Learning Objectives:

i) Learners will be able to identify the subject and predicate in the sentence.

ii) Learners will be able to comprehend the story and present it in their own words.

iii) Learners will be encouraged to attempt the related comprehension exercises on their own.

The Cherry Tree (Literature)
- **Ruskin Bond**

About the Author:

Ruskin Bond is an Indian author of British descent. Most of his works are influenced by life in the hill stations at the foothills of the Himalayas,where he spent his childhood. He has contributed to children's literature in India for many years.

Synopsis:

In The Cherry Tree by Ruskin Bond we have the theme of struggle, resilience, dedication, conflict, growth, responsibility and pride. It is a beautiful story which indirectly symbolizes human life and its struggle through Rakesh and his cherry tree. Rakesh threw a cherry seed and that started to shoot into a twig. He took care of it but was impatient to wait for its natural growth and so left it uncared. But with all its strong resilient power, the cherry tree wins over nature and starts to grow. Rakesh was delighted to see its growth and starts to take care of it again along with his grandfather. He was ecstatic to see the tree bloom with beautiful flowers and the thought that he was going to get the fruit from the tree that he planted made him feel so great. The author has beautifully portrayed the beauty of the nature and climate of Mussoorie. Through the character of Rakesh, who is so kind towards his grandfather and the cherry tree, the author symbolically compares goodness to godliness.

Elements of the Prose – The Cherry Tree

- **Characters –** Rakesh and his Grandfather
- **Setting –** Outskirts of Mussoorie
- **Point of view –** Third person, narrator or the author is telling the story.
- **Theme –** Care for animals and plants. It has underlying themes of Struggle, Dedication, Pride, Growth and Responsibility
- **Mood –** Feeling of love for nature and happiness
- **Plot –** Rakesh plants a seed that faces a lot of difficulties before growing into a cherry tree.

Activity:

- After reading the story, 'The Cherry Tree' the teacher will divide the students into pairs and will encourage one child to be the interviewer and the other a tree. In the conversation the interviewer will ask the tree questions about its life, how it's useful for the entire humankind and hopes for the future.

- Design a poster related to nature/environment.

<div align="center">

GRAMMAR

TOPIC: <u>SUBJECT & PREDICATE</u>

</div>

<u>**LINK:**</u> **https://www.youtube.com/watch?v=9Kr7Xt5KPw**

*Every **sentence** has two parts: a **subject** and a **predicate**.

i) The part which names the person or thing we are speaking about. This is called the **Subject** of the sentence.

<u>**Examples:**</u>

a) Rebecca is washing the car.

b) Sam and his brother always race each other up the hill while trekking.

ii) The part which tells something about the subject. This is called the **Predicate** of the sentence.

<u>**Examples**</u>:

a) Rebecca is **washing the car.**

b) Sam and his brother **always race each other up the hill while trekking**.

*The Subject of the sentence usually comes first, but occasionally it is put after the Predicate; as,

a) Here comes **the bus**.

b) Sweet are the uses of **adversity.**

*In Imperative sentences the Subject is left out.

<u>**Examples**</u>:

a) Sit down. (Here the Subject 'You' is understood.)

b) Thank him. (Here too the Subject 'You' is understood.)

<div align="center">

MATHS

</div>

Playing with numbers Class 6 notes - Chapter 3

LEARNING OBJECTIVES- To understand and apply the concepts of prime and composite numbers.

To be able to use divisibility test for numbers

Divisibility Tests

A divisibility rule is a method of determining whether a given integer is divisible by a fixed divisor without performing division, usually by examining its digits.
We have divisibility rules for 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11.

Divisibility tests for 2

If one's digit of a number is 0,2,4,6 or 8, then the number is divisible by 2.
Example: 12, 34, 56 and 78.

Divisibility tests for 4

A number with 3 or more digits is divisible by 4 if the number formed by its last two digits (i.e. ones and tens) is divisible by 4.
Example: 1396 is divisible by 4 since its last two digits i.e. 36 is divisible by 4.

Divisibility tests for 3

A number is divisible by 3, if sum of its digits is divisible by 3.
Example: Take 27.
Sum of its digits = 2+7= 9, which is divisible by 3.
Therefore, 27 is divisible by 3.

Divisibility tests for 5

If the one's digit of a number is either 5 or 0, then it is divisible by 5.
Example: 75, 90, 100 and 125.

Divisibility tests for 8

A number with 4 or more digits is divisible by 8, if the number formed by its last three digits is divisible by 8.
Example: 73512 is divisible by 8 since its last three digits i.e. 512 is divisible by 8.

Divisibility tests for 6

If a number is divisible by 2 and 3 both, then it is divisible by 6 also.
Example: 120 is divisible by 2 and 3. Therefore, it is divisible by 6 also.

Divisibility tests for 7

Double the last digit and subtract it from the remaining leading cut number. If result is divisible by 7, then the original number is divisible by 7. Example: 826 is divisible by 7 since, $82 - (6 \times 2) = 82 - 12 = 70$, which is divisible by 7.

Divisibility tests for 9

A number is divisible by 9 if sum of its digits is divisible by 9.
Example: Consider 126.
Sum of its digits = 1+2+6 = 9, which is divisible by 9.
Therefore, 126 is divisible by 9.

Divisibility tests for 11

Find difference between sum of digits at odd places (from the right) and sum of digits at even places (from the right) of a number. If the difference is either 0 or divisible by 11, then the number is divisible by 11.
Example: 1234321 is divisible by 11 since, $(1+3+3+1) - (2+4+2) = 8 - 8 = 0$, which is divisible by 11.

Divisibility tests for 10

If one's digit of a number is 0, then the number is divisible by 10.
Example: 10, 20, 30 and 40.
To know more about Divisibility Rules, visit here.

Common factors

The factors of 4 are 1, 2 and 4.
The factors of 18 are 1, 2, 3, 6, 9 and 18.
The numbers 1 and 2 are common factors of both 4 and 18.

For More Information On Common Factors, Watch The Below Video.

Common multiples

Multiples of 3 are 3, 6, 9, 12, 15, 18,….
Multiples of 5 are 5, 10, 15, 20, 25, 30,…
Multiples of 6 are 6, 12, 18, 24, 30, 36,…
Therefore, common multiples of 3, 5 and 6 are 30, 60,….

The Prime Factor

Prime Factorization

When a number is expressed as a product of prime numbers, factorisation is called prime factorisation.

SCIENCE

Chapter: **Sorting Materials into Groups**

Introduction
The process of sorting and grouping objects/things according to some basis is called Classification. It makes study of large number of objects of different type easier, simple, systematic and convenient. Objects around us have different shapes, colours and uses. Some of the objects are found in nature while others are man-made. Objects are made of materials. Materials are the substances used to make things. For example, wood pulp is the material from which paper is made. Same material can be used to make different types of objects. For example, glass can be used to make bowls, bulbs, window panes etc. The same object can be made of different kinds of materials. For example, a chair is made of wood, plastic or iron. Some objects are made up of a combination of several materials. For example, a wooden knife and a plastic knife.
Material can be classified as naturally occurring materials and man–made materials. Naturally occurring materials are found in nature. E.g., cotton, marble etc. Man-made materials are prepared by human beings. For example, plastic, steel, polyester etc.
Note: Objects are made of materials.

1 Properties of materials
Based on the different properties, materials can be differentiated into their respective groups. These are as follows:
1.1 Appearance
In appearance materials usually look very different from each other. The appearance of wood is different from iron. Similarly, appearance of iron is different from copper or aluminium. Some materials when freshly cut appear shiny where as others have no shine Metals shine in their pure state. This shining property of metal is called metallic lustre.

Figure 1: Lustrous vs Non-lustrous materials

1.2 Solubility

Some of the solid substances dissolve when placed in a container containing water and stirred where as some remain undissolved. The solid substances that dissolve in water are called soluble substances e.g. salt, sugar etc. The solid substances that remain undissolved are called insoluble substances. e.g. sand, saw dust etc.

1.3 Hardness

On the basis of hardness materials can be classified as soft or hard. Soft materials are those which can be easily compressed or scratched. E.g.: Cotton, sponge. Hard materials are those which are difficult to compress. E.g.: Iron, stone, wood, diamond, etc.

1.4 Transparency

Transparent objects are those objects through which things can be seen (i.e. they allow the light to pass through them). E.g.: Glass, water, air, some plastics etc. Translucent materials are those materials through which objects can be seen but not clearly. E.g.: Oiled paper. Opaque objects are those objects through which you are not able to see (i.e. they do not allow the light to pass through them). E.g.: Metals, cardboard, wood etc.
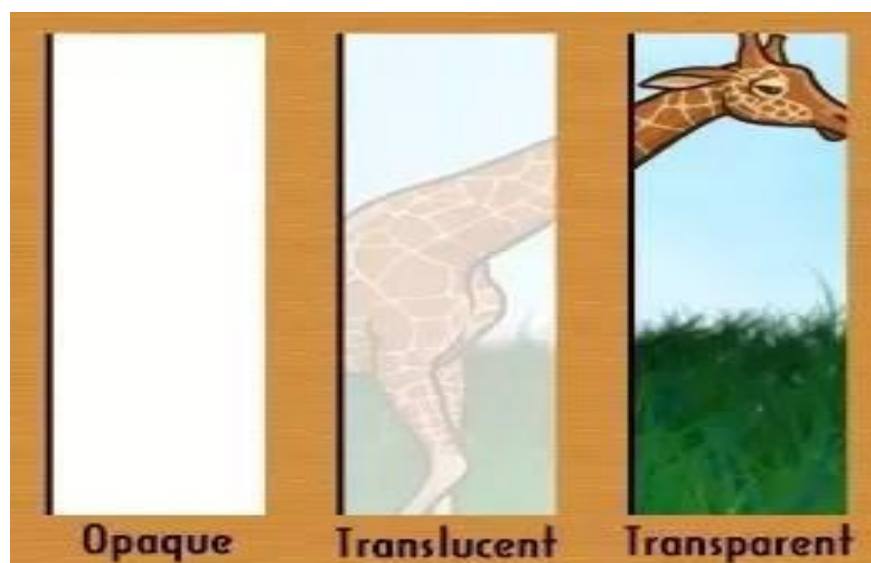

Figure 2: Transparent vs Translucent vs Opaque materials

1.5 Depending on their density, objects may float on the surface of the water or they might sink to the bottom. The objects with lower density float on the surface. E.g.: Wood, tree leaves etc. The objects with higher density sink to the bottom. E.g.: Pebbles, iron rod etc.

Figure 3: Floating vs Sinking objects

Table 1 shows the summary of various properties of materials.
Table 1: Properties of materials

Appearance	Solubility	Hardness	Transparency	Density
Materials look different from each other.	**Soluble:** Materials which dissolve completely in water. **Insoluble:** Materials which do not dissolve in water.	**Soft:** Materials which can be compressed or scratched easily. **Hard:** Materials which are difficult to compress.	**Transparent:** Materials through which things can be seen clearly. Light passes completely through it. **Translucent:** Materials through which things can be seen, but not clearly. It allows light to pass through partially. **Opaque:** Materials through which things cannot be seen. It does not allow light to pass through it.	**Float:** Some materials float on the surface of the water. (The material which float on water have less density than water.) **Sink:** Some materials sink to the bottom of water. (The materials which sink in water have more density than water.)
Example: Metals have lustre, wood does not have lustre.	**Soluble:** Example: Sugar and salt dissolve in water. **Insoluble:** Example: Sand and sawdust doesn't dissolve in water.	**Soft:** Example: Cotton and rubber. **Hard:** Example: Iron and steel.	**Transparent:** Example: Glass. **Translucent:** Example: Wax paper. **Opaque:** Example: Wood.	**Float:** Example: Tree leaves. **Sink:** Example: Pebbles.

शब्दरूप तत् (पुल्लिंग)

विभक्ति	एकवचन	द्विवचन	बहुवचन
प्रथमा	सः	तौ	ते
द्वितीया	तम्	तौ	तान्
तृतीया	तेन	ताभ्याम्	तैः
चतुर्थी	तस्मै	ताभ्याम्	तेभ्यः
पंचमी	तस्मात्	ताभ्याम्	तेभ्यः
षष्ठी	तस्य	तयोः	तेषाम्
सप्तमी	तस्मिन्	तयोः	तेषु

तत् (स्त्रीलिंग)

विभक्ति	एकवचन	द्विवचन	बहुवचन
प्रथमा	सा	ते	ताः
द्वितीया	ताम्	ते	ताः
तृतीया	तया	ताभ्याम्	ताभिः
चतुर्थी	तस्यै	ताभ्याम्	ताभ्यः
पंचमी	तस्याः	ताभ्याम्	ताभ्यः
षष्ठी	तस्याः	तयोः	तासाम्
सप्तमी	तस्याम्	तयोः	तासु

तत् (नपुंसकलिंग)

तद् नपुंसकलिंग के रूप

विभक्ति	एकवचन	द्विवचन	बहुवचन
प्रथमा	तत्	ते	तानि
द्वितीया	तत्	ते	तानि
तृतीया	तेन	ताभ्याम्	तैः
चतुर्थी	तस्मै	ताभ्याम्	तेभ्यः
पंचमी	तस्मात्	ताभ्याम्	तेभ्यः
षष्ठी	तस्य	तयोः	तेषाम्
सप्तमी	तस्मिन्	तयोः	तेषु

Class 6 Hindi Grammar

-संधि

Note- please refer to the above given link to study the chapter before answering the following assignment

संधि की परिभाषा

दो वर्णों (स्वर या व्यंजन) के मेल से होने वाले विकार को संधि कहते हैं।

दूसरे अर्थ में- संधि का सामान्य अर्थ है मेल। इसमें दो अक्षर मिलने से तीसरे शब्द की रचना होती है, इसी को संधि कहते है।

सरल शब्दों में- दो शब्दों या शब्दांशों के मिलने से नया शब्द बनने पर उनके निकटवर्ती वर्णों में होने वाले परिवर्तन या विकार को संधि कहते हैं।

संधि विच्छेद- उन पदों को मूल रूप में पृथक कर देना संधि विच्छेद है।
जैसे- हिम + आलय= हिमालय (यह संधि है), अत्यधिक= अति + अधिक (यह संधि विच्छेद है)

संधि के भेद

वर्णों के आधार पर संधि के तीन भेद है-

(1) स्वर संधि (Vowel sandhi)

(2) व्यंजन संधि (Combination of Consonants)

(3) विसर्ग संधि (Combination Of Visarga)

(1)स्वर संधि (vowel sandhi) :- दो स्वरों से उत्पत्र विकार अथवा रूप-परिवर्तन को स्वर संधि कहते है।

दूसरे शब्दों में- ''स्वर वर्ण के साथ स्वर वर्ण के मेल से जो विकार उत्पत्र होता है, उसे 'स्वर संधि' कहते हैं।''

जैसे- विद्या + अर्थी = विद्यार्थी, सूर्य + उदय = सूर्योदय, मुनि + इंद्र = मुनीन्द्र, कवि + ईश्वर = कवीश्वर, महा + ईश = महेश

इनके पाँच भेद होते है -
(i) दीर्घ संधि
(ii) गुण संधि
(iii) वृद्धि संधि
(iv) यण संधि
(v) अयादि संधि

(i)दीर्घ संधि- जब दो सवर्ण, ह्स्व या दीर्घ, स्वरों का मेल होता है तो वे दीर्घ सवर्ण स्वर बन जाते हैं। इसे दीर्घ स्वर-संधि कहते हैं।

नियम- दो सवर्ण स्वर मिलकर दीर्घ हो जाते है। यदि 'अ'',' 'आ', 'इ', 'ई', 'उ', 'ऊ' और 'ऋ'के बाद वे ही ह्स्व या दीर्घ स्वर आये, तो दोनों मिलकर क्रमशः 'आ', 'ई', 'ऊ', 'ऋ' हो जाते है। जैसे-

अ + अ= आ	अत्र + अभाव= अत्राभाव कोण + अर्क= कोणार्क
अ + आ= आ	शिव + आलय= शिवालय भोजन + आलय= भोजनालय
आ + अ= आ	विद्या + अर्थी= विद्यार्थी लज्जा + अभाव= लज्जाभाव
आ + आ= आ	विद्या + आलय= विद्यालय महा + आशय= महाशय
इ + इ= ई	गिरि + इन्द्र= गिरीन्द्र

इ + ई= ई	गिरि + ईश= गिरीश
ई + इ= ई	मही + इन्द्र= महीन्द्र
ई + ई= ई	पृथ्वी + ईश= पृथ्वीश
उ + उ= ऊ	भानु + उदय= भानूदय
ऊ + उ= ऊ	स्वयम्भू + उदय= स्वयम्भूदय
ऋ + ऋ= ऋ	पितृ + ऋण= पितृण

(ii) गुण संधि- अ, आ के साथ इ, ई का मेल होने पर 'ए'; उ, ऊ का मेल होने पर 'ओ'; तथा ऋ का मेल होने पर 'अर्'

हो जाने का नाम गुण संधि है।
जैसे-

अ + इ= ए	देव + इन्द्र= देवन्द्र
अ + ई= ए	देव + ईश= देवेश
आ + इ= ए	महा + इन्द्र= महेन्द्र
अ + उ= ओ	चन्द्र + उदय= चन्द्रोदय
अ + ऊ= ओ	समुद्र + ऊर्मि= समुद्रोर्मि
आ + उ= ओ	महा + उत्सव= महोत्सव
आ + ऊ= ओ	गंगा + ऊर्मि= गंगोर्मि
अ + ऋ= अर्	देव + ऋषि= देवर्षि

आ + ऋ = अर्	महा + ऋषि = महर्षि

(iii) वृद्धि संधि- अ, आ का मेल ए, ऐ के साथ होने से 'ऐ' तथा ओ, औ के साथ होने से 'औ' में परिवर्तन को वृद्धि संधि
कहते हैं।
जैसे-

अ + ए =ऐ	एक + एक =एकैक
अ + ऐ =ऐ	नव + ऐश्वर्य =नवैश्वर्य
आ + ए=ऐ	महा + ऐश्वर्य=महैश्वर्य सदा + एव =सदैव
अ + ओ =औ	परम + ओजस्वी =परमौजस्वी वन + ओषधि =वनौषधि
अ + औ =औ	परम + औषध =परमौषध
आ + ओ =औ	महा + ओजस्वी =महौजस्वी
आ + औ =औ	महा + औषध =महौषध

(iv) यण संधि- इ, ई, उ, ऊ या ऋ का मेल यदि असमान स्वर से होता है तो इ, ई को 'य'; उ, ऊ को 'व' और ऋ को 'र' हो जाता है। इसे यण संधि कहते हैं।
जैसे-

(क) इ + अ= य	यदि + अपि= यद्यपि
इ + आ= या	अति + आवश्यक= अत्यावश्यक
इ + उ= यु	अति + उत्तम= अत्युत्तम

इ + ऊ = यू	अति + उष्म= अत्यूष्म
(ख) उ + अ= व	अनु + आय= अन्वय
उ + आ= वा	मधु + आलय= मध्वालय
उ + ओ = वो	गुरु + ओदन= गुर्वौदन
उ + औ= वौ	गुरु + औदार्य= गुर्वौदार्य
उ + इ= वि	अनु + इत= अन्वित
उ + ए= वे	अनु + एषण= अन्वेषण
(ग) ऋ + आ= रा	पितृ + आदेश= पित्रादेश

(v) अयादि स्वर संधि- ए, ऐ तथा ओ, औ का मेल किसी अन्य स्वर के साथ होने से क्रमशः अय्, आय् तथा अव्, आव् होने को अयादि संधि कहते हैं।
जैसे-

ए + अ= य	ने + अन= नयन
ऐ + अ= य	गै + अक= गायक
ओ + अ= व	भो + अन= भवन
औ + उ= वु	भौ + उक= भावुक

CHAPTER - 2
Diversity and Discrimination

Difference and Prejudice

- Differences in people exist on various grounds.
- These differences lead to prejudice.
- Prejudice means to judge other people negatively or see them as inferior.
- All 8 major religions are practiced in India which has over 1,600 languages.
- Sometimes, people with very strange and unfamiliar ideas meet us.

Creating Stereotype

- As children grow up, boys and girls are taught to do certain types of tasks.
- These are based on certain types of stereotype images. It means to fix people into one particular image.

Inequality and Discrimination

- Discrimination happens when people act on their prejudices or stereotypes.
- Discrimination can take place because of several reasons.
- Groups of people who may speak a certain language, follow a particular religion, live in specific regions, etc. may be discriminated against as their customs or practices may be seen as inferior.
- People may suffer discrimination on economic or social grounds. Tribal, some religious groups and even particular regions are discriminated against for one or more of these reasons.

On Being Discriminated Against

- People are engaged in certain types of occupations. Certain kinds of jobs are more valued than others.
- Caste rules were set which did not allow the so-called untouchables to take on work, other than what they were meant to do.
- Dr Ambedkar suffered discrimination when he was only of nine years in school.
- He emerged as the pioneer of the rights of Dalits. He believed the Dalits must fight against the caste system.

Striving for Equality

- After Independence, the framers of the Indian Constitution aimed for ending.
- The struggle for freedom against British rule also strived for equality.
- Dalits, women, tribals and peasants have fought for long ending inequality.
- People were allowed the freedom to follow their religion, speak their language, celebrate their festivals and expose themselves freely.
- To guarantee equality, India became a secular state.