Listen for errors and reason out</li> </ul>	<ul style="list-style-type: none"> <li>• Plan a scene</li> <li>• Use of appropriate language with accuracy in usage of determiners</li> <li>• Organise thoughts on the given topic</li> <li>• Speak with fluency and accuracy</li> <li>• Speak with right intonation and pauses</li> <li>• Interview personalities</li> </ul>	<ul style="list-style-type: none"> <li>• Read and research to find details</li> <li>• Study about a personality of interest</li> <li>• Find out more information about a place of interest</li> <li>• Comprehend and appreciate the cartoon strip and get clarity about determiners</li> </ul>	<ul style="list-style-type: none"> <li>• Organise ideas</li> <li>• Describe the events occurring in school in a precise and effective manner, highlight the determiners</li> <li>• Present the work in a legible form in a given time</li> <li>• Edit and proof read</li> </ul>	As an apprentice of journalism, the learner prepares a power point presentation about a tourist spot.
2.	<b>Adjectives</b> • Positioning of adjectives • Comparison of adjectives	<ul style="list-style-type: none"> <li>• Spot the adjectives</li> <li>• Brainstorm</li> <li>• Listen to his/her peers</li> <li>• Imagine and visualise details</li> </ul>	<ul style="list-style-type: none"> <li>• Brainstorm</li> <li>• Speak out clearly</li> <li>• Reason out</li> <li>• Organise his/her thoughts based on the given topic</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise and identify the adjectives</li> <li>• Decipher visual inputs</li> </ul>	<ul style="list-style-type: none"> <li>• Organise the adjectives</li> <li>• Document observations</li> <li>• Check the flow of ideas</li> </ul>	As an apprentice of theatre, the learner organises a puppet show.

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Ch.No.	Topic	Listening	Speaking	Reading	Writing	Apprentice Work
		<ul style="list-style-type: none"> <li>↳ Visualisation</li> <li>↳ Assimilation</li> <li>↳ Critical thinking</li> </ul>	<ul style="list-style-type: none"> <li>↳ Articulation</li> <li>↳ Extempore</li> <li>↳ Interactive communication</li> </ul>	<ul style="list-style-type: none"> <li>↳ Comprehension</li> <li>↳ Interpretation</li> <li>↳ Analysis</li> </ul>	<ul style="list-style-type: none"> <li>↳ Creative writing</li> <li>↳ Academic writing</li> <li>↳ Documentation</li> </ul>	
		<ul style="list-style-type: none"> <li>• Think critically</li> <li>• Listen for details</li> </ul>	<ul style="list-style-type: none"> <li>• Speak spontaneously and fluently</li> <li>• Usage of correct and appropriate adjectives</li> <li>• Use of suitable body language</li> </ul>	<ul style="list-style-type: none"> <li>• Appreciate the usage of adjectives</li> <li>• Comprehend and appreciate the cartoon strip and get clarity about adjectives</li> </ul>	<ul style="list-style-type: none"> <li>• Think critically</li> <li>• Analyse and change into comparative form of adjectives</li> <li>• Mention specific details using suitable adjectives</li> <li>• Present neatly and legibly</li> </ul>	
3.	<b>Adverbs</b> <ul style="list-style-type: none"> <li>• More about adverbs</li> <li>• Formation of adverbs</li> <li>• Position of adverbs</li> </ul>	<ul style="list-style-type: none"> <li>• Listen to peers</li> <li>• Add more suggestions and give fresh ideas</li> </ul>	<ul style="list-style-type: none"> <li>• Share ideas with peers</li> <li>• Read out clearly</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise and identify the adverbs</li> <li>• Differentiate between adjectives and adverbs</li> <li>• Appreciate the text</li> <li>• Read fluently, with right pauses and correct punctuation</li> <li>• Comprehend and appreciate the cartoon strip and get clarity about adverbs</li> </ul>	<ul style="list-style-type: none"> <li>• Organise details</li> <li>• Write in accordance with the question put up by the peer</li> <li>• Arrange the sentences in correct order</li> <li>• Expand a template story</li> </ul>	As an apprentice of creative writing, the learner writes a story.

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4.	<b>Finite and Non-Finite Verbs</b> <ul style="list-style-type: none"> <li>• Finite and non-finite verbs</li> <li>• Infinitive</li> <li>• Bare infinitive</li> </ul>	<ul style="list-style-type: none"> <li>• Listen to peers and find out errors in the usage of gerunds and infinitives</li> </ul>	<ul style="list-style-type: none"> <li>• Speak fluently and clearly</li> <li>• Focus on pronunciation</li> <li>• Pause at right places</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and highlight the verbs</li> <li>• Answer questions based on the text</li> <li>• Identify gerunds</li> <li>• Comprehend and appreciate the cartoon strip and get clarity about verbs</li> </ul>	<ul style="list-style-type: none"> <li>• Story writing</li> <li>• Slogan writing</li> <li>• Highlighting finite and non-finite verbs</li> <li>• Make sentences</li> </ul>	<p>As an apprentice of direction, the learner makes a documentary film.</p>
5.	<b>Prepositions</b> <ul style="list-style-type: none"> <li>• Types of preposition</li> <li>• Relation expressed by preposition</li> </ul>	<ul style="list-style-type: none"> <li>• Listen to the prepositions read out in the class</li> <li>• Listen attentively and reason out</li> </ul>	<ul style="list-style-type: none"> <li>• Read out the prepositional poem to the class</li> <li>• Spot the prepositions</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise and identify preposition</li> <li>• Distinguish between adverbs and prepositions</li> <li>• Edit and proofread the given text</li> <li>• Comprehend and appreciate the cartoon strip and get clarity about preposition</li> </ul>	<ul style="list-style-type: none"> <li>• Write a poem using preposition</li> <li>• Coordinate with peers</li> </ul>	<p>As an apprentice of translation, the learner writes a brief biographical account of Indira Goswami and translates it.</p>

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6.	<b>Tenses</b> <ul style="list-style-type: none"> <li>• Present perfect tense</li> <li>• Past perfect tense</li> <li>• Future perfect tense</li> </ul>	<ul style="list-style-type: none"> <li>↳ Visualisation</li> <li>↳ Assimilation</li> <li>↳ Critical thinking</li> </ul> <ul style="list-style-type: none"> <li>• Listen to the peers</li> <li>• Provide feedback</li> <li>• Reason out if the sentences are grammatically correct</li> <li>• Listen carefully to the details told by the partner</li> </ul>	<ul style="list-style-type: none"> <li>↳ Articulation</li> <li>↳ Extempore</li> <li>↳ Interactive communication</li> </ul> <ul style="list-style-type: none"> <li>• Present a past event of his/her life</li> <li>• Speak out the sentences loudly and correctly in the class</li> <li>• Interview your mates</li> </ul>	<ul style="list-style-type: none"> <li>↳ Comprehension</li> <li>↳ Interpretation</li> <li>↳ Analysis</li> </ul> <ul style="list-style-type: none"> <li>• Read the lyrics of a hit song</li> <li>• Edit and proofread</li> <li>• Comprehend and appreciate the cartoon strip and get clarity about tenses</li> </ul>	<ul style="list-style-type: none"> <li>↳ Creative writing</li> <li>↳ Academic writing</li> <li>↳ Documentation</li> </ul> <ul style="list-style-type: none"> <li>• Change the verb form as required or directed</li> <li>• Brainstorm</li> <li>• Document the lyrics on the topic of your interest</li> <li>• Write creatively using correct tense forms</li> </ul>	<p>As an apprentice of lyric writing, the learner makes a musical composition.</p>
7.	<b>Sentences—Simple, Compound and Complex</b> <ul style="list-style-type: none"> <li>• Types of sentences</li> <li>• Complex sentences</li> </ul>	<ul style="list-style-type: none"> <li>• Listen attentively</li> <li>• Answer on the basis of listening</li> <li>• Pay attention to the instructions</li> </ul>	<ul style="list-style-type: none"> <li>• Organise a quiz</li> <li>• Read clearly and fluently</li> <li>• Organise his/her thoughts while working in a group</li> <li>• Demonstrate his/her placards in the class</li> <li>• Speak accurately using correct sentence structures</li> </ul>	<ul style="list-style-type: none"> <li>• Read the text and find out dependent and independent clause</li> <li>• Identify and classify the clauses</li> <li>• Comprehend and appreciate the cartoon strip and get clarity about sentences</li> <li>• Edit and proofread the given text</li> </ul>	<ul style="list-style-type: none"> <li>• Brainstorm and plan a quiz</li> <li>• Write down the sentences and act according to the facilitator's instructions</li> </ul>	<p>As an apprentice of media and mass communication, the learner organises a talk show and discusses issues faced by the class as a whole.</p>

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8.	<b>Passivisation</b>	<ul style="list-style-type: none"> <li>↳ Visualisation</li> <li>↳ Assimilation</li> <li>↳ Critical thinking</li> </ul>	<ul style="list-style-type: none"> <li>↳ Articulation</li> <li>↳ Extempore</li> <li>↳ Interactive communication</li> </ul>	<ul style="list-style-type: none"> <li>↳ Comprehension</li> <li>↳ Interpretation</li> <li>↳ Analysis</li> </ul>	<ul style="list-style-type: none"> <li>↳ Creative writing</li> <li>↳ Academic writing</li> <li>↳ Documentation</li> </ul>	<b>Apprentice Work</b>	
	<ul style="list-style-type: none"> <li>• More about passivisation</li> </ul>	<ul style="list-style-type: none"> <li>• Watch a video</li> <li>• Observe and analyse the events</li> </ul>	<ul style="list-style-type: none"> <li>• Give running commentary</li> <li>• Speak clearly, fluently and confidently</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and highlight the active and passive voice</li> <li>• Edit and proofread the given text</li> <li>• Read more to find out headlines in active and passive voice</li> </ul>	<ul style="list-style-type: none"> <li>• Note down his/her views</li> <li>• Document the details for election campaign</li> <li>• Write down a process</li> <li>• Draft ads, using phrasal verbs</li> <li>• Depicting details in the form of picture</li> <li>• Pick out the correct phrasal verb</li> </ul>	<p>As an apprentice of sports journalism, the learner enjoys a cricket match meanwhile learning the skills of commentary.</p>	
	<b>Reported Speech</b>	<ul style="list-style-type: none"> <li>• Rules for changing direct speech into reported speech</li> </ul>	<ul style="list-style-type: none"> <li>• Describe something that he/she has heard</li> <li>• Listen attentively</li> <li>• Answer on the basis of listening</li> <li>• Spontaneous action</li> </ul>	<ul style="list-style-type: none"> <li>• Speak clearly, fluently and confidently</li> <li>• Organise his/her thoughts while working in a group</li> </ul>	<ul style="list-style-type: none"> <li>• Picture reading to provide dialogues</li> <li>• Reading the text provided by partner and then converting it into required speech</li> </ul>	<ul style="list-style-type: none"> <li>• Write dialogues in direct and reported speech</li> <li>• Make sentences as required</li> </ul>	<p>As an apprentice of film criticism, the learner watches a classic English movie and prepares a written review and a television report on the same.</p>

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10.	<b>Punctuation</b> <ul style="list-style-type: none"> <li>• More about punctuation marks</li> </ul>	<ul style="list-style-type: none"> <li>↳ Visualisation</li> <li>↳ Assimilation</li> <li>↳ Critical thinking</li> </ul> <ul style="list-style-type: none"> <li>• Answer questions based on the text</li> <li>• Predict based on an open ended piece that he/she has heard</li> </ul>	<ul style="list-style-type: none"> <li>↳ Articulation</li> <li>↳ Extempore</li> <li>↳ Interactive communication</li> </ul> <ul style="list-style-type: none"> <li>• Organise his/her thoughts based on the given topic</li> <li>• Speak with right intonation and pauses</li> </ul>	<ul style="list-style-type: none"> <li>↳ Comprehension</li> <li>↳ Interpretation</li> <li>↳ Analysis</li> </ul> <ul style="list-style-type: none"> <li>• Answer questions based on the text (vocabulary based and deductive)</li> <li>• Edit</li> <li>• Proofread</li> <li>• Reason out</li> <li>• Provide feedback</li> </ul>	<ul style="list-style-type: none"> <li>↳ Creative writing</li> <li>↳ Academic writing</li> <li>↳ Documentation</li> </ul> <ul style="list-style-type: none"> <li>• Organise ideas</li> <li>• Stick to the prescribed format</li> <li>• Manage time effectively</li> </ul>	<p>As an apprentice of editing, the learner compares the punctuation marks used in three different languages.</p>

Ch.No.	Literature Component	Skills	Learning Outcome
1.	<b>Poetry</b> <i>Where the Mind is Without Fear</i> by Rabindranath Tagore (Poem)	<ul style="list-style-type: none"> <li>Emotional sensitivity</li> <li>Expression and intonation</li> <li>Rhythmic intelligence</li> <li>Critical appreciation</li> </ul>	<ul style="list-style-type: none"> <li>Understand the meaning the poet is trying to get across</li> <li>Comprehend the emotion behind the text</li> <li>Use appropriate body language and gesture while reciting the poem</li> <li>Modulate the pitch and volume of the voice</li> <li>Understand and appreciate the structure and rhyme scheme</li> <li>Understand the poetic style</li> <li>Comprehend the literal meaning of the poem</li> <li>Interpret the central theme of the poem</li> <li>Understand the poetic text in its historical context and compare it to the present day</li> <li>Assimilate the acquired information and reflect and evaluate the given argument</li> </ul>
2.	<b>Prose</b> <i>Adventures of Tom Sawyer</i> by Mark Twain (Novel)	<ul style="list-style-type: none"> <li>Cultural sensitivity</li> <li>Judgmental ability</li> <li>Analytical ability</li> <li>Creative thinking</li> </ul>	<ul style="list-style-type: none"> <li>Perceive the cultural setting of the era through the text</li> <li>Understand the ways of the society and culture presented in the text</li> <li>Gain experience through peer and group work</li> <li>Understand the writer's perspective</li> <li>Select a scene from the novel and present it through a short skit thereby presenting your perspective</li> <li>Discuss and debate on the given statement</li> <li>Demonstrate his/her understanding of the vocabulary used in the text</li> <li>Understand and answer questions based on the text</li> <li>Comprehend the theme of the text</li> <li>Demonstrate an understanding of the characters of the text</li> <li>Convert the text from prose to drama</li> <li>Write his/her own adventure story</li> </ul>



Ch.No.	Literature Component	Skills	Learning Outcome
3.	Prose <i>A Holiday Task</i> by Saki (Short Story)	<ul style="list-style-type: none"> <li>Cultural sensitivity</li> <li>Judgmental ability</li> <li>Analytical ability</li> <li>Creative thinking</li> </ul>	<ul style="list-style-type: none"> <li>Perceive the cultural setting of the era through the text</li> <li>Demonstrate his/her understanding of the society presented in the text</li> <li>Gain better understanding of the text through research and peer work</li> <li>Understand the writer's perspective</li> <li>Present your own perspective of the major characters in the text</li> <li>Demonstrate his/her understanding of the vocabulary used in the text</li> <li>Summarise the story</li> <li>Analyse the theme of the story</li> <li>Comprehend and answer questions based on the text</li> <li>Understand how arguments are developed and then resolved</li> <li>Write a diary entry about his/her most unusual holiday task (real or imaginative)</li> <li>Demonstrate an understanding of the plot and the major characters of the text</li> </ul>
4.	Drama <i>The Invisible Man</i> by H. G. Wells (Play)	<ul style="list-style-type: none"> <li>Socio-moral sensitivity</li> <li>Theatrical aptitude</li> <li>Character analysis</li> <li>Cognitive ability</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate an understanding of the social values presented in the text</li> <li>Understand and respect the ideas and actions of others</li> <li>Compare and interpret social and moral choices and issues</li> <li>Reading the play in a dramatic manner taking care of the pitch, voice modulation, diction and additional sound effects</li> <li>Analyse the traits of the characters in the text</li> <li>Create pen portrait of the protagonist</li> <li>Comprehend and summarise the text</li> <li>Answer questions based on the text</li> <li>Gather new words used in different contexts</li> <li>Understand related issues around the world</li> </ul>

Ch.No.	Literature Component	Skills	Learning Outcome
5.	Poetry <i>I had a Hippopotamus</i> by Patrick Barrington (Poem)	<ul style="list-style-type: none"> <li>Emotional sensitivity</li> <li>Expression and intonation</li> <li>Rhythmic intelligence</li> <li>Critical appreciation</li> </ul>	<ul style="list-style-type: none"> <li>Decipher and comprehend the emotion behind the text</li> <li>Relate to and identify with the poetic voice and his feelings</li> <li>Present the perspective of the pet through a diary entry</li> <li>Use appropriate body language and gesture while reciting the poem</li> <li>Modulate the pitch and volume of the voice</li> <li>Appreciate and understand the structure and rhyme scheme</li> <li>Understand the poetic style</li> <li>Compose his/her own poetry</li> <li>Comprehend the literal meaning of the poem</li> <li>Appreciate aesthetically the play of words and figures of speech</li> <li>Interpret the central theme of the poem</li> </ul>
6.	Prose <i>Dr Jekyll and Mr Hyde</i> by R. L. Stevenson (Novel)	<ul style="list-style-type: none"> <li>Cultural sensitivity</li> <li>Judgmental ability</li> <li>Analytical ability</li> <li>Creative thinking</li> </ul>	<ul style="list-style-type: none"> <li>Perceive the cultural setting of the era through the text</li> <li>Demonstrate his/her understanding of the society presented in the text</li> <li>Gain better understanding of the text through research and peer work</li> <li>Understand the writer's perspective and present your own</li> <li>Discuss actively on the given themes</li> <li>Demonstrate his/her understanding of the vocabulary used in the text</li> <li>Comprehend and answer questions based on the text</li> <li>Understand how arguments are developed and then resolved</li> <li>Analyse the major themes in the text</li> <li>Understand the genre of the text</li> <li>Change the course of the story</li> <li>Demonstrate an understanding of the plot and the major characters in the text</li> <li>Write a review comparing the novel to a film version of the story</li> </ul>

Ch.No.	Literature Component	Skills	Learning Outcome
7.	<b>Prose</b> <i>The Face on the Wall</i> by E. V. Lucas (Short Story)	<ul style="list-style-type: none"> <li>Cultural sensitivity</li> <li>Judgmental ability</li> <li>Analytical ability</li> <li>Creative thinking</li> </ul>	<ul style="list-style-type: none"> <li>Understand the society presented in the text</li> <li>Gain better understanding of the text through research and peer work</li> <li>Frame a story through collective effort of the class</li> <li>Understand the writer's perspective and present your own</li> <li>Share stories and discuss on the given theme</li> <li>Demonstrate his/her understanding of the vocabulary used in the text</li> <li>Summarise the story</li> <li>Comprehend and answer questions based on the text</li> <li>Analyse the theme of the story</li> <li>Understand how arguments are developed and then resolved</li> <li>Demonstrate an understanding of what makes a good storyteller</li> <li>Write his/her own story on a similar theme</li> </ul>
8.	<b>Drama</b> <i>Oliver Twist</i> by Charles Dickens (Play)	<ul style="list-style-type: none"> <li>Socio-moral sensitivity</li> <li>Theatrical aptitude</li> <li>Character analysis</li> <li>Cognitive ability</li> </ul>	<ul style="list-style-type: none"> <li>Comprehend the social values and morals presented in the text</li> <li>Understand and respect the ideas and actions of others</li> <li>Understand and interpret social issues and moral choices presented in the text</li> <li>Reading the play in a dramatic manner taking care of the pitch, voice modulation, diction and additional sound effects</li> <li>Discuss and actively debate on the given statement</li> <li>Analyse the traits of the characters in the text</li> <li>Create character sketches</li> <li>Comprehend and summarise the text</li> <li>Answer questions based on the text</li> <li>Understand the writer's perspective and present your own</li> <li>Rewrite a scene giving it an unconventional twist</li> </ul>

Ch.No.	Literature Component	Skills	Learning Outcome
9.	<b>Prose</b> <i>The Gift of the Magi</i> by O. Henry (Short Story)	<ul style="list-style-type: none"> <li>Cultural sensitivity</li> <li>Judgmental ability</li> <li>Analytical ability</li> <li>Creative thinking</li> </ul>	<ul style="list-style-type: none"> <li>Understand and appreciate the values and morals presented in the text</li> <li>Gain better understanding of the text through research and peer work</li> <li>Understand the writer's perspective</li> <li>Present your own perspective of the major characters in the text</li> <li>Demonstrate his/her understanding of the vocabulary used in the text</li> <li>Summarise the story</li> <li>Analyse the themes of the story</li> <li>Comprehend and answer questions based on the text</li> <li>Understand how conflict/argument is developed and then resolved</li> <li>Create and perform a skit that showcases an ironical situation</li> <li>Appreciate the writer's style of writing</li> </ul>
10.	<b>Poetry</b> <i>Stopping by Woods on a Snowy Evening</i> by Robert Frost (Poem)	<ul style="list-style-type: none"> <li>Emotional sensitivity</li> <li>Expression and intonation</li> <li>Rhythmic intelligence</li> <li>Critical appreciation</li> </ul>	<ul style="list-style-type: none"> <li>Decipher and comprehend the emotion behind the text</li> <li>Interpret the meaning the poet is trying to get across</li> <li>Present the perspective of the poet through a diary entry</li> <li>Use appropriate body language and gesture while reciting the poem</li> <li>Modulate the pitch and volume of the voice</li> <li>Appreciate and understand the structure and rhyme scheme</li> <li>Understand the poetic style</li> <li>Compose his/her own poetry on the given theme</li> <li>Comprehend the literal meaning of the poem</li> <li>Give a different interpretation to the poem</li> <li>Speculate and write an imaginary account of what would happen if the speaker had made a different choice</li> <li>Interpret and analyse the central theme of the poem</li> </ul>

## कौशल

अध्याय संख्या	विषय	श्रवण	वाचन	पठन	लेखन	शिशुार्थी हेतु
1.	भाषा, वर्ण और वर्तनी • भाषा-रूप • वर्ण • वर्तनी	<ul style="list-style-type: none"> <li>चित्रात्मकता</li> <li>आत्मसात करना</li> <li>आलोचनात्मक चिंतन</li> </ul>	<ul style="list-style-type: none"> <li>अभिव्यक्ति क्षमता</li> <li>तात्कालिक वाचन</li> <li>संवादात्मक संप्रेषण</li> </ul>	<ul style="list-style-type: none"> <li>बोधगम्यता</li> <li>विवेचना</li> <li>विश्लेषण</li> </ul>	<ul style="list-style-type: none"> <li>सृजनात्मक लेखन</li> <li>शैक्षिक लेखन</li> <li>प्रलेखन</li> </ul>	शिशुार्थी हेतु
2.	संज्ञा व सर्वनाम • संज्ञा के भेद • सर्वनाम के भेद • संज्ञा व सर्वनाम की रूप-रचना	<ul style="list-style-type: none"> <li>क्रियाकलाप के माध्यम से संज्ञा-भेदों को सुनकर पहचानना।</li> </ul>	<ul style="list-style-type: none"> <li>संज्ञा-भेदों पर आधारित अधिकाधिक शब्द बताना।</li> <li>संज्ञा, सर्वनाम व उनकी रूप-रचना से संबंधित नियमों को बताने में सक्षम होना।</li> </ul>	<ul style="list-style-type: none"> <li>विज्ञों के माध्यम से संज्ञा व सर्वनाम भेदों की विवेचना।</li> </ul>	<ul style="list-style-type: none"> <li>अनुच्छेद लिखना।</li> </ul>	बिभिन्न धातुओं से जुड़े उदाहरणों के बारे में जानकारी प्राप्त करना व संज्ञा-सर्वनाम के प्रयोग द्वारा उन धातुओं से निर्मित होने वाली वस्तुओं के नामों व प्रयोगों के विषय में वाक्य-रचना करना।
3.	विशेषण • विशेषण के भेद • विशेषणों की तुलना	<ul style="list-style-type: none"> <li>विशेषण शब्दों को सुनकर भेद के आधार पर सूचीबद्ध करना।</li> </ul>	<ul style="list-style-type: none"> <li>विशेषणों के तुलनात्मक रूप का प्रयोग करते हुए एक दिवसीय क्रिकेट मैचों में भाग लेने वाली टीमों के कपड़ों की विशेषता बताना।</li> </ul>	<ul style="list-style-type: none"> <li>विशेषण की अवस्थाएँ पढ़कर वस्तु, व्यक्ति व स्थान आदि की तुलनात्मक विशेषताओं का ज्ञान प्राप्त करना।</li> </ul>	<ul style="list-style-type: none"> <li>तिरंगे झंडे के कपड़े, आकार और रंगों को ध्यान में रखते हुए व उपयुक्त विशेषणों का प्रयोग करते हुए अनुच्छेद लिखना।</li> </ul>	फेशन डिज़ाइनर की दृष्टि में सर्दी व गर्मी में जुड़े वस्त्रों की विशेषताएँ बताने हुए विशेषण शब्दों से परिचित होना।

## कौशल

अध्याय संख्या	विषय	श्रवण	वाचन	पठन	लेखन	शिशुार्थी हेतु
		<ul style="list-style-type: none"> <li>चित्रात्मकता</li> <li>आत्मसात करना</li> <li>आलोचनात्मक चिंतन</li> </ul>	<ul style="list-style-type: none"> <li>अभिव्यक्ति क्षमता</li> <li>तात्कालिक वाचन</li> <li>संवादात्मक संप्रेषण</li> </ul>	<ul style="list-style-type: none"> <li>बोधगम्यता</li> <li>विवेचना</li> <li>विश्लेषण</li> </ul>	<ul style="list-style-type: none"> <li>सृजनात्मक लेखन</li> <li>शैक्षिक लेखन</li> <li>प्रलेखन</li> </ul>	शिशुार्थी हेतु
			<ul style="list-style-type: none"> <li>विशेषण व उसके भेदों की परिभाषा बताने में सक्षम होना।</li> </ul>			
4.	क्रिया के काल • क्रिया के भेद • काल और उसके भेद	<ul style="list-style-type: none"> <li>विभिन्न क्रिया-रूपों का प्रयोग करते हुए बोले गए वाक्यों को ध्यानपूर्वक सुनना व उनमें से क्रिया-रूपों के सही भेद को पहचानना।</li> </ul>	<ul style="list-style-type: none"> <li>क्रिया व काल के भेदों को बताना।</li> <li>क्रिया-रूपों से संबंधित गतिविधि के माध्यम से विषयानुसृत प्रश्न पूछना व उत्तर देना।</li> </ul>	<ul style="list-style-type: none"> <li>वाक्य पढ़कर उनमें से सकर्मक व अकर्मक क्रियाओं को चुनना एवं उनकी मूल धातु को तालिका में लिखना।</li> </ul>	<ul style="list-style-type: none"> <li>कालाधारित अनुच्छेद लेखन का कार्य करना।</li> </ul>	काल के अनुसार क्रियाओं का प्रयोग करते हुए एक पत्रकार की दृष्टि से मन को धुने वाली किसी घटना का वर्णन करना।
5.	वाच्य • वाच्य की परिभाषा • वाच्य के भेद • वाच्य परिवर्तन के नियम	<ul style="list-style-type: none"> <li>निर्देशित क्रियाकलाप के अनुसार बोले गए वाक्यों को ध्यानपूर्वक सुनना व उनमें होने वाले वाच्य परिवर्तन को समझना।</li> </ul>	<ul style="list-style-type: none"> <li>कक्षा, स्कूल, खेल-कूद आदि क्षेत्रों से जुड़ी वाक्य-रचना में वाच्य अनुसार परिवर्तन करना।</li> <li>वाच्य के भेदों व वाच्य परिवर्तन के नियम बताना।</li> </ul>	<ul style="list-style-type: none"> <li>वाच्य पर आधारित प्रश्नों के उत्तर देते हुए संबंधित अवधारणा पर अपनी पकड़ मजबूत करना।</li> </ul>	<ul style="list-style-type: none"> <li>सृजनात्मक लेखन का कार्य करना।</li> </ul>	अपनी पसंद की कहानी लिखते समय वाच्य परिवर्तन के नियमों से परिचित होना।
6.	अविकारी शब्द • अविकारी शब्दों की परिभाषा व भेद	<ul style="list-style-type: none"> <li>प्रश्नोत्तर के माध्यम से अविकारी शब्दों से संबंधित समझ विकसित करना।</li> </ul>	<ul style="list-style-type: none"> <li>अपने शब्दों में अविकारी शब्दों की परिभाषा व भेद बताना। अविकारी शब्दों का प्रयोग करते हुए अच्छे प्रबंधन की विशेषताएँ बताना।</li> </ul>	<ul style="list-style-type: none"> <li>क्रियाकलाप के माध्यम से अविकारी शब्दों को चुनना।</li> </ul>	<ul style="list-style-type: none"> <li>क्रियाकलाप के माध्यम से क्रियाविशेषण शब्दों का प्रयोग करते हुए वाक्य-रचना करना।</li> </ul>	स्कूल के उचित प्रबंधन संबंधी रिपोर्ट को तैयार करते हुए अविकारी शब्दों के प्रयोग से भी परिचित होना।

## कौशल

अध्याय संख्या	विषय	ध्यान	साधन	घटन	लेखन	विवरणीय तथ्य
7.	शब्द-भंडार	<ul style="list-style-type: none"> <li>विनाशकला</li> <li>आभवापन करना</li> <li>आलोचनात्मक चिंतन</li> </ul>	<ul style="list-style-type: none"> <li>अभिव्यक्ति क्षमता</li> <li>सांस्कृतिक साधन</li> <li>संवादात्मक संश्लेषण</li> </ul>	<ul style="list-style-type: none"> <li>सारांशपत्र</li> <li>विचारना</li> <li>विश्लेषण</li> </ul>	<ul style="list-style-type: none"> <li>सूचनात्मक लेखन</li> <li>शैक्षिक लेखन</li> <li>प्रलेखन</li> </ul>	शब्दों का प्रयोग करके
8.	शब्द-भंडार	<ul style="list-style-type: none"> <li>शब्द-भंडार संबंधी नवीन ज्ञान को आत्मसात करना।</li> </ul>	<ul style="list-style-type: none"> <li>क्रियाकलाप के अंतर्गत पूर्णतः जाने वाले चित्तोप, अनेक के लिए एक व ध्वनिबोधक शब्दों के अर्थ बताना।</li> </ul>	<ul style="list-style-type: none"> <li>क्रियाकलाप के अंतर्गत दिए गए समान प्रकृत होने वाले व अनेकार्थक शब्दों को पढ़कर उनका अंतर स्पष्ट करने हुए वाक्य बनाना।</li> </ul>	<ul style="list-style-type: none"> <li>निर्देशित क्रियाकलाप के अनुसार ध्वनिबोध-चिन्नादर्क व पर्यायवाची शब्दों को लिखना।</li> </ul>	निर्दिष्ट परिभाषा का अर्थ समझना व उसे प्रयोग में लाना।
9.	वाक्य-विचार	<ul style="list-style-type: none"> <li>वाक्य की परिभाषा</li> <li>वाक्य के अंग</li> <li>वाक्य के भेद</li> </ul>	<ul style="list-style-type: none"> <li>वाक्य की परिभाषा व उसके अंगों एवं भेदों को बताने में सक्षम होना।</li> <li>विषय पर आधारित प्रश्नों के उत्तर देना।</li> </ul>	<ul style="list-style-type: none"> <li>चित्र देखकर कल्पना की उड़ान भरते हुए उसका विवरण प्रस्तुत करना।</li> </ul>	<ul style="list-style-type: none"> <li>सूचनात्मक लेखन का कार्य करना।</li> <li>सबल वाक्यों से संयुक्त व मिश्रित वाक्य बनाना।</li> </ul>	वाक्य-विचार का अर्थ समझना व उसे प्रयोग में लाना।
10.	मुहावरे एवं लोकोक्तियाँ	<ul style="list-style-type: none"> <li>रसोईघर में प्रयोग किए जाने वाले मुहावरे पता लगाना।</li> </ul>	<ul style="list-style-type: none"> <li>मुहावरेदार भाषा का प्रयोग करते हुए वार्तालाप करना।</li> </ul>	<ul style="list-style-type: none"> <li>क्रियाकलाप के माध्यम से चित्रों में छिपी कहावतें खोजना।</li> </ul>	<ul style="list-style-type: none"> <li>निर्देशित क्रियाकलाप के अनुसार मुहावरों की सूची बनाना।</li> </ul>	मुहावरों का अर्थ समझना व उसे प्रयोग में लाना।

# हिंदी साहित्य

# कक्षा 7

अध्याय संख्या	साहित्य के अंग	कौशल	अध्ययन फल
1.	कवीर के दोहे (पद्य)	<ul style="list-style-type: none"> <li>भावनात्मक संवेदनशीलता</li> <li>हाव-भाव और स्वरशैली</li> <li>लयात्मकता</li> <li>आलोचनात्मक समीक्षा</li> </ul>	<ul style="list-style-type: none"> <li>दोहों के माध्यम से दैनिक जीवन के व्यवहार चक्र को समझना।</li> <li>दोहा-पाठ करते समय उचित हाव-भाव एवं उचित स्वर शैली का प्रयोग करना।</li> <li>दोहों में लयात्मकता (सुर, ताल, उतार-चढ़ाव) का विशेष ध्यान रखते हुए दोहा-पाठ करना।</li> <li>दोहों में आए कठिन शब्दों के अर्थ वर्ण-पहेली में से ढूँढकर लिखना।</li> <li>दोहों में छिपी अर्थों की आलोचनात्मक समीक्षा करना।</li> <li>अन्य कवियों द्वारा रचित दोहों की जानकारी प्राप्त करना।</li> </ul>
2.	आखिरी पाठ (गद्य)	<ul style="list-style-type: none"> <li>सांस्कृतिक संवेदनशीलता</li> <li>मूल्यांकन क्षमता</li> <li>विश्लेषणात्मक क्षमता</li> <li>सूत्रनात्मक चिंतन</li> </ul>	<ul style="list-style-type: none"> <li>कहानी को ध्यान में रखते हुए अपने देश व संस्कृति की उन्नति के लिए राष्ट्रभाषा हिंदी के विकास पर बत देना।</li> <li>कहानीकार का उद्देश्य समझना।</li> <li>कहानी में उदाई युद्ध की समस्या को ध्यान में रखते हुए 'युद्ध देश की प्रगति में बाधक है।' - विषय के पक्ष-विपक्ष में अपने विचार व्यक्त करना।</li> <li>'आखिरी पाठ' कहानी के मुख्य पात्रों का चरित्र विश्लेषण करना।</li> <li>कहानी के प्रमुख तथ्यों के विश्लेषण के उपरान्त अपने विचार लिखना।</li> <li>भारत-पाक के संबंधों को सुधारने के लिए किए जाने वाले प्रयासों पर अपने विचार व्यक्त करना व नए सुधारों के सुझाव देना।</li> </ul>
3.	मंगी योग्य यात्रा (गद्य)	<ul style="list-style-type: none"> <li>सांस्कृतिक संवेदनशीलता</li> <li>मूल्यांकन क्षमता</li> <li>विश्लेषणात्मक क्षमता</li> </ul>	<ul style="list-style-type: none"> <li>डॉ. राजेंद्र प्रसाद के यात्रा-संस्मरण के माध्यम से भिन्न की संस्कृति को जानना व भारत के किन्हीं दो प्रदेशों के सांस्कृतिक अंतर को स्पष्ट करना।</li> <li>जीवन में अत्यंत सामान्य वस्तुओं व व्यक्तियों का मूल्यांकन करना जो विशेष परिस्थितियों में आपको अतीव प्रसन्नता का अनुभव करते हैं।</li> <li>डॉ. राजेंद्र प्रसाद द्वारा भ्रमण किए गए यात्रा मार्ग का स्पष्टता से उल्लेख करना।</li> <li>पाठ में आए वाक्यों के विश्लेषणात्मक अध्ययन के आधार पर लेखक के चरित्रिक गुण लिखना।</li> </ul>

अध्याय संख्या	साहित्य के अंग	कौशल	अध्ययन फल
4.	अंधेर नगरी (एकांकी)	<ul style="list-style-type: none"> <li>सृजनात्मक चिंतन</li> <li>नैतिक संवेदनशीलता</li> <li>नाटकीय प्रवृत्ति</li> <li>चरित्र विश्लेषण</li> <li>ज्ञानात्मक क्षमता</li> </ul>	<ul style="list-style-type: none"> <li>अपनी पहली विदेश यात्रा के रोमांचक अनुभव अथवा काल्पनिक चिंतन को अपने शब्दों में लिखना।</li> <li>नैतिक संवेदना को दृष्टि से गना द्वारा किए जाने वाले न्याय के औचित्य-अनीचित्य के विषय में अपने विचार व्यक्त करना।</li> <li>'अंधेर नगरी' एकांकी का अभिनय प्रस्तुत करना।</li> <li>एकांकी को कहानी अथवा आत्मकथा के रूप में प्रस्तुत करना।</li> <li>एकांकी में आए पात्रों की चार्मिक विशेषताएँ लिखना।</li> <li>एकांकी की घटनाओं को उचित क्रम में लगाना।</li> <li>एकांकी पर आधारित प्रश्नों के उत्तर देना।</li> </ul>
5.	जासूसों की जासूस (गद्य)	<ul style="list-style-type: none"> <li>सांस्कृतिक संवेदनशीलता</li> <li>मूल्यांकन क्षमता</li> <li>विश्लेषणात्मक क्षमता</li> <li>सृजनात्मक चिंतन</li> </ul>	<ul style="list-style-type: none"> <li>उपन्यास के अध्ययन के पश्चात आधुनिक दृष्टि से समृद्ध भारतीय संस्कृति को जानना व भारतीय जड़ी-बूटियों के नामों व गुणों के बारे में अधिक जानकारी प्राप्त करना।</li> <li>अपनी मूल्यांकन क्षमता के आधार पर उपन्यास से संबंधित प्रश्नों का सही-यलत में उत्तर देना।</li> <li>उपन्यास की मुख्य पात्र मैना की चार्मिक विशेषताएँ लिखना।</li> <li>उपन्यास के प्रमुख पात्रों से संबंधित चित्रों के विश्लेषण के माध्यम से पहेली को सुलझाना।</li> <li>किसी अप्रत्याशित व्यक्ति से मिलने पर होने वाले रोमांचक अनुभव का वर्णन अपने शब्दों में करना।</li> </ul>
6.	घीरों का कैसा हो वसंत (पद्य)	<ul style="list-style-type: none"> <li>भावात्मक संवेदनशीलता</li> <li>हाव-भाव और स्वरशैली</li> <li>लयात्मकता</li> <li>आलोचनात्मक समीक्षा</li> </ul>	<ul style="list-style-type: none"> <li>'घीरों का कैसा हो वसंत' कविता पढ़कर मन में उत्पन्न वीरता व देशभक्ति की भावनाओं का उल्लेख करना।</li> <li>कविता में भावात्मक संवेदनशीलता से संबंधित प्रश्नों के उत्तर देना।</li> <li>कविता-पाठ करते समय उचित हाव-भाव एवं उचित स्वर शैली का प्रयोग करना।</li> <li>'कविता गायन प्रतियोगिता' में अन्य कवियों की देश-प्रेम पर आधारित कविताओं का पाठ करते समय लयात्मकता (सुर, ताल, उतार-चढ़ाव) का विशेष ध्यान रखना।</li> <li>कविता के शीर्षक की आलोचनात्मक समीक्षा करना।</li> <li>कविता को आधार बनाकर 'अभिव्यक्ति की स्वतंत्रता' विषय के पक्ष-विपक्ष में अपने विचार लिखना।</li> </ul>

अध्याय संख्या	साहित्य के अंग	कौशल	अध्ययन फल
7.	भोलाराम का जीव (गद्य)	<ul style="list-style-type: none"> <li>मूल्यांकन क्षमता</li> <li>विश्लेषणात्मक क्षमता</li> <li>सृजनात्मक चिंतन</li> </ul>	<ul style="list-style-type: none"> <li>कहानीकार के उद्देश्य को समझना व उसका मूल्यांकन करना।</li> <li>'भोलाराम का जीव' कहानी से सीखे गए नए शब्दों के सटीक अर्थ शब्दकोश में से खोजकर लिखना।</li> <li>सरकारी दफ्तर की भ्रष्ट कार्यप्रणाली का विश्लेषण कर अपने विचार व्यक्त करना।</li> <li>कहानी में आई पेंशन की समस्या पर चर्चा करने के बाद समाज की किसी अन्य समस्या व उसके समाधान के बारे में अपने सुझाव लिखना।</li> </ul>
8.	आप क्या करते हैं (गद्य)	<ul style="list-style-type: none"> <li>सांस्कृतिक संवेदनशीलता</li> <li>मूल्यांकन क्षमता</li> <li>विश्लेषणात्मक क्षमता</li> <li>सृजनात्मक चिंतन</li> </ul>	<ul style="list-style-type: none"> <li>'आप क्या करते हैं' निबंध पढ़कर भारतीय संस्कृति में नामों की महिमा के बारे में जानना।</li> <li>अपनी मूल्यांकन क्षमता के आधार पर निबंध में वर्णित नामों की महिमा के पक्ष-विपक्ष में अपने विचार व्यक्त करना।</li> <li>'आप क्या करते हैं' निबंध में आए कठिन शब्दों के अर्थ शब्दकोश में से खोजकर लिखना।</li> <li>निबंध में उल्लेखित कर्म व कार्य के अंतर को समझना व दूसरों के लिए जीने वाले महान व्यक्ति के कर्मों से संबंधित चित्र चिपकाना।</li> <li>निबंध की विशेषताओं का विश्लेषण करना।</li> <li>निबंध की भाषा शैली में निहित व्यंजना शब्द-शक्ति से संबंधित गतिविधि पूर्ण करना।</li> <li>निबंध के शीर्षक के बारे में अपने विचार लिखना।</li> </ul>
9.	शह में मात (गद्य)	<ul style="list-style-type: none"> <li>सांस्कृतिक संवेदनशीलता</li> <li>मूल्यांकन क्षमता</li> <li>विश्लेषणात्मक क्षमता</li> <li>सृजनात्मक चिंतन</li> </ul>	<ul style="list-style-type: none"> <li>'शह में मात- कहानी पढ़कर ग्रामीण व शहरी संस्कृति के अंतर को जानना।</li> <li>अपनी मूल्यांकन क्षमता के आधार पर विचार करना कि ठग सेठ को सबक सिखाने के लिए बूढ़े चौधरी के बेटे का व्यवहार सही था या गलत?</li> <li>कथा-विकास का विश्लेषण कर अपने विचार लिखना।</li> <li>कहानी के पात्रों का चरित्र विश्लेषण लिखना।</li> <li>ठगी पर आधारित अन्य कहानी-कविता की रचना अपने शब्दों में करना।</li> </ul>

<p>10. स्नेह-पद्य (पद्य)</p>	<ul style="list-style-type: none"> <li>• भावात्मक संवेदनशीलता</li> <li>• हाव-भाव और स्वरशैली</li> <li>• लयात्मकता</li> <li>• आलोचनात्मक समीक्षा</li> </ul>	<ul style="list-style-type: none"> <li>• 'स्नेह-पद्य' कविता पढ़कर मन में उत्पन्न भावों की वृत्ति करना।</li> <li>• कविता-पाठ करते समय उचित हाव-भाव व स्वर-शैली का प्रयोग करना।</li> <li>• काव्य में लयात्मकता का विशेष ध्यान रखते हुए कविता-पाठ करना।</li> <li>• कविता में से अपना मनपसंद काव्य-अंश चुनकर लिखना व उसकी आलोचनात्मक समीक्षा करना।</li> <li>• कवि की अन्य कविताओं की जानकारी प्राप्त करना।</li> <li>• कविता के शीर्षक के बारे में अपने विचार लिखना।</li> <li>• जीवन में स्नेह के संबंध व मधुर वचनों की महत्ता को जानना।</li> </ul>
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# MATH

## Part - I

# Class 7

### S K I L L S

Ch.No.	Topic	Knowledge <ul style="list-style-type: none"> <li>↳ Retention</li> <li>↳ Comprehension</li> <li>↳ Identification</li> <li>↳ Assimilation</li> </ul>	Application <ul style="list-style-type: none"> <li>↳ Correlation</li> <li>↳ Reasoning</li> <li>↳ Problem Solving</li> <li>↳ Inference</li> </ul>	Mathematical Skills <ul style="list-style-type: none"> <li>↳ Data Handling</li> <li>↳ Graphical representation</li> <li>↳ Computation</li> <li>↳ Visual and Spatial Skills</li> </ul>	Apprentice Work
1.1	<b>Integers</b> <ul style="list-style-type: none"> <li>• Basic Operations of Integers</li> <li>• Properties of Integers</li> </ul>	<ul style="list-style-type: none"> <li>• Stating the rules for addition, subtraction, multiplication and division of integers</li> <li>• Giving examples of mathematical expressions corresponding to the rules of operations of integers</li> <li>• Naming the property which holds true for a mathematical expression</li> </ul>	<ul style="list-style-type: none"> <li>• Solving real life problems involving mathematical expressions using the rules</li> <li>• Simplifying mathematical expressions using the rules of operations of integers with the help of a crossword</li> <li>• Verifying the properties of integers with examples through a group activity</li> <li>• Simplifying mathematical expressions using the properties of integers</li> </ul>	<ul style="list-style-type: none"> <li>• Accuracy in calculations</li> </ul>	As an apprentice to a financial advisor, the learner uses the internet to collect numerical data and analyses it to frame and solve mathematical expressions.

## S K I L L S

Ch.No.	Topic	<b>Knowledge</b> ↳ Retention ↳ Comprehension ↳ Identification ↳ Assimilation	<b>Application</b> ↳ Correlation ↳ Reasoning ↳ Problem Solving ↳ Inference	<b>Mathematical Skills</b> ↳ Data Handling ↳ Graphical representation ↳ Computation ↳ Visual and Spatial Skills	<b>Apprentice Work</b>
1.2	<b>Rational Numbers</b> • Rational Numbers  • Operations on Rational Numbers  • To Find Rational Numbers Between Two Given Rational Numbers  • Conversion of Rational Number  • Estimation of Decimals • Operations on Decimals	• Definition of a rational number • Representation of rational numbers on the number line  • Understanding the procedural fluency of operations on rational numbers • Definition of additive and multiplicative identity; additive and multiplicative inverse • Understanding the step by step procedure of finding other rational numbers between two given rational numbers  • Conversion of rational numbers into decimals and vice-versa  • Estimation of decimals to one, two or three decimal place	• Comparing rational numbers  • Solving sums involving operations on rational numbers  • Choosing the appropriate method to find other rational numbers between two given rational numbers through an activity • Verifying whether a fraction gives a terminating or a non-terminating decimal  • Solving real life problems involving decimals	• Accuracy in calculations • Handling numerical data • Graphical representation	As an apprentice to an operation research analyst, the learner collects data, then analyses and interprets the same to perform specified tasks.

## S K I L L S

Ch.No.	Topic	<b>Knowledge</b> ↳ Retention ↳ Comprehension ↳ Identification ↳ Assimilation	<b>Application</b> ↳ Correlation ↳ Reasoning ↳ Problem Solving ↳ Inference	<b>Mathematical Skills</b> ↳ Data Handling ↳ Graphical representation ↳ Computation ↳ Visual and Spatial Skills	<b>Apprentice Work</b>
1.3	<b>Exponents</b> • Types of Exponents  • Laws of Exponents  • Scientific and Calculator Notation of Numbers  • Comparing Exponents  • Expanding Numbers in Exponential Form	• Identification of positive and negative integer exponents • Conversion of exponential form to standard form and vice-versa • Identification and understanding of laws of exponents  • Identification and comprehension of scientific and calculator notation of numbers  • Comparison of exponents  • Writing the expanded form of large numbers and expressing it in exponential form	• Expressing very large and very small numbers in exponential form • Correlating standard form and exponential form through a group activity • Applying laws of exponents to simplify complex sums  • Expressing large and small numbers in scientific or calculator notation and vice-versa through an activity • Comparing exponents with same bases and same powers or different bases and powers	• Accuracy in calculations • Handling numerical data	As an apprentice to space scientist, the learner analyses and interprets the large data to perform various tasks involved by making calculations.

## S K I L L S

Ch.No.	Topic	Knowledge <ul style="list-style-type: none"> <li>↳ Retention</li> <li>↳ Comprehension</li> <li>↳ Identification</li> <li>↳ Assimilation</li> </ul>	Application <ul style="list-style-type: none"> <li>↳ Correlation</li> <li>↳ Reasoning</li> <li>↳ Problem Solving</li> <li>↳ Inference</li> </ul>	Mathematical Skills <ul style="list-style-type: none"> <li>↳ Data Handling</li> <li>↳ Graphical representation</li> <li>↳ Computation</li> <li>↳ Visual and Spatial Skills</li> </ul>	Apprentice Work
2.1	<b>Comparing Quantities</b> <ul style="list-style-type: none"> <li>• Proportion</li> <li>• Percentages</li> <li>• More About Percentages</li> </ul>	<ul style="list-style-type: none"> <li>• Identification and understanding of direct and indirect proportion</li> <li>• Conversion of fractions and decimals to percentages and vice-versa</li> <li>• Understanding the use of percentage to compare quantities</li> <li>• Conversion of ratios to percentages</li> <li>• Finding the percentage of change</li> <li>• Finding profit or loss</li> <li>• Finding profit or loss per cent</li> </ul>	<ul style="list-style-type: none"> <li>• Applying direct and indirect proportion in solving real life problems through a thinking process in groups</li> <li>• Correlating fractions, decimals and percentages</li> <li>• Solving real life problems involving percentage</li> <li>• Inferring that per cent change is relative</li> <li>• Correlating ratios and percentages</li> <li>• Applying concept of per cent change in real life problems through a game</li> <li>• Solving real life problems related to profit or loss per cent</li> </ul>	<ul style="list-style-type: none"> <li>• Accuracy in calculations</li> <li>• Handling numerical data</li> </ul>	<p>As an apprentice to an economist, the learner assumes some numerical data as import and export values, analyses the situation to find the per cent change and ratios.</p>

## S K I L L S

Ch.No.	Topic	Knowledge <ul style="list-style-type: none"> <li>↳ Retention</li> <li>↳ Comprehension</li> <li>↳ Identification</li> <li>↳ Assimilation</li> </ul>	Application <ul style="list-style-type: none"> <li>↳ Correlation</li> <li>↳ Reasoning</li> <li>↳ Problem Solving</li> <li>↳ Inference</li> </ul>	Mathematical Skills <ul style="list-style-type: none"> <li>↳ Data Handling</li> <li>↳ Graphical representation</li> <li>↳ Computation</li> <li>↳ Visual and Spatial Skills</li> </ul>	Apprentice Work
	<ul style="list-style-type: none"> <li>• Simple Interest</li> </ul>	<ul style="list-style-type: none"> <li>• Explanation of formula for finding simple interest</li> <li>• Calculation of Simple Interest and Amount</li> </ul>	<ul style="list-style-type: none"> <li>• Solving simple banking problems involving finding of simple interest</li> <li>• Application of the formula of simple interest to calculate Principal, Rate and Time</li> </ul>		
3.1	<b>Algebraic Expressions</b> <ul style="list-style-type: none"> <li>• Patterns and Algebraic Expressions</li> <li>• Evaluating Algebraic Expressions</li> <li>• Addition, Subtraction and Multiplication of Algebraic Expressions</li> </ul>	<ul style="list-style-type: none"> <li>• Identification of patterns</li> <li>• Evaluation of algebraic expressions by substituting values</li> <li>• Comprehension of steps involved in carrying out basic operations on algebraic expression</li> </ul>	<ul style="list-style-type: none"> <li>• Generalising patterns to form algebraic expressions through an activity</li> <li>• Correlating geometric or numeric pattern and algebraic expressions</li> </ul>	<ul style="list-style-type: none"> <li>• Visualisation of geometric patterns</li> <li>• Accuracy in calculations</li> </ul>	<p>As an apprentice to a retailer, the learner correlates the given algebraic data with the quantities and analyses the change in quantities by performing calculations.</p>



## S K I L L S

Ch.No.	Topic	<b>Knowledge</b> ↳ Retention ↳ Comprehension ↳ Identification ↳ Assimilation	<b>Application</b> ↳ Correlation ↳ Reasoning ↳ Problem Solving ↳ Inference	<b>Mathematical Skills</b> ↳ Data Handling ↳ Graphical representation ↳ Computation ↳ Visual and Spatial Skills	<b>Apprentice Work</b>
	<ul style="list-style-type: none"> <li>Algebraic Identities</li> <li>Multiplication and Factorisation of Algebraic Expressions</li> </ul>	<ul style="list-style-type: none"> <li>Identification of algebraic identities</li> <li>Multiplying and factorising algebraic expressions using identities</li> </ul>	<ul style="list-style-type: none"> <li>Applying algebraic expressions in finding perimeter and area of geometric figures through an activity</li> <li>Verifying algebraic identities</li> <li>Framing and solving algebraic expressions by using identities</li> </ul>	<ul style="list-style-type: none"> <li>Procedural Fluency</li> </ul>	
3.2	<b>Linear Equations</b> <ul style="list-style-type: none"> <li>Linear Equations in One Variable</li> <li>Graphing Linear Equations</li> <li>Analysing Graphs</li> <li>Slope of a Line</li> </ul>	<ul style="list-style-type: none"> <li>Definition of linear equation in one variable</li> <li>Description of Cartesian System of coordinates</li> <li>Interpretation of graphs of linear equations in two variables</li> <li>Definition of slope of a line</li> </ul>	<ul style="list-style-type: none"> <li>Correlating the equation and its solution</li> <li>Finding equations corresponding to a solution</li> <li>Plotting graphs of linear equations in two variables through an activity</li> <li>Analysing graphs of equations in two variables</li> </ul>	<ul style="list-style-type: none"> <li>Accuracy in calculations</li> <li>Graphing linear equations</li> </ul>	As an apprentice to a stockbroker, the learner uses the given data to plot graphs and interpret them.

# MATH

## Part - II

# Class 7

## S K I L L S

Ch.No.	Topic	<b>Knowledge</b> ↳ Retention ↳ Comprehension ↳ Identification ↳ Assimilation	<b>Application</b> ↳ Correlation ↳ Reasoning ↳ Problem Solving ↳ Inference	<b>Mathematical Skills</b> ↳ Data Handling ↳ Graphical representation ↳ Computation ↳ Visual and Spatial Skills	<b>Apprentice Work</b>
4.1	<b>Perimeter and Area</b> <ul style="list-style-type: none"> <li>Area of a parallelogram and a triangle</li> <li>Area of a triangle and a parallelogram with the same base and same height</li> <li>Perimeter and Area of Special Quadrilaterals</li> <li>Circumference and area of circle</li> </ul>	<ul style="list-style-type: none"> <li>Derivation of the area of a parallelogram and triangle</li> <li>Stating the Heron's formula to calculate the area of triangle</li> <li>Stating the formulae of perimeter and area of rhombus and trapezium</li> <li>Stating the formulae of circumference and area of a circle</li> </ul>	<ul style="list-style-type: none"> <li>Solving problems involving area of triangle and parallelogram</li> <li>Drawing inference that taken any side as the base, the area of the parallelogram remains the same through a group activity</li> <li>Solving problems involving perimeter and area of a rhombus and a trapezium</li> <li>Deriving the area of the rhombus and trapezium through a group activity</li> <li>Solving problems involving circumference and area of a circle</li> </ul>	<ul style="list-style-type: none"> <li>Accuracy in calculations</li> <li>Graphical representation</li> </ul>	As an apprentice to a landscape architect, the learner visualises a landscape design, makes its blueprint using different shapes and calculates the perimeter and area of different geometric shapes.

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4.2	<b>Surface Area and Volume</b> • Surface Area	<ul style="list-style-type: none"> <li>• Understanding how the area of any irregular rectilinear figure can be calculated by using the known formulae</li> <li>• Definition of surface area</li> <li>• Stating the formulae for total surface area and lateral surface area of cube, cuboid and cylinder</li> <li>• Understanding the method of finding the surface area of solids composed of cubes and cuboids</li> <li>• Conversion of one unit of surface area into another unit</li> </ul>	<ul style="list-style-type: none"> <li>• Comparing the length of the string with the circumference of the circle and the area of the rectangle with the area of the circle through a group activity</li> <li>• Comparing the area of an irregular figure by making calculations and from graph through a group activity</li> <li>• Solving problems involving surface area of cubes, cuboids and cylinders</li> <li>• Deriving lateral surface area of cylinder through a group activity</li> </ul>	<ul style="list-style-type: none"> <li>• Accuracy in calculations</li> <li>• Handling numerical data</li> </ul>	As an apprentice to a builder, the learner chooses suitable dimensions to make the model of a cuboid-shaped hall with cubical slabs and cylindrical pillars, calculates the volume and surface area of structures used in the model to find the cost of painting the model.

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5.1	<b>Volume</b> • Volume  <b>Lines and Angles</b> • Adjacent Angles • Linear Pair • Vertically Opposite Angles	<ul style="list-style-type: none"> <li>• Definition of volume</li> <li>• Stating the formulae for volume of cube, cuboid and cylinder</li> <li>• Understanding the method of finding the volume of solids composed of cubes and cuboids</li> <li>• Differentiate between volume and capacity</li> <li>• Conversion of one unit of volume into another unit</li> <li>• Identification and definition of adjacent angles</li> <li>• Identification and definition of linear pair</li> <li>• Identification and definition of vertically opposite angles</li> <li>• Drawing conclusion that vertically opposite angles are equal when lines intersect</li> </ul>	<ul style="list-style-type: none"> <li>• Solving problems involving volume of cubes, cuboids and cylinders</li> <li>• Deriving volume of cylinder through a group activity</li> <li>• Finding unknown angles using linear pair axiom in straight and intersecting lines</li> <li>• Finding unknown angles using the result on vertically opposite angles</li> </ul>	<ul style="list-style-type: none"> <li>• Accuracy in calculations</li> </ul>	As an apprentice to a math teacher, the learner executes a plan for teaching a topic using a suitable teaching method, evaluates the understanding of the learners and clarifies their doubts.

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	<ul style="list-style-type: none"> <li>• Transversals and Angles formed</li> <li>• Parallel lines cut by a Transversal</li> </ul>	<ul style="list-style-type: none"> <li>• Definition of transversal</li> <li>• Identification of angles formed by a transversal</li> <li>• Stating the result that lines cut by a transversal are parallel when corresponding angles, alternate interior angles, alternate exterior angles are equal and vice-versa</li> </ul>	<ul style="list-style-type: none"> <li>• Verifying the result to prove that lines are parallel through a group activity</li> </ul>		
5.2	<b>Congruent Triangles</b> <ul style="list-style-type: none"> <li>• Congruency</li> </ul> <ul style="list-style-type: none"> <li>• Applications of Congruency Rules</li> </ul>	<ul style="list-style-type: none"> <li>• Identification of congruent angles and congruent line segments</li> <li>• Stating five conditions of congruency of triangles</li> <li>• Writing the congruency statement for congruent triangles</li> </ul>	<ul style="list-style-type: none"> <li>• Verifying the conditions of congruency of triangles through a group activity</li> <li>• Verifying results by applying the conditions of congruency of triangles</li> </ul>	<ul style="list-style-type: none"> <li>• Handling data</li> <li>• Accuracy in calculations</li> </ul>	As an apprentice to a navigator, the learner visualises a navigation situation, makes its model and applies the conceptual knowledge of congruent triangles to answer questions.

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	<ul style="list-style-type: none"> <li>• Applications of the Pythagoras Theorem</li> </ul>	<ul style="list-style-type: none"> <li>• Stating the Pythagoras theorem</li> </ul>	<ul style="list-style-type: none"> <li>• Solving real life problems by applying Pythagoras Theorem</li> <li>• Verifying the Pythagoras Theorem through a group activity</li> </ul>		
5.3	<b>Constructions</b> <ul style="list-style-type: none"> <li>• Construction of Triangles</li> <li>• Constructing altitudes, perpendicular bisectors, medians and angle bisectors of a Triangle</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the steps of construction of unique triangles under the given conditions of congruency</li> <li>• Understanding the steps of construction of altitudes, perpendicular bisectors, medians and angle bisectors of a triangle</li> <li>• Definition of orthocentre, circumcentre, centroid and incentre and finding their location in a triangle</li> </ul>	<ul style="list-style-type: none"> <li>• Verifying that triangles constructed under given conditions of congruency are unique through an activity</li> <li>• Constructing altitudes, perpendicular bisectors, medians and angle bisectors of a triangle through a group activity</li> </ul>		As an apprentice to a structural engineer, the learner constructs the design of triangular windows of different dimensions and locates their centroid, orthocentre and incentre.
5.4	<b>Understanding Quadrilaterals</b> <ul style="list-style-type: none"> <li>• Quadrilaterals</li> </ul>	<ul style="list-style-type: none"> <li>• Definition of quadrilaterals</li> <li>• Listing six types of quadrilaterals and their properties</li> </ul>	<ul style="list-style-type: none"> <li>• Applying the properties of quadrilaterals to find unknown dimensions</li> </ul>	<ul style="list-style-type: none"> <li>• Accuracy in calculations</li> <li>• Handling data</li> </ul>	As an apprentice to a watch designer, you need to design the dial of a wristwatch using any one type of quadrilateral.

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5.5	<b>Circles</b> • Circle and its Parts  • Angles in a Segment	<ul style="list-style-type: none"> <li>• Definition of a circle, arc of a circle, chord, segment and listing their properties</li> <li>• Identification of major and minor arc and segment</li> <li>• Stating the results:                             <ul style="list-style-type: none"> <li>(a) angles formed in the same segment of a circle are equal</li> <li>(b) the angle subtended by the segment at the centre is twice the angle subtended by the same segment on the circle</li> <li>(c) an angle in a semicircle is a right angle</li> </ul> </li> <li>• Definition of a semicircle</li> </ul>	<ul style="list-style-type: none"> <li>• Verifying that the angle subtended by the segment at the centre is twice the angle subtended by the same segment on the circle</li> <li>• Proving the result that an angle in a semicircle is a right angle through a group activity</li> </ul>	<ul style="list-style-type: none"> <li>• Handling data</li> </ul>	As an apprentice to a transportation designer, the learner does some research work on wheels, identifies its parts and finds the angle subtended by the arc at the centre of the wheel.

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5.6	<b>Symmetry</b> • Types of Symmetry  • Plotting Shapes  • Reflection along Axes  • Translation  • Oblique and Isometric Sketches of Solids	<ul style="list-style-type: none"> <li>• Definition and identification of symmetry; reflective and rotational symmetry</li> <li>• Definition of order of rotational symmetry</li> <li>• Identification of four types of quadrants</li> <li>• Identification of the quadrant in which the reflected figure would lie if the quadrant of the original figure is given</li> <li>• Understanding how a shape is translated parallel to <math>x</math>-axis, <math>y</math>-axis and not parallel to any of the axes</li> <li>• Definition of oblique and isometric sketch</li> </ul>	<ul style="list-style-type: none"> <li>• Finding the coordinates for the figure reflected along both the axis when the original coordinates are given</li> <li>• Finding the coordinates for the translated figure when the original coordinates are given</li> </ul>	<ul style="list-style-type: none"> <li>• Plotting the given coordinates on a graph paper</li> <li>• Plotting the original and reflected figure in a graph</li> <li>• Plotting the original and translated figure in a graph</li> <li>• Drawing either an isometric or an oblique sketch given either one of them</li> </ul>	As an apprentice to an artist, the learner makes a table mat with symmetric design by using the concept of line, rotational and translational symmetry.

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6.1	<b>Data Handling</b> • Pie Chart  • Interpretation of a Pie Chart	• Definition of a pie chart • Understanding the steps to construct a pie chart • Analysis of the data given as a pie chart		• Accuracy in calculations • Representing data in the form of a pie chart • Interpretation of data given as a pie chart	As an apprentice to a statistician, the learner conducts a survey across other sections to find the most popular cricket team among the students by following a few steps of data handling.
6.2	<b>Probability</b> • Probability  • Probability of single events	• Definition of probability • Listing the types of events • Definition of equally likely events • Understanding the method of finding the probability of single event • Definition of complement of an event	• Verifying the probability of various events through an activity	• Handling data to calculate probability of events	As an apprentice to a market research analyst, the learner makes predictions on the basis of logical guesswork and calculates the probability using the data collected.

# SCIENCE

## Biology

# Class 7

## S K I L L S

Ch.No.	Topic	<b>Knowledge</b> ↳ Retention ↳ Comprehension ↳ Identification ↳ Assimilation	<b>Application</b> ↳ Correlation ↳ Reasoning ↳ Problem solving ↳ Inference	<b>Scientific Skills</b> ↳ Experimentation ↳ Graphical representation ↳ Analysis ↳ Imagination	<b>Apprentice Work</b>
1.	<b>Levels of Organisation</b> • Cells  • Tissues  • Organs • Organ Systems  • Levels of Organisation	• Differentiation between unicellular and multicellular organisms  • Description of plant and animal tissues  • Listing the organ systems, organs and their functions  • Explanation of importance of various levels of organisation in the proper functioning of the body	• Comparing and contrasting role of various levels in an organisation • Establishing a relation between various levels of organisation in the human body through a role play  • Drawing inferences from flow charts of various levels of organisation • Citing other suitable examples of organisms and organisations having various levels of organisation	• Preparing a slide of onion peel  • Observing slides of vascular tissue and human blood • Doing a role play of a tissue  • Making imaginative posters of an organ of the human body  • Recording observations in terms of levels of organisation in unicellular and multicellular organisms	As an apprentice to a hospital administrator, the learner writes an application to the Human Body Corporation defending the role played by each level in the organisation.

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2.	<b>Nutrition</b> • Holozoic Nutrition  • Nutrition in Human Beings  • Nutrition in Ruminants  • Nutrition in Amoeba	• Listing the various stages involved in holozoic nutrition  • Recognition of various organs of the digestive system • Description of the process of digestion in Human beings • Brief description of the process of nutrition in ruminant animals and amoeba	• Establishing a relation between various organs of the digestive system  • Reasoning why the ruminant animals keep chewing cud • Comparing the steps of holozoic nutrition in unicellular and multicellular organisms	• Doing a role play of a mass of food to understand the process of nutrition • Drawing a labelled diagram of the human digestive system  • Making a PowerPoint presentation on eating habits of pet animals, cows and human beings	As an apprentice to a gastroenterologist, the learner prepares a write up of the interaction of a mass of food and organs of the digestive system.
3.	<b>Respiration</b> • The Human Respiratory System  • Types of Respiration	• Identification of different organs of the respiratory system • Explanation of the terms breathing, respiration • Description of aerobic and anaerobic respiration and differences between them	• Comparing the process of breathing and respiration  • Understanding the reason for feeling tired after strenuous physical work and why a massage gives relief	• Performing an experiment to find out the atmosphere inside our lungs and recording observations	As an apprentice to an intensivist, the learner prepares a case study on the Bhopal gas tragedy.

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4.	<b>Transportation in Plants and Animals</b> • Mechanism of Respiration  • Breathing in Other Animals  • Respiration in Plants  • Transportation in Humans  • Blood  • Blood Vessels	• Explanation of the method of inhalation and exhalation in human beings  • Explanation of salient features of respiration in other animals  • Explanation of how respiration takes place in plants  • Explanation of the need of transporting substances in organisms • Description of various components of blood • Enumeration of the functions of blood • Differentiation between arteries and veins	• Checking breathing rate through an activity  • Drawing inferences about mechanism of respiration in woody plants  • Giving examples of substances transported in the human body and plants • Establishing a relation between different organs of the circulatory system	• Drawing a labelled diagram of the human respiratory system  • Making predictions about the kind of equipment required by a scuba diver to explore underwater caves • Analysing the mechanism of respiration in woody plants  • Using imagination to relate the ingredients of the soup to the various components of blood • Imagining being a drop of blood to understand the process of circulation in the human body	As an apprentice to a nephrologist, the learner collects a pathology report and marks major areas that help in identifying any disorder in the body.

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	<ul style="list-style-type: none"> <li>• Heart</li> <li>• Pulse rate and Heartbeat</li> <li>• Excretion</li> <li>• Transportation in Plants</li> </ul>	<ul style="list-style-type: none"> <li>• Description of the structure of human heart</li> <li>• Differentiation between systemic and pulmonary circulation</li> <li>• Description of pulse rate and heartbeat</li> <li>• Meaning of excretion and explanation of the role played by various organs of the excretory system</li> <li>• Explanation of movement of substances in plants</li> </ul>	<ul style="list-style-type: none"> <li>• Comparing systemic and pulmonary circulation</li> <li>• Reasoning why pulse rate and heartbeat increase in some situations</li> <li>• Drawing inferences from flow charts depicting processes of circulation and excretion in the human body</li> <li>• Reasoning how water, minerals and food are transported in the plants</li> </ul>	<ul style="list-style-type: none"> <li>• Measuring the pulse rate in various situations</li> <li>• Doing a role play of an excretory organ</li> <li>• Performing an experiment to learn how transportation takes place in plants</li> </ul>	
5.	<b>Control and coordination</b> <ul style="list-style-type: none"> <li>• Coordination Among Body Parts</li> <li>• Central Nervous System</li> </ul>	<ul style="list-style-type: none"> <li>• Explanation of the need of control and coordination in the body</li> <li>• Listing, recognition and functions of the parts of</li> </ul>	<ul style="list-style-type: none"> <li>• Citing examples of coordinated actions in animals</li> <li>• Establishing a relation between body responses</li> </ul>	<ul style="list-style-type: none"> <li>• Analysing the role of the sense organs and brain in coordinating the actions of the body</li> <li>• Demarcating different areas of the brain on a cap</li> </ul>	As an apprentice to a neurologist, the learner draws an outline of the human body and demarcates the different organs of the nervous system and sense organs.

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	<ul style="list-style-type: none"> <li>• Peripheral Nervous System</li> <li>• Endocrine System</li> <li>• Sensory System</li> <li>• Voluntary and Involuntary Actions</li> <li>• Control and coordination in plants</li> </ul>	the central nervous system (Brain and Spinal cord)  <ul style="list-style-type: none"> <li>• Listing and explanation of different parts of the peripheral nervous system (Sensory and motor nerves)</li> <li>• Differentiation between role of sensory and motor nerves</li> <li>• Explanation of terms such as glands and hormones</li> <li>• Explanation of the role played by sense organs in control and coordination</li> <li>• Differentiation between voluntary and involuntary actions</li> <li>• Differentiation between growth promoters and growth inhibitors</li> <li>• Citation of examples of plant hormones and their uses</li> </ul>	and organs of the CNS and PNS  <ul style="list-style-type: none"> <li>• Giving reasons for the body's response to different situations</li> <li>• Citing other examples of voluntary and involuntary actions</li> <li>• Establishing a relation between hormones and their effects</li> <li>• Establishing a relation between sense organs and response to stimuli</li> <li>• Differentiating reflex actions from other involuntary actions</li> </ul>	<ul style="list-style-type: none"> <li>• Enacting a reflex action</li> <li>• Graphical representation of a reflex action in a logical sequence</li> </ul>	

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6.	<b>Reproduction in Plants</b> • Response to Stimuli • Reproduction • Types and Methods of Reproduction in Plants • Sexual Reproduction • Pollination	• Meaning and examples of tropic and nastic movements • Explanation of the meaning and need of reproduction • Differentiation between asexual and sexual methods of reproduction • Description of natural and artificial methods of vegetative propagation • Description of various parts of a flower • Differentiation between self and cross pollination	• Citing examples of movements in plants • Distinguishing between tropic and nastic movements • Growing a new plant with the help of a stem cutting • Citing more examples of plants grown by different methods of vegetative propagation • Comparing and contrasting asexual and sexual methods of reproduction in plants • Establishing a relation between pollination and fertilization	• Performing an experiment to learn about tropism in plants • Drawing labelled diagrams to show different methods of vegetative propagation • Dissecting a flower • Drawing labelled diagrams of the parts of a flower	As an apprentice to a horticulturist, the learner collects samples of plants grown by different methods to learn about different ways of reproduction.

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7.	<b>Good Health</b> • Fertilization • Seed Dispersal • Harmful effects of: - Smoking - Alcohol - Drugs • Ways to Give Up Smoking, Alcohol and Drugs	• Explanation of how a seed is formed • Description of agents of seed dispersal • Differentiation between active and passive smoking • Description of the harmful effects of smoking, alcohol and drugs on health • Description of various measures to give up addiction	• Giving examples of other seeds dispersed by wind, water or animals • Establishing a relation between consumption of tobacco, alcohol and drugs and the health of an individual • Suggesting measures to give up alcohol, smoking and drugs	• Using imagination to make a name-plate with the help of seeds of various shapes and sizes • Drawing imaginative posters to spread awareness about the harmful effects of consuming tobacco, alcohol and drugs • Reasoning why some cough syrups cause drowsiness • Making a flip chart highlighting the harmful effects of drugs on the human body • Analysing the harmful effects of consuming alcohol, tobacco and drugs	As an apprentice to a counselor, the learner creates an MS PowerPoint presentation on the harmful effects of consumption of alcohol, tobacco and drugs.



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8.	<b>Natural Fibres</b> <ul style="list-style-type: none"> <li>• Fabric from Fibres</li> <li>• Wool</li> <li>• Silk</li> </ul>	<ul style="list-style-type: none"> <li>• Description of the uniqueness of a fabric and sources of plant and animal fibres</li> <li>• Explanation of the discovery and the manufacturing process of wool</li> <li>• Description of the salient features of woollen fabrics</li> <li>• Explanation of the history and the manufacturing process of silk</li> <li>• Description of the salient features and uses of silk</li> </ul>	<ul style="list-style-type: none"> <li>• Establishing the difference in apparel worn by people of different countries</li> <li>• Arranging different fabrics according to their weight through an activity</li> <li>• Comparing and contrasting the property of absorption of water by different fabrics through an activity</li> <li>• Comparing the unique characteristics of various cloth materials through an activity</li> <li>• Choosing the suitable fabric based on specific need</li> </ul>	<ul style="list-style-type: none"> <li>• Performing an experiment to check the weight of different fabrics</li> <li>• Performing an experiment to check which fabrics absorb more water</li> <li>• Analysing the properties of various fabrics and recording observations</li> <li>• Exploring the environment</li> <li>• Drawing sketches based on observation of different kinds of spiders in our surroundings</li> </ul>	<p>As an apprentice to a textile engineer, the learner studies the effect of stress on natural fibres.</p>

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Ch.No.	Topic	Knowledge <ul style="list-style-type: none"> <li>↳ Retention</li> <li>↳ Comprehension</li> <li>↳ Identification</li> <li>↳ Assimilation</li> </ul>	Application <ul style="list-style-type: none"> <li>↳ Correlation</li> <li>↳ Reasoning</li> <li>↳ Problem solving</li> <li>↳ Inference</li> </ul>	Scientific Skills <ul style="list-style-type: none"> <li>↳ Experimentation</li> <li>↳ Graphical representation</li> <li>↳ Analysis</li> <li>↳ Imagination</li> </ul>	Apprentice Work
9.	<b>Changes Around Us</b> <ul style="list-style-type: none"> <li>• Matter and Its Internal Energy</li> <li>• Properties of Matter</li> <li>• Physical Changes</li> <li>• Chemical Changes</li> </ul>	<ul style="list-style-type: none"> <li>• Explanation of internal energy of a substance due to which changes in state of matter take place</li> <li>• Identification of the physical and chemical properties of matter</li> <li>• Explanation of changes in terms of change in physical and chemical properties of matter</li> </ul>	<ul style="list-style-type: none"> <li>• Explaining how matter changes its state with change in internal energy</li> <li>• Comparing and contrasting the changes taking place in nature through an activity</li> <li>• Justifying why a change is a physical or a chemical change through activities</li> </ul>	<ul style="list-style-type: none"> <li>• Performing an experiment to record the changes in state of wax with the change in internal energy</li> <li>• Analysing changes in properties of substances and recording observations</li> </ul>	<p>As an apprentice to a toxicologist, the learner studies the change in properties of substances and differentiates between the types of changes.</p>
10.	<b>Elements and Compounds</b> <ul style="list-style-type: none"> <li>• Chemical Symbol</li> <li>• Grouping of Elements</li> <li>• Chemical Compounds</li> </ul>	<ul style="list-style-type: none"> <li>• Meaning and significance of a chemical symbol</li> <li>• Description of the groups of metals, non-metals and semi-metals and their source and uses</li> <li>• Meaning and significance of a chemical formula</li> <li>• Explanation of how atoms of elements</li> </ul>	<ul style="list-style-type: none"> <li>• Classifying an element on the basis of its properties</li> <li>• Justifying why a particular substance is used for a specific purpose (e.g. metals for wires)</li> <li>• Inferring the chemical composition of a compound from its chemical formula</li> </ul>	<ul style="list-style-type: none"> <li>• Performing an experiment to observe how elements combine to form compounds</li> <li>• Analysing how molecules of compounds are made of different combinations</li> </ul>	<p>As an apprentice to a chemical engineer, the learner surveys the medicine box to record various elements or compounds present in the strips, tubes or bottles of medicines.</p>

## S K I L L S

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	• Types of Compounds	combine to form a compound • Classification of compounds as binary, tertiary and quaternary compounds		of various elements • Presenting information in the form of a table	
11.	<b>Acids, Alkalies and Neutrals</b> • Acids, Alkalies and Neutral Substances • The pH Value and Range • Indicators to Determine pH Value • Applications of Acids, Alkalies and their Salts	• Description of the terms acid, alkali and neutrals • Explanation of the term neutralisation • Explanation of pH value as a measure of the acidity or alkalinity of a substance • Description of the types of indicators used to determine the pH of a solution • Explanation of the different uses of acids, alkalies and their salts	• Correlating taste of some food items with their acidic, alkaline or neutral nature through an activity • Finding the pH range of substances through an activity • Justifying the use of certain acidic and alkaline substances in treating waste water, giving relief from insect stings and in reducing acidity	• Performing experiments to determine the acidic or alkaline nature of different substances • Performing an experiment to find the effect of acidic or alkaline solution on the germination of seeds • Exploring and collecting soil samples from the environment	As an apprentice to a food chemist, the learner experiments with a few indicators and litmus strip to determine the pH values of different substances commonly found at home.

## S K I L L S

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12.	<b>Solutions</b> • Homogeneous and Heterogeneous Solutions • Components of a Solution • Concentration of Solutions • Solubility of a Solute • Pure Substances from Solutions	• Description of homogeneous and heterogeneous solutions • Definition of the terms solute, solvent and solution • Explanation of dilute and concentrated solutions • Description of unsaturated, saturated and supersaturated solutions • Explanation of the methods used to extract pure substances from a solution	• Distinguishing between true solutions and mechanical mixtures • Differentiating between the solute and solvent in a solution • Inferring that the concentration of solution depends on the amount of solute dissolved in it • Justifying the amount of solute required to make unsaturated, saturated and supersaturated solutions • Choosing the appropriate method to separate the components of a solution	• Performing an experiment and recording observations to differentiate between the two types of solutions • Performing an experiment to compare the solubility of substances • Preparing unsaturated, saturated and supersaturated solution through an activity • Drawing a labelled diagram to show the process of distillation	As an apprentice to a biotechnologist, the learner conducts an experiment to compare the solubility of various substances at different temperatures.

### S K I L L S

Ch.No.	Topic	Knowledge	Application	Scientific Skills	Apprentice Work
13.	<b>Force &amp; Motion</b>	<ul style="list-style-type: none"> <li>↳ Retention</li> <li>↳ Comprehension</li> <li>↳ Identification</li> <li>↳ Assimilation</li> </ul>	<ul style="list-style-type: none"> <li>↳ Correlation</li> <li>↳ Reasoning</li> <li>↳ Problem solving</li> <li>↳ Inference</li> </ul>	<ul style="list-style-type: none"> <li>↳ Experimentation</li> <li>↳ Graphical representation</li> <li>↳ Analysis</li> <li>↳ Imagination</li> </ul>	<b>Apprentice Work</b>
	<ul style="list-style-type: none"> <li>• Force</li> <li>• Effects of Force</li> <li>• Contact Forces</li> <li>• Non-contact Forces</li> </ul>	<ul style="list-style-type: none"> <li>• Description of how force is exerted due to interaction between two objects</li> <li>• Explanation of the effects of force on shape and motion of objects</li> <li>• Explanation of different types of contact forces (Muscular Force, Frictional Forces and Tensional Forces)</li> <li>• Identification of the different forms of friction (Sliding or Rolling Friction)</li> <li>• Classification of non-contact forces as Gravitational, Magnetic, Nuclear, or Electrostatic forces</li> </ul>	<ul style="list-style-type: none"> <li>• Correlating the change in shape and motion of an object with the force applied through an activity</li> <li>• Comparing friction between different surfaces through an activity</li> <li>• Inferring the non-contact force being exerted through an activity</li> </ul>	<ul style="list-style-type: none"> <li>• Performing an experiment to show the effect of force on an object</li> <li>• Recording and analysing observations to know about different types of forces</li> <li>• Analysing the use of friction in daily life</li> <li>• Performing an activity to learn properties of magnetic forces</li> </ul>	As an apprentice to a pilot, the learner deduces the relationship between force, area and pressure.

### S K I L L S

Ch.No.	Topic	Knowledge	Application	Scientific Skills	Apprentice Work
	<ul style="list-style-type: none"> <li>• Pressure</li> <li>• Different Types of Pressure</li> </ul>	<ul style="list-style-type: none"> <li>↳ Retention</li> <li>↳ Comprehension</li> <li>↳ Identification</li> <li>↳ Assimilation</li> </ul>	<ul style="list-style-type: none"> <li>↳ Correlation</li> <li>↳ Reasoning</li> <li>↳ Problem solving</li> <li>↳ Inference</li> </ul>	<ul style="list-style-type: none"> <li>↳ Experimentation</li> <li>↳ Graphical representation</li> <li>↳ Analysis</li> <li>↳ Imagination</li> </ul>	<b>Apprentice Work</b>
14.	<b>Heat</b>	<ul style="list-style-type: none"> <li>↳ Retention</li> <li>↳ Comprehension</li> <li>↳ Identification</li> <li>↳ Assimilation</li> </ul>	<ul style="list-style-type: none"> <li>↳ Correlation</li> <li>↳ Reasoning</li> <li>↳ Problem solving</li> <li>↳ Inference</li> </ul>	<ul style="list-style-type: none"> <li>↳ Experimentation</li> <li>↳ Graphical representation</li> <li>↳ Analysis</li> <li>↳ Imagination</li> </ul>	<b>Apprentice Work</b>
	<ul style="list-style-type: none"> <li>• Heat</li> <li>• Temperature</li> <li>• Types of Thermometers</li> <li>• Transfer of Heat</li> <li>• Thermal Insulation</li> </ul>	<ul style="list-style-type: none"> <li>• Definition and description of the term pressure</li> <li>• Explanation of the type of pressure exerted by solids, liquids and gases</li> <li>• Definition of thermal motion and explanation of effect of heat on particles of matter</li> <li>• Definition of temperature</li> <li>• Description of how a thermometer is made</li> <li>• Identification of different types of thermometers</li> <li>• Explanation of the processes of conduction, convection and radiation</li> <li>• Description of applications of the concept of thermal insulation in various fields</li> </ul>	<ul style="list-style-type: none"> <li>• Comparing the pressure exerted by a liquid, solid and gas</li> <li>• Establishing a relationship between pressure and volume through an activity</li> <li>• Reasoning why a solute dissolves faster in a hot liquid through an activity</li> <li>• Measuring the temperature of a system through an activity</li> <li>• Interconversion of temperatures given in Fahrenheit and Celsius scale</li> <li>• Differentiating between conduction, convection and radiation through an activity</li> <li>• Establishing a relationship between thermal insulation and conservation of energy</li> </ul>	<ul style="list-style-type: none"> <li>• Analysing the relationship between pressure, force and area</li> <li>• Performing an experiment to observe the effect of heat on motion of particles</li> <li>• Predicting the rise in temperature due to the heat generated in a system through an activity</li> </ul>	As an apprentice to, a thermodynamics engineer, the learner uses a thermometer, makes predictions, collects data and analyses the results.

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15.	• Conserving Energy  <b>Light</b> • Light  • Composition of sunlight  • Reflection of Light  • Reflection from Curved Surfaces  • Speed of Light in Various Mediums  • Refraction of light	• Stating the Law of Conservation of Energy  • Definition and properties of light  • Description of composition of sunlight (Visible, Infrared, Ultraviolet radiations)  • Definitions of regular and irregular reflections • Stating the laws governing reflection of light  • Definition of terms used in defining the path of light when reflected from a curved surface  • Stating the speed of light in vacuum, air, water and glass • Description of the phenomenon of refraction of light	• Classifying objects as opaque, transparent or translucent  • Correlating formation of a rainbow with splitting and scattering of visible light  • Reasoning why smooth, polished surfaces shine while rough surfaces do not  • Explaining the use of convex and concave mirrors in various applications  • Reasoning why light bends as the medium of propagation changes through an activity	• Recording and analysing observations about reflection of light from a plane mirror  • Making a labelled diagram to show the reflection of light  • Labelling of convergent and divergent beams of/from concave and convex mirror  • Performing an experiment to observe how light travels through different mediums	As an apprentice to, a photographer, the learner traces the path of light after reflection and uses a torch as the source of light to click photographs.

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16.	<b>Electricity</b> • Static Electricity  • Electric Current  • Conductors and Insulators  • Symbols in an Electric Circuit  • Heating Effect of Electricity  • Magnetic Effect of Electricity	• Description of how static electricity is produced due to positive and negative charges that build up on surface of materials  • Explanation that current is the flow of charges • Differentiation between conductors and insulators  • Recognition of the various symbols used in electric circuit • Explanation of the fact that electrical energy can be converted into heat energy  • Explanation of the fact that a magnetic compass can be deflected by passing an electrical current and that a magnetic field can be used to generate an electric current	• Reasoning for the appearance of spark between charged objects  • Correlating the flow of current with the atomic structure of a conductor and insulator • Justifying the use of fuse in electrical appliances  • Reasoning why the flow of electricity results in producing heat through an activity  • Justifying that electricity and magnetism are linked to each other through an activity	• Experimenting to find the effect of static electricity on transparent tape • Recording observations  • Graphic representation of an electric circuit  • Analysing the heating effect of electricity on a nichrome and aluminium wire  • Demonstration of electrical and magnetic properties using electromagnets	As an apprentice to an electrical and electronic engineer, the learner sends a coded signal using an electric torch.

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17.	<b>Technology</b> • Engineering Problems • Causes of Design Failure • Avoiding Design Failure	• Identifying the various engineering problems and their causes • Description of a few causes of failure of a structural design • Explanation of measures to be taken to prevent design failure	• Reasoning to explain design failure of a structure • Suggesting measures to avoid design failures	• Analysing the problems and solutions faced by structural engineers through a case study of Burj Al Arab • Analysing a design and making modifications to improve stability	As an apprentice to a structural engineer, the learner studies some of the factors that affect the stability of a structure.
18.	<b>Unifying Concepts</b> • Wave Nature of Energy • Waves as Unifying Concept	• Description of waves as a means of propagating energy • Description of application of wave nature of light, sound, heat and electricity	• Understanding the wave nature of energy, light, sound and heat • Inferring that waves are the unifying factor responsible for transmission of energy	• Performing an experiment to know how energy is transmitted	As an apprentice to a telecommunication engineer the learner uses a television remote to understand the application of IR radiations.

# HISTORY

## Class 7

## S K I L L S

Ch.No.	Topic	<b>Knowledge</b> ↳ Retention ↳ Comprehension ↳ Identification ↳ Assimilation	<b>Application</b> ↳ Correlation ↳ Reasoning ↳ Problem Solving ↳ Inference	<b>Social Science Skills</b> ↳ Awareness ↳ Graphical representation ↳ Organisation ↳ Imagination	<b>Apprentice Work</b>
1.	<b>Understanding and Preserving Heritage</b> • Historical sources • Manuscripts • Museums • Some prominent museums in India and around the world • Museum management	• Understanding primary and secondary sources • Defining manuscripts • Defining museums • Collating information and pictures of some famous museums • Understanding the role played by museums • Understanding how manuscripts were written in earlier times • Discussing preservation and storage of manuscripts in a digital format	• Separating primary and secondary sources from a given list • Deciphering a manuscript from a 14th century English text • Writing a report on the importance of museums	• Developing awareness of the importance of primary sources • Appreciating the painstaking efforts taken by scribes before the onset of printing	As an apprentice to a curator, the learner organises an exhibition using old objects collected from homes to get a first hand experience of how curators work

## S K I L L S

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2.	<b>Political Life in India from 750 CE to 1200 CE</b> • Kingdoms in the North  • Kingdoms in the South  • Attacks by Mahmud Ghazni	• Learning about northern kingdoms of Palas, Rajputs, Pratiharas and Rashtrakutas • Understanding Cholas, Pandyas and Cheras in the south • Studying of social structure and administration in the north and the south • Describing of art and architecture in the different regions • Identifying of some prominent temples of this era from pictures	• Comparing the administration in the north with that of the systems in the south  • Giving reasons for the weakening of the king's position over a period of time  • Understanding the impact of the attacks by Mahmud Ghazni • Drawing inference from the religious changes during this period	• Developing awareness of trading contacts between the northern and the southern kingdoms  • Visualising the lives of the artisans during this period	As an apprentice to a Palaeographer, the learner deciphers a hand written script. As a result, the learner becomes aware of the methodology and the difficulties faced by Palaeographers while deciphering ancient scripts.

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3.	<b>Society in India from 750 CE to 1200 CE</b> • Administration  • Trade and Commerce  • Religion  • Society	• Understanding the administrative structure from the 8th to 12th century • Understanding national and international trade connections • Identifying the prevalence of Hinduism. • Distinguishing between Vaishnavas and Shaivas  • Discussing social structure and lifestyle of different social classes • Understanding gender relations in different social classes	• Analysing the power distribution between Nadu, Vallanadus and Mandalams  • Analysing the role of temples as centres of trade. • Naming and giving features of the most significant temples in India • Inferring the impact of the development of the concept of Mathas as centres of learning • Inferring the impact of the rise of women poets	• Correlating the changes that came about in this distribution by the end of the 12th century  • Developing an understanding of the economy and the tax system • Making the distinctions between the new rising branches of religion • Debating the possible causes for these diversions in religious beliefs  • Developing an awareness of the social structure and the system of education	As an apprentice to an anthropologist, the learner traces the changes in clothing trends due to the changing lifestyle over the past fifty years.

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		<ul style="list-style-type: none"> <li>- Retention</li> <li>- Comprehension</li> <li>- Identification</li> <li>- Assimilation</li> </ul>	<ul style="list-style-type: none"> <li>- Correlation</li> <li>- Reasoning</li> <li>- Problem Solving</li> <li>- Inference</li> </ul>	<ul style="list-style-type: none"> <li>- Awareness</li> <li>- Graphical representation</li> <li>- Organisation</li> <li>- Imagination</li> </ul>	
4.	Language and literature Art and architecture <b>Delhi Sultanate</b> • Muhammad Ghori • Qutbuddin Aibak • Iltutmish • Razia • Mongolian invasions • Khalji dynasty • Tughlaq dynasty	<ul style="list-style-type: none"> <li>• Understanding major languages in use along with famous scriptures</li> <li>• Giving examples of important works of art during this period</li> <li>• Understanding personalities of the early Turkish rulers</li> <li>• Identifying Razia as the only woman Muslim ruler of Delhi Sultanate</li> <li>• Describing the establishment and consolidation of the Khalji dynasty</li> <li>• Understanding Muhammad bin Tughlaq and his policies</li> <li>• Identifying changes brought about under Firoz Shah Tughlaq</li> <li>• Timur's invasion</li> <li>• Sayyids and Lodis</li> </ul>	<ul style="list-style-type: none"> <li>• Giving reasons for the importance of regional languages</li> <li>• Commenting on temple art highlighting on Jain temples</li> <li>• Comparing the attacks of Chengiz Khan with that of the invasions of Ghazni and Ghori</li> <li>• Drawing inference about the Rajput culture from a case study on the attack on Chittor</li> <li>• Discussing problems that arose due to Muhammad Tughlaq's shifting of capital</li> <li>• Comparing the rule of two rulers of the Tughlaq dynasty</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness of the rising form of art under Jain patronage</li> <li>• Imagining how the people in the north would have reacted to new Turkish rulers</li> <li>• Writing a critique on the experimentations by Muhammad Tughlaq</li> <li>• Short write-up on the dynasties after the Tughlaqs</li> </ul>	As an apprentice to a historian, the learner traces the history of the city of Delhi and noting the important political changes taking place and the development as a capital.

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		<ul style="list-style-type: none"> <li>- Retention</li> <li>- Comprehension</li> <li>- Identification</li> <li>- Assimilation</li> </ul>	<ul style="list-style-type: none"> <li>- Correlation</li> <li>- Reasoning</li> <li>- Problem Solving</li> <li>- Inference</li> </ul>	<ul style="list-style-type: none"> <li>- Awareness</li> <li>- Graphical representation</li> <li>- Organisation</li> <li>- Imagination</li> </ul>	
5.	<b>Delhi Sultanate Administration and Society</b> • Political life • Social life • Literature • Music • Art and architecture	<ul style="list-style-type: none"> <li>• Comprehending the power of the sultan</li> <li>• Describing the administrative structure</li> <li>• Giving an overview of the aristocracy, priests and peasants</li> <li>• Identifying the influence of some Bhakti and Sufi saints</li> <li>• Identifying qawwali as a style of devotional singing that developed during this period</li> <li>• Enumerating examples of several forts and mosques built during this period</li> </ul>	<ul style="list-style-type: none"> <li>• Comparing lifestyle of people in big cities and smaller towns under the Delhi Sultans</li> <li>• Inferring the reasons for the development of regional languages</li> </ul>	<ul style="list-style-type: none"> <li>• Making a flowchart showing the different hierarchies in the political system of Delhi Sultanate</li> <li>• Developing awareness of the main feature of the structures built during this period such as the use of arcs and domes</li> </ul>	As an apprentice to a columnist, the learner collects articles from different newspapers and magazines and identifies allusions to historical sources in the newspaper columns.

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6.	<b>The Advent of Mughals</b> • Babur • The first Battle of Panipat, Kanwah and Ghagra • Humayun • Sher Shah Suri • The Vijayanagar Empire	• Introducing Babur as a leader and a brilliant general • Writing about Humayun and his successes and defeats • Identifying Sher Shah as a powerful opponent of the Mughals • Describing the battles of Chausa and Kannauj • Understanding Sher Shah's administration • Identifying Krishnadeva Raya as the most prominent ruler of Vijayanagar kingdom • Administration under Vijayanagar Empire	• Correlating different events to understand how Babur established control over a vast area • Exploring reasons for the rise of Sher Shah as a powerful ruler • Co-relating infrastructure building activities of today with Sher Shah's road projects • Evaluating Sher Shah's introduction of 'rupia' • Reasoning as to why Hampi is such an important historical site	• Visualising how Babur would have encouraged his troops in the battle of Panipat • Making graphical flowcharts of the power transfers between Ibrahim Lodhi and Babur • Making a flowchart showing all of Sher Shah's achievements	As an apprentice to a political analyst, the learner compares and analyses the administrative system of Sher Shah Suri.

## S K I L L S

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		• Describing the Bahamani kingdom	• Giving reasons for the rising conflict between the Vijayanagar and the Bahamani empire	• Comparing the two powerful kingdoms	
7.	<b>Akbar</b> • Akbar's early life • Expansion of Empire • Akbar's religious beliefs • Akbar's court	• Studying Akbar's ascent to the throne and his personal characteristics • Describing Akbar's plan for expansion of his territory • Understanding Akbar's Rajput alliances • Comprehending the impact of abolishment of jazia • Appreciating Akbar's Din-i-ilahi • Akbar's social reforms • Appraising Akbar's court culture • Enumerating Akbar's nauaratnas	• Drawing parallels with the conquests of the early Mughal rulers • Enumerating reasons why Akbar is considered the greatest Mughal ruler • Analysing the aftermath of Akbar's death	• Visualising the crowning of a fourteen year old Akbar • Writing a critique on the measures taken by Akbar to bring about religious harmony • Organising the names of Mughal rulers in a time line	As an apprentice to a diplomat, the learners play out an imaginary diplomatic interface between emperor Akbar and the Prime Minister of India. The agenda is to establish if the <i>mansabdari</i> system implemented by Akbar could be put to effective use in modern-day India.



## S K I L L S

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8.	<b>Mughal Consolidation</b> • Jahangir  • Shah Jahan  • Shah Jahan's administration  • Aurangzeb  • The Marathas and the Sikhs	<ul style="list-style-type: none"> <li>Understanding the administration and cultural and political developments during Jahangir's reign</li> <li>Understanding expansion of the Mughal empire under Shah Jahan</li> <li>Identifying Shah Jahan's contribution to the art and architecture</li> <li>Assimilating details of Shah Jahan's policies throughout his 30 year reign</li> <li>Studying Aurangzeb's war campaigns and policies</li> <li>Understanding Aurangzeb's policy towards Marathas and the Deccan</li> </ul>	<ul style="list-style-type: none"> <li>Understanding reasons for Jahangir's approach towards the Portuguese and the English</li> <li>Analysing the social conditions under the reign of Jahangir</li> <li>Specifying why Shah Jahan's reign is referred to as the golden period of the Mughals</li> <li>Surveying the architectural developments under Shah Jahan</li> <li>Correlating the geographical extent of Aurangzeb's empire and its consequences on the regional powers</li> </ul>	<ul style="list-style-type: none"> <li>Debating the positives and negatives of the system of 'chain of justice'</li> <li>Imagining oneself as Shah Jahan to create a personal profile the way it is done in modern day applications such as the Facebook</li> <li>Imagining the lives of Hindus under Aurangzeb</li> </ul>	As an apprentice to a conservation architect, the learner studies the damages caused to the Taj Mahal and the Humayun's Tomb and makes an MS Powerpoint presentation on the restoration of the two said monuments.

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	• Decline of the Mughal Empire	<ul style="list-style-type: none"> <li>Understanding the impact of attacks from the NWFP</li> <li>Identifying the regional kingdoms that rose to power towards the end of Aurangzeb's reign</li> </ul>	<ul style="list-style-type: none"> <li>Comparing the lifestyle and the religious policy followed by Akbar and Aurangzeb</li> </ul>	<ul style="list-style-type: none"> <li>Correlating Aurangzeb's absence due to his long military campaigns with the condition of the public during his reign</li> </ul>	
9.	<b>The Mughal Magnificance</b> • Mughal Administration  • <i>Mansabdari</i> System	<ul style="list-style-type: none"> <li>Understanding the central and the provincial administration under the Mughals</li> <li>Identifying the chief officials in Akbar's court</li> <li>Understanding the pros and cons of the <i>mansabdari</i> system</li> </ul>	<ul style="list-style-type: none"> <li>Giving a critique of how the Mughals fought wars and organised warfare strategy</li> <li>Studying the divisions under Mughal army</li> </ul>	<ul style="list-style-type: none"> <li>Developing awareness of the cultural diversity under the Mughal period</li> <li>Graphically organising the levels of Mughal administration and debating of the different aspects of organisation</li> </ul>	As an apprentice to a art historian, the learner traces the history and development of the miniature style of paintings under different Mughal rulers.

## S K I L L S

Ch.No.	Topic	<b>Knowledge</b> - Retention - Comprehension - Identification - Assimilation	<b>Application</b> - Correlation - Reasoning - Problem Solving - Inference	<b>Social Science Skills</b> - Awareness - Graphical representation - Organisation - Imagination	<b>Apprentice Work</b>
	<ul style="list-style-type: none"> <li>Mughal Revenue System</li> <li>Life of people</li> <li>Mughal Architecture</li> <li>Mughal Paintings</li> <li>Music</li> <li>Language and Literature</li> </ul>	<ul style="list-style-type: none"> <li>Understanding the tax system under the Mughals and the role of Zamindars</li> <li>Studying the travellers and lifestyle of different social groups</li> <li>Comparing the life of people in urban and rural areas</li> <li>Identifying the architectural developments under different Mughal rulers</li> <li>Studying Mughal paintings</li> <li>Tracing the development of music and musical instruments under the Mughals</li> <li>Identifying the prevalence of regional languages and Persian as a court language</li> </ul>	<ul style="list-style-type: none"> <li>Comparing the items exported and imported under the Mughal rule with the goods imported and exported in modern India</li> <li>Inferring the impact of Akbar's dictat abolishing sati</li> <li>Drawing parallels between different styles and themes of Mughal architecture</li> <li>Giving reasons for the difference in the development of literature in the south with the literature encouraged in the north under the Mughals</li> </ul>	<ul style="list-style-type: none"> <li>Developing awareness about the change in traded goods over a period of time</li> <li>Working in groups to find out the sources of the raw material used for the structures built under the Mughals</li> </ul>	

# CIVICS

# Class 7

## S K I L L S

Ch.No.	Topic	<b>Knowledge</b> - Retention - Comprehension - Identification - Assimilation	<b>Application</b> - Correlation - Reasoning - Problem Solving - Inference	<b>Social Science Skills</b> - Awareness - Graphical representation - Organisation - Imagination	<b>Apprentice Work</b>
1.	<b>Grappling with Inequality</b> <ul style="list-style-type: none"> <li>Democracy and equality</li> <li>Social inequalities</li> <li>Inequality due to caste- based discrimination</li> <li>Inequality due to religious discrimination</li> <li>Gender inequality</li> <li>Economic inequality</li> </ul>	<ul style="list-style-type: none"> <li>Description of democracy and equality</li> <li>Listing different kinds of inequalities</li> <li>Explanation of different factors causing -religious inequality -gender inequality -economic inequality</li> </ul>	<ul style="list-style-type: none"> <li>Analysing the adverse effects of inequalities and impact of love and compassion</li> <li>Correlating and applying creativity by writing a slogan</li> <li>Providing solutions for economic inequality</li> </ul>	<ul style="list-style-type: none"> <li>Graphical representation of various inequalities</li> <li>Using imagination to write a slogan</li> <li>Picking out examples of inequalities from day-to-day lives</li> <li>Preparing a list of things missed out as an illiterate</li> </ul>	As a Political leader, enacting a scene from the lives of great leaders, depicting how they stood for their cause and fought for equality.
2.	<b>Towards Equality</b> <ul style="list-style-type: none"> <li>Struggles in the past to remove inequality</li> </ul>	<ul style="list-style-type: none"> <li>Naming Indian social activists and reformers of pre-independence and post-independence period</li> <li>Describing the issues raised and the steps taken by them</li> </ul>	<ul style="list-style-type: none"> <li>Establishing co-relation by assuming the role of a reformer and suggesting measures to eliminate discrimination</li> </ul>	<ul style="list-style-type: none"> <li>Graphical representation of - different reformers - welfare measures - related provisions in the Constitution - present day solutions through NGOs</li> </ul>	As a social entrepreneur, urging the people through slogan writing and street play to shed prejudices and treat each other equally.

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	<ul style="list-style-type: none"> <li>Political equality</li> <li>Need for welfare measures</li> </ul>	<ul style="list-style-type: none"> <li>Explanation of political equality, Universal Adult Franchise and Equality in the Constitution</li> <li>Citing examples of present day Social Entrepreneurs and NGOs and govt. efforts</li> <li>Describing how a learner can be a volunteer</li> </ul>	<ul style="list-style-type: none"> <li>Analysing the provisions of the Constitution related to the equality of all including disabled children</li> <li>Analysing and evaluating the welfare measures taken by the govt. and NGOs</li> </ul>	<ul style="list-style-type: none"> <li>Getting sensitised to organise oneself as a young budding social activist</li> <li>Exploring possibilities of empowering women in different ways</li> </ul>	
3.	<b>Tackling Gender Issues</b> <ul style="list-style-type: none"> <li>Gender roles</li> <li>Areas of discrimination or inequality</li> <li>Gender empowerment</li> <li>Steps taken by the government</li> </ul>	<ul style="list-style-type: none"> <li>Description of the stereotyped roles of boys and girls</li> <li>Explaining the different areas where gender discrimination is done</li> <li>Citing the examples of NGOs working for women empowerment</li> <li>Listing steps taken by the govt. for women empowerment</li> </ul>	<ul style="list-style-type: none"> <li>Analysing the impact of age-old stereotypes</li> <li>Pointing out the areas of discrimination</li> <li>Evaluating the role of NGOs in gender empowerment</li> </ul>	<ul style="list-style-type: none"> <li>Graphical representation of the areas of discrimination, steps taken by NGOs and the government</li> <li>Creating awareness about the existence of inequality present in the society and other spheres</li> <li>Understanding the shift of women's role in past and present</li> </ul>	As a Social Entrepreneur working for the welfare of women, making a scrap book on the gender specific attitudes and opinions formed by media through ads and pictures.

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	<ul style="list-style-type: none"> <li>Women's voices and struggles</li> </ul>	<ul style="list-style-type: none"> <li>Writing about women coming to the forefront and raising their voice against injustices</li> </ul>	<ul style="list-style-type: none"> <li>Evaluating the methods employed by women to express their opinion on govt.'s policies</li> </ul>	<ul style="list-style-type: none"> <li>Discussion about the women achievers in different fields of sports, theatre, art etc.</li> </ul>	
4.	<b>State Government</b> <ul style="list-style-type: none"> <li>Structure of the state government</li> <li>Legislature</li> <li>Executive</li> <li>Judiciary</li> </ul>	<ul style="list-style-type: none"> <li>Listing the three important parts of the State Government</li> <li>Describing the functions of the organs of the State</li> <li>Explaining the functioning of the Govt. of NCT of Delhi</li> <li>Illustrating with examples the transparency and accountability of the govt. machinery</li> </ul>	<ul style="list-style-type: none"> <li>Distinguishing between the composition and functions of the various organs of the State Government</li> <li>Comparing the governance of NCT of Delhi with that of the State Government</li> <li>Preparing a chart and writing a slogan on different issues</li> </ul>	<ul style="list-style-type: none"> <li>Graphical representation of the various organs of the State Government and their inner composition</li> <li>Graphical representation of the Constituencies of Delhi</li> <li>Listing the problems faced by the people of your colony and suggesting solutions</li> <li>Critical Appraisal of the ways and means adopted by the State machinery, ministry and officials to reach people</li> </ul>	As a minister or a bureaucrat holding a Press Conference briefing the media on policy decisions.

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5.	<b>Providing Healthcare and Education</b> • Role of the Government in providing education • Higher education • Government initiatives • Healthcare in India • Public health services • Private health services • Steps taken	• Listing the agencies involved • Describing public and private sector services in providing education • Stating the problems faced in reaching out to all citizens • Describing public and private sector services providing healthcare • Citing some examples of positive measures taken by the government	• Classifying the kinds of services available in healthcare and education • Analysing the role played by the public and the private sector • Comparing the services provided by the public and the private sector • Collecting and sharing information to initiate a campaign • Appraising the current situation • Suggesting viable solutions	• Graphical representation of public and private sector services in healthcare and education • Describing the services available in the learner's state • Planning effective measures and possible solutions to the problems faced	As a minister of Health and Education or a CEO of a corporate house, holding a press conference to brief and apprise the public on the future strategies and modernising plans taken by the government.

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6.	<b>Resources</b> • Resources • Land • Capital • Labour	• Defining resources • Describing three important factors involved in the procedure from production to consumption • Explaining the various factors involved in production • Describing the factors related to the pricing of the product • Explaining the competitive market based on the quality of the product	• Finding out various factors involved in opening of an account • Explaining the proper use of capital to start new business • Comparing skilled and unskilled labour	• Planning and organising as an entrepreneur • Listing the products having a competitive market • Explaining different categories of capital • Describing different kinds of labour	As an entrepreneur, preparing a project report for opening a juice factory.

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7.	<b>Types of Economic Systems</b> • Barter system • Socialist economy • Capitalist economy • Mixed economy	<ul style="list-style-type: none"> <li>• Listing and describing different forms of economies with examples</li> <li>• Describing the merits and demerits of all the systems</li> </ul>	<ul style="list-style-type: none"> <li>• Discussing different economies in the world</li> <li>• Explaining barter system through the exchange of goods within the class</li> <li>• Evaluating the working of the related institutions</li> <li>• Analysing the merits and demerits of all the systems</li> </ul>	<ul style="list-style-type: none"> <li>• Graphical representation of the different forms and institutions involved</li> <li>• Describing the system of economy adopted in various countries and one's own country</li> <li>• Preparing a write-up on the most appropriate system for India</li> </ul>	As an economist preparing a report on the economic conditions of the three different types of economic systems.

# GEOGRAPHY

## Class 7

## S K I L L S

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1.	<b>The Forces Beneath</b> • Internal structure of the earth  • Movement of Lithospheric plates -Earthquakes  -Volcanoes  • How people live in earthquake/volcano prone areas and disaster management in such regions	<ul style="list-style-type: none"> <li>• Identification of the internal layers of the earth</li> <li>• Understanding of lithospheric plates</li> <li>• Differentiating between different volcanic formations</li> <li>• Understanding the process of earthquakes and volcanic eruptions.</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the effect of internal movements on the earth surface</li> <li>• Understanding the process of mountain building</li> <li>• Analysing readings of a Richter scale</li> <li>• Stating important facts about earthquakes and volcanoes</li> <li>• Preventing or mitigating earthquake/volcanic disasters</li> </ul>	<ul style="list-style-type: none"> <li>• Graphically representing the earth's crust</li> <li>• Listing different kinds of volcanoes</li> <li>• Locating areas of frequent volcanic action</li> <li>• Listing the earthquake safety tips</li> </ul>	The learners make a working model of a volcano and demonstrate the volcanic eruption as a seismologist.

## S K I L L S

Ch.No.	Topic	Knowledge	Application	Social Science Skills	Apprentice Work
		<ul style="list-style-type: none"> <li>↳ Retention</li> <li>↳ Comprehension</li> <li>↳ Identification</li> <li>↳ Assimilation</li> </ul>	<ul style="list-style-type: none"> <li>↳ Correlation</li> <li>↳ Reasoning</li> <li>↳ Problem Solving</li> <li>↳ Inference</li> </ul>	<ul style="list-style-type: none"> <li>↳ Awareness</li> <li>↳ Graphical representation</li> <li>↳ Organisation</li> <li>↳ Imagination</li> </ul>	
2.	<b>The Forces Above: Air</b> <ul style="list-style-type: none"> <li>• Air and its composition</li> <li>• Air temperature and pressure</li> <li>• Winds</li> <li>• Cyclones</li> <li>• Air pollution – its ill effects</li> <li>• Examples of organisations in India working towards reduction in pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Naming the different layers of the atmosphere</li> <li>• Explanation of composition of air</li> <li>• Understanding the influence of air temperature on air pressure</li> <li>• Description of types of wind</li> <li>• Listing different types of cyclones</li> <li>• Explanation of effects of air pollution on health</li> <li>• Citing the examples of organisation working to reduce pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Reasoning the cause of planetary and local winds</li> <li>• Comparing the air pressure at different altitudes</li> <li>• Understanding the effect of wind on the climate of a place</li> <li>• Analysing the human activities leading to air pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Graphically representing the different pressure belts of the earth and planetary wind movement</li> <li>• Representing the areas prone to cyclones on a world map</li> <li>• Awareness of natural causes of air pollution</li> </ul>	<p>As an environmentalist the learners collect information on the changes occurring in the atmosphere to prepare a newsletter on atmosphere.</p>

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Ch.No.	Topic	Knowledge	Application	Social Science Skills	Apprentice Work
		<ul style="list-style-type: none"> <li>↳ Retention</li> <li>↳ Comprehension</li> <li>↳ Identification</li> <li>↳ Assimilation</li> </ul>	<ul style="list-style-type: none"> <li>↳ Correlation</li> <li>↳ Reasoning</li> <li>↳ Problem Solving</li> <li>↳ Inference</li> </ul>	<ul style="list-style-type: none"> <li>↳ Awareness</li> <li>↳ Graphical representation</li> <li>↳ Organisation</li> <li>↳ Imagination</li> </ul>	
3.	<b>Water</b> <ul style="list-style-type: none"> <li>• Water cycle, rainfall, humidity</li> <li>• Rivers, seas &amp; ice</li> <li>• Waves, tides, ocean currents</li> <li>• Water pollution</li> <li>• Effect of water pollution on humans</li> <li>• Case Study: Any major Indian river (Yamuna)</li> </ul>	<ul style="list-style-type: none"> <li>• Description of rainfall, humidity and water cycle</li> <li>• Defining a river</li> <li>• Getting aware of tides and ocean currents</li> <li>• Listing the oceans of the world</li> <li>• Explanation of effects of water pollution on health.</li> </ul>	<ul style="list-style-type: none"> <li>• Analysing the water cycle, rainfall and humidity</li> <li>• Pointing out the causes of water pollution</li> <li>• Analysing the causes of water pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Locating the important rivers of India on an outline map of India.</li> </ul>	<p>As oceanographers the learners get into groups to make an 'ocean album'. Learners collect information (pics etc) about oceans – their location, area, climate, marine life and all related interesting facts.</p>
4.	<b>Face of the earth</b> <ul style="list-style-type: none"> <li>• Denudation agents</li> <li>• Major landforms</li> </ul>	<ul style="list-style-type: none"> <li>• Formation of different landforms due to denudation</li> <li>• Understanding the role of agents that help in the formation of landforms</li> <li>• Identifying the differences in plains, plateaus, mountains and deserts</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding how internal and external forces change the face of the earth.</li> </ul>	<ul style="list-style-type: none"> <li>• Graphically representing landforms formed by the agents of denudation</li> <li>• Graphically representing the different stages of the Ganga river</li> </ul>	<p>The learners prepare and enact 'Yatra-an Indian journey' portraying the landforms, their culture (song, dance, language etc) of any one region.</p>

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	<ul style="list-style-type: none"> <li>Lifestyle in the different landforms</li> </ul>	<ul style="list-style-type: none"> <li>Differentiating and describing lifestyle in different landforms.</li> </ul>	<ul style="list-style-type: none"> <li>Giving reasons for the diverse cultures and practices in India.</li> </ul>	<ul style="list-style-type: none"> <li>Collecting information about the lifestyle of people from different pictures and magazines</li> </ul>	
5.	<b>Natural Vegetation</b>  <ul style="list-style-type: none"> <li>Types of forests (tropical, coniferous, temperate)</li> <li>Desert vegetation</li> <li>Grasslands</li> <li>Life of people in different regions</li> </ul>	<ul style="list-style-type: none"> <li>Listing the various kinds of forests</li> <li>Describing various kinds of forests in India</li> <li>Understanding the importance of forests</li> <li>Listing different grasslands of world</li> </ul>	<ul style="list-style-type: none"> <li>Differentiating between the various forests found in India.</li> <li>Analysing the vegetation found in different forest areas</li> <li>Highlighting the life of people living in forest and grassland areas and conservation of forests.</li> </ul>	<ul style="list-style-type: none"> <li>Generating a report on deciduous forests</li> <li>Graphically representing areas where different forests and deserts are found on a political map of the world</li> </ul>	As forest officers, the learners in a group collect information on different trees which are part of the natural vegetation of the school and present the same in the form of a poster.