English Assignment

SUBJECT TEACHER MS. EKTA KHURANA/ MS. AREEBA

Can we change this?

Learning Outcomes

Knowledge: To know about the central idea, theme and message of the chapter.

Understanding: To understand the meaning of the difficult words.

Application: To analyze and use critical thinking to understand setting and characters of the chapter.

Skill: To summarize the story in their own words and answer the questions based on the poem.

About the Author

Bama is a Tamil dalit woman writer who has contributed many literary works to dalit literature such as novels, short stories, poems etc. In her autobiography 'Karukku', she has written about the gender and caste discrimination faced by them even if they attain good education. 'Can we change this?' is an extract from Karukku.

Summary

Concept of Untouchability

This chapter narrated the life of a Tamilian Dalit of India named Bama. In a place where patriarchic society being a Dalit added more factors of discrimination in the life of a young girl.

Bama was a cheerful and beautiful young girl who always had questions to satisfy her burning curiosity. However, one such curious voyage led her to an ugly truth of the World, the prevalence of untouchability and the subjugation of people based on racial and blood purity.

Oppression of the Lower caste people by Upper Caste people

She saw some laborers working for their rich landlord. Little Bama noticed one of them holding the landlord's food packet with the strings, carefully not cupping it in his hands.

She was amused and asked her elder brother, Annan, about it later. Her brother educated her about the evil practice of untouchability and that the labourer had to hold the packet at the strings only, lest he polluted the contents of the packet.

Bama felt a surge of rage and disgust at such an evil belief and practice. She felt that her community and people must show resistance to such oppression and refuse to run trivial errands for the rich upper caste people.

Importance of Education for changing mindset of the society

Annan tells her that until their Dalit community can uplift their identity through education they will continue to be looked down upon and run roughshod over.

He encourages Bama to use the opportunities offered by education to circumvent the odds of caste discrimination and bridge the chasm of racial inequality. Through education, people can change their destiny even though they cannot do anything regarding their birth or place of birth.

Her brother's word left a deep imprint on the mind and psyche of little Bama. She resolved to prove him right and studied vigorously. As a result, she came ahead of every other student in her class.

Her success bred more confidence in her. Her self-belief and hard work made her popular among her classmates and teachers alike. Finally, she was able to change the course of her fortunes and write a glorious destiny, surpassing the limitations that society marked her with at her birth.

Video Link

https://www.youtube.com/watch?v=PHJs05wqTLQ (Part 1)
https://www.youtube.com/watch?v=VSIzHUxoIQM&t=7s (Part 2)
https://www.youtube.com/watch?v=m3O2c3-Vvis (Part 3)


A. Answer the following questions.

1. What was the sight that the narrator found amusing? Was it really so?

2. Why was the narrator's Annan not amused by her story?

3. What feeling did the realization of truth evoke in the narrator?

4. What humiliation did the lower caste have to face?

5. Naicker was furious. Why? Was this justified?

6. What discrimination did the narrator undergo on a daily basis at school?

7. Relate the humiliating incident that the narrator experienced at school.

8. Justify the title of the story.

Activity
When the Aryans migrated to Northern India, they imposed domination over the native inhabitants of the land. The caste system evolved from there on. Can you complete the social hierarchy pyramid? Identify and define each level in the caste pyramid. (Brahmin, Kshatriya, Vaishya, Sudra, Untouchables)
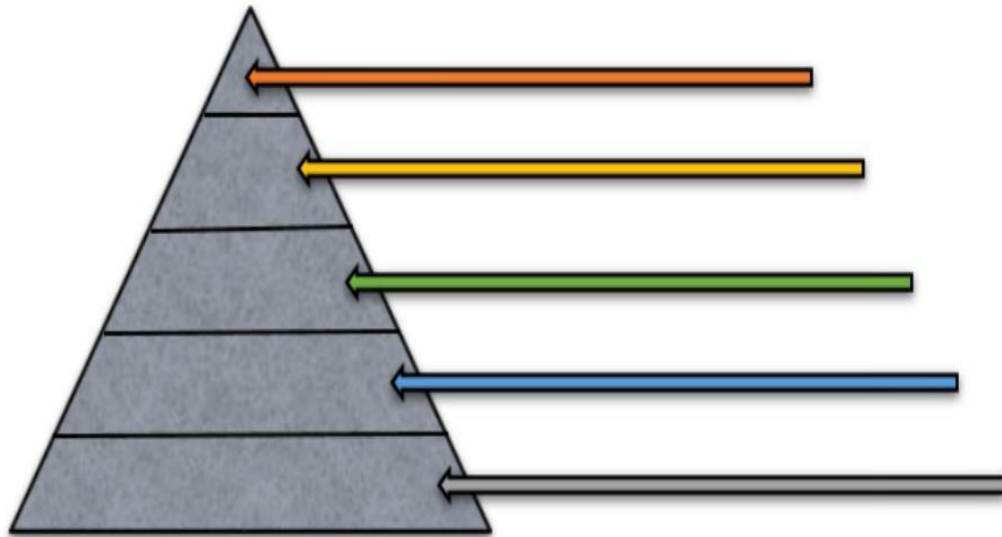
MATHS ASSIGNMENT
SUBJECT TEACHER MS. SHIVANGI

Please watch this video:

Algebraic Expressions and Identities

Learning Outcomes:

i)   Students will be able to define I and II algebraic identities.

ii)   Students will be able to apply algebraic identities to solve problems.

iii)   Students will be able to perform multiplication of two binomials by using colour strips of cardboard.

Activity : To multiply two binomials by different colour strips of cardboard.

Method of constructions:

1) Take three pieces of cardboard and paste coloured papers on them. Green on one, blue on the other and the red on the last one.

2) Make a large number of square of side x units of green colour and cut them out. (figure 1)

x

x

Fig. 1
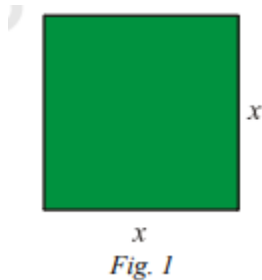
3) Similarly make many squares of dimensions x units x 1 unit using blue coloured cardboard and squares of dimensions 1 unit x 1 unit of red colour and cut them out. (Figure 2 and 3)

x

1

1   1

Fig. 2   Fig. 3
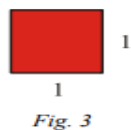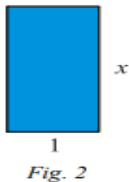
Demontration:

1) To represent the algebraic expression 3x + 5, arrange these strips as shown in figure 4.

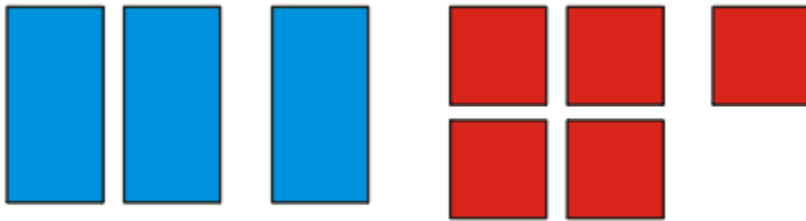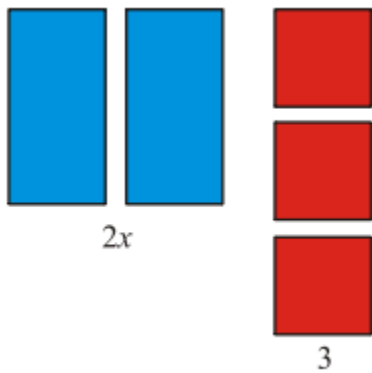*Fig. 4*

2) Similarly represent algebraic expression 2x + 3, as in step 1 in figure 5

2x

3

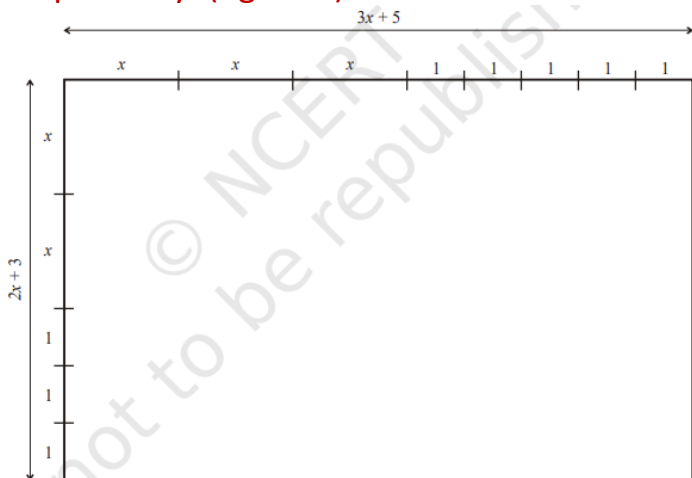3) Make a rectangle whose length and breadth are 3x+ 5 and 2x+3 respectively. (figure 6)

Fig. 6

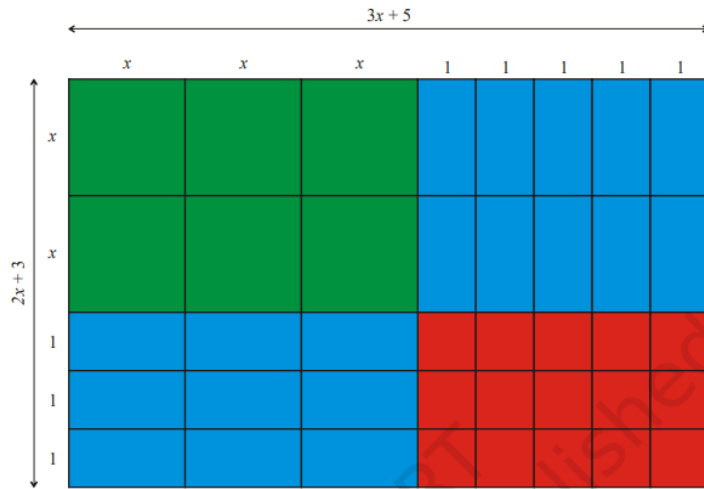4) Arrange the strips obtained in steps 2 and 3 in the rectangle of figure 6 as shown in figure 7.

Fig. 7

Area of rectangle in fig 6 = l x b= (3x +5) (2x +3)

Area of strips in fig 7 = $6x^2$ + 19x +15

So, (3x+5) (2x +3) = $6x^2$ + 19x +15

Similarly, Find the product of some other two linear algebraic expressions.

Activity based Question:

Q-1) The side of a square is given by the expression (5p + 6). Find its area.

5p+6

5p +6
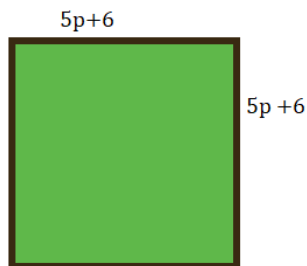
Identity:

Consider the equality (a + 1) (a +2) = a^2 + 3a + 2

We shall evaluate both sides of this equality for some value of a, say a = 10.

For a = 10

 LHS = (a + 1) (a + 2) = (10 + 1) (10 + 2) = 11 × 12 = 132

RHS = a^2 + 3a + 2 = 10^2 + 3 × 10 + 2 = 100 + 30 + 2 = 132

Thus, the values of the two sides of the equality are equal for a = 10.

We shall find that for any value of a, LHS = RHS.

Such an equality, true for every value of the variable in it, is called an identity.

Thus,

$(a + 1) (a + 2) = a^2 + 3a + 2$ is an identity.

An equation is true for only certain values of the variable in it. It is not true for

all values of the variable.

For example, consider the equation

$a^2 + 3a + 2 = 132$

It is true for $a = 10$, as seen above, but it is not true for $a = -5$ or for $a = 0$ etc.

Standard Identities:

I Identity
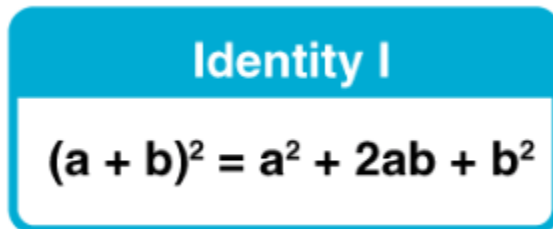
$(a+b)^2 = a^2 + 2ab + b^2$

$(a + b)^2 = (a + b) (a + b)$

$= a(a + b) + b (a + b)$

$= a^2 + ab + ba + b^2$

$= a^2 + 2ab + b^2$

Identity I

$$(a + b)^2 = a^2 + 2ab + b^2$$

Thus,

Example 1   Find: $(2x + 3y)^2$

$(2x + 3y)^2 = (2x)^2 + 2(2x) (3y) + (3y)^2$ [Using the Identity (I)]
$= 4x^2 + 12xy + 9y^2$

Example 2   Find using identity 103^2

$103^2 = (100 + 3)^2$

$= 100^2 + 2 \times 100 \times 3 + 3^2$

$= 10000 + 600 + 9$

$= 10609$

II Identity

$(a-b)^2 = = a^2 - 2ab + b^2$

$(a-b)^2 = (a-b)(a-b)$

$= a(a-b) - b(a-b)$

$= a^2 - ab - ba + b^2$

$= a^2 - 2ab + b^2$

Thus,

Identity II

$$(a-b)^2 = a^2 - 2ab + b^2$$

Example 1   Using Identity (II), find $(4p - 3q)^2$

$(4p - 3q)^2 = (4p)^2 - 2 \times 4p \times 3q + (3q)^2$ [Using the Identity (II)]

$= 16p^2 - 12pq + 9q^2$

Example 2   Using Identity (II), find $(4.9)^2$

$(4.9)^2 = (5.0 - 0.1)^2$

$= 5^2 - 2 \times 5 \times 0.1 + (0.1)^2$

$= 25 - 1.0 + 0.01$

$= 24.01$

Solve the following Questions:

Q-1) Find using suitable identity:

   i) $(x + 2)^2$

   ii) $(8xa + 3b)^2$

   iii) $(9a + 1/6)^2$

   iv) $(2a/3b + 2b/3a)^2$

Q-2) Find using suitable identity:

i) $\left(\dfrac{x}{y} - \dfrac{y}{x}\right)^2$

ii) $(a^2b - bc^2)^2$

iii) $(x^2 - ay)^2$

iv) $(P - 3)^2$

Q-3) **Show that:**
(i) $(3x + 7)^2 - 84x = (3x - 7)^2$
(ii) $(9a - 5b)^2 + 180ab = (9a + 5b)^2$

(iii) $(4m/3 - 3n/4)^2 + 2mn = 16m^2/9 + 9n^2/16$

Q-4) **Using suitable identity, evaluate the following:**
(i) $(102)^2$
(ii) $(99)^2$
(iii) $(1001)^2$

SOCIAL SCIENCE (Geography) ASSIGNMENT

SUBJECT TEACHER MS. NIDA

Chapter 3:   Mineral & power resources

Study material

Learning out comes:- Students will be able to know about distribution of minerals in Asia ,Europe ,North America , south America , Africa, Australia & Antarctica.

Distribution of minerals:-

- Minerals occur in different types of rocks such as igneous rock, metamorphic rocks, or sedimentary rocks.
- Metamorphic examples: iron ore, copper , nickel, chromites, platinum etc.
- Sedimentary rocks examples: Lime stone, manganese, phosphate beds etc.

➤ Asia:
- China & India have large iron ore deposits.
- China , Malaysia & Indonesia are among the world's leading tin producers.
- China also leads in production of lead, antimony & tungsten.
- Asia also has deposits of manganese, Bauxite ,Nickel, Zinc & copper**.**

➤ Europe:
- It is the leading producer of iron ore in the word.
- Russia , Ukraine, Sweden, & france have large deposits of iron ore.
- Copper, lead, Zinc, manganese,& nickel are found in eastern Europe & European Russia.

➤ North America.
- Mineral deposits in north America are located in three zones.
    1. The Canadian region north of the great lakes: iron ore , nickel, gold, uranium & copper.
    2. The Appalachian region: coal.
    3. The mountain ranges of the west: copper , lead, zinc, gold & silver.

- **South America.**
  - Iron ore: Brazil.
  - Copper: chile & peru.
  - Tin: Brazil & Bolivia.
  - Mineral oil: Venezuela, Argentina, Chile , Peru & Colombia.
- **Africa:**
  - It is the worlds largest producer of diamonds, gold & platinum.
  - Oil : Nigeria, Libia ,Angola.
  - Other minerals found in Africa are copper, Iron ore, Chromium, Uranium, cobalt & bauxite.
- **Australia:**
  - It is the largest producer of bauxite in the world.
  - It is a leading producer of gold, Diamond, iron ore, tin & Nickel.
  - It is also rich in copper, Lead, Zinc & manganese.

- **Antarctica:**
  - Deposits of coal in the Trans Antarctic mountains & iron near the prince Charles mountain of East Antarctica is predicted.
  - Iron ore, Gold, Silver & oil are also present in commercial quantities.

Assignment

Fill in the blanks.

1. Processing of digging out of minerals is known as _____.
2. India _____ in ferrous minerals.

3. Australia is the largest producer of _____ in the world.
4. China & India have large _____ ore deposits.
5. Russia is rich in _____ resource.

Multiple choice questions.

1. Name the continent with the largest producer of bauxite in the world

   1. Australia
   2. Africa
   3. South America
   4. North America

2. Pick out the region of North America where huge mineral deposits are found.

   1. Kalgoorlie region
   2. Witwatersrand region
   3. Chota Nagpur plateau
   4. The Appalachian region.

3. Name the two important states where large deposits of Uranium are found.

   1. Rajasthan and Karnataka
   2. Andhra Pradesh and Maharashtra
   3. Jharkhand and Andhra Pradesh
   4. Rajasthan and Jharkhand

4. Give two examples of non- metallic mineral fuels from the options given below:

1. Gold, Silver
2. Coal, Petroleum
3. Manganese Ore, Bauxite
4. Iron Ore, Bauxite

5. Which continent is the leading producer of iron ore in the world?

1. Asia
2. North America
3. Europe
4. Australia

6. A naturally occurring substance that has a definite chemical composition is known as a ....
   (a) Ore
   (b) Mineral
   (c) Soil
   (d) Land.

7. . Which one of the following properties of a mineral is not correct?
   (a) Impure
   (b) Non-Renewable
   (c) Non-Exhaustible
   (d) Unevenly Distributed.

8. Minerals that lie near the earth's surface are simply dug out by the process known as ....
   (a) Quarrying
   (b) Drilling

(c) Open Cast Mining

(d) Shaft Mining.

9. Non-metallic minerals like Limestone, Sandstone, Marble, etc. are found in the ....

(a) Metamorphic Rocks

(b) Igneous Rocks

(c) Sedimentary Rocks

(d) Weathered Rocks.

10. Aluminum is obtained from ....

(a) Iron Ore

(b) Bauxite

(c) Crude Oil

(d) Rocks

Short Answer questions

1. Differentiate between a rock & an ore.
2. Define quarriying.
3. Name the leading tin producers in Asia.
4. Which minerals are found in Antarctica ?

Long answer questions

1. Describe distribution of minerals in Asia.
2. Write in brief how minerals are distributed in North America.

Activity:-

- On the world political map mark the following **.**

    1. Canadian shield
    2. Appalachians.
    3. Western Cordilleras.
    4. Lake superior.

*(Mark these regions with the help of atlas by using pencil colors)

Video Link:

https://www.youtube.com/watch?v=4TlSboVH2vU&feature=youtu.be

https://www.youtube.com/watch?v=VV1Q52b6JNE&feature=youtu.be

SOCIAL SCIENCE (CIVICS) ASSIGNMENT

SUBJECT TEACHER MS. POONAM PATHAK

Topic:- Chapter 2 - Understanding Secularism

Sub Topic 1:-   What is Secularism?
- Why is it Important to Separate Religion from the State?
- What is Indian Secularism?
- Steps were taken by Indian State to Protect Secularism in India.
- In what way is Indian secularism different from that of other democratic countries?

Learning Objectives:- Students learn the meaning of secularism ,why is it important to separate religion from State .

what is Indian secularism and the steps taken by the Indian State to protect Secularism in India

Methodology:-PPT, Video and word file

You tube link:-https://www.youtube.com/watch?v=wkBG5rjQ50o

Activity 1:- <mark>**Find out how the Indian Secularism is different from American Secularism.**</mark>

What is Secularism?

India adopted a strategy of separating the power of religion and the power of the State. **Secularism** refers to this separation of religion from the State. The Indian Constitution allows individuals the freedom to live by their religious beliefs and practice it.

Why is it Important to Separate Religion from the State?

The separation of the State and religion in democratic societies is important because of the following reasons:

1. It helps a country to function democratically.

2. The tyranny of the majority and the violation of Fundamental Rights can be very harmful to the people belonging to the minority. So, it protects people from any type of religious violence.

3. It protects the freedom of individuals to exit from their religion, embrace another religion. It gave people the freedom to interpret religious teachings differently.

What is Indian Secularism?

The Indian Constitution mandates that the Indian State be secular. Only a secular State can realise its objectives to ensure the following:

- One religious community does not dominate another.
- Some members do not dominate other members of the same religious community.
- The State does not enforce any particular religion nor does it take away the religious freedom of individuals.

Steps were taken by Indian State to Protect Secularism in India

The Indian State works in various ways:

1. It uses a strategy of distancing itself from religion. In India, government spaces like law courts, police stations, government schools and offices are not supposed to display or promote any one religion.

2. A strategy of non-interference. This means that in order to respect the sentiments of all religions and not interfere with religious practices, the State makes certain exceptions for particular religious communities.

3. A strategy of intervention. This means that to ensure the laws relating to equal inheritance rights are respected, the State can intervene in the religion-based 'personal laws' of communities.

4. The intervention of the State can also be in the form of support. For example, the Indian Constitution grants the right to religious communities to set up their own schools and colleges. It also gives them financial aid on a non-preferential basis.

In what way is Indian secularism different from that of other democratic countries?

There is one significant way in which Indian secularism differs from the dominant understanding of secularism as practised in the United States of America. In American secularism, there is a strict separation between religion and the State. Whereas in Indian secularism, the State can intervene in religious affairs.

Assignment:-

Question 1.
Will the government intervene if some religious group says that their religion allows them to practise infanticide? Give reasons for your answer.
Solution:
The government will intervene if some religious group says that their religion allows them to practise female infanticide.
In this instance, the State is intervening in religion in order to end a social practice that violates the Fundamental Rights of the female child to live on this earth.

2.What does the term 'secularism' refer to?
Answer:
The term 'secularism' refers to the separation of the power of religion from the power of the State.

3.Why cannot government schools celebrate religious festivals?
Answer:
Government schools cannot celebrate religious festivals because it will be a violation of government's policy of treating all religions equally.

4. Why is it important to separate religion from the State? Explain with examples.

Answer:

There are two main reasons why the separation of religion from the State is important:

1. The first is to prevent the domination of one religion over another. Example:Almost all countries of the world will have more than one religious groups living in them. Within these religious groups, there will most likely be one group that is in a majority. If this majority religious group has access to State power, then it could quite easily use this power and financial resources to discriminate against and persecute persons of other religions. This would violate Fundamental Rights.
2. The second is to protect the freedom of individuals to exit from their religion, embrace another religion or have the freedom to interpret religious teachings differently. Example:We can give example of untouchability in Hindu religious practice. If state power were in the hands of those Hindus who support untouchability, then it would be a difficult task for anyone to abolish this practice.

5. What are the three objectives of a secular State?
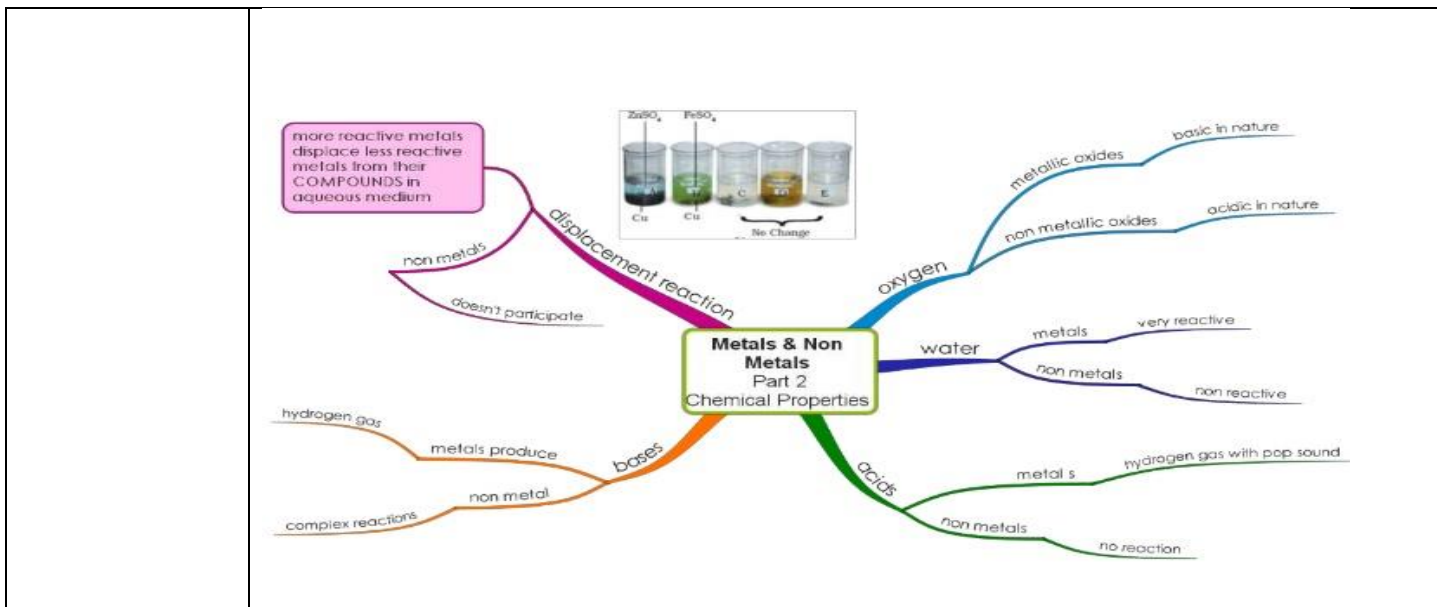
Answer:

The three objectives of a secular State are:

- One religious community does not dominate another.
- Some members do not dominate other members of the same religious community.
- The State does not enforce any particular religion nor does it take away the religious freedom of individuals.

SUBJECT - SCIENCE

SUBJECT TEACHER MS. JAISHREE JOSHI / MS. PARUL TYAGI

Study Material- chp Metal and Non metal

	Lesson Plan Session - 2020
Class and Section ---8th C & D	Term -I Month - July
Dates: -From 1st July -15th July	Number of periods: - 10Periods /3 periods week
Subject --- Science	**Science**
TOPICS /Sub Topics	**Blackboard Summary and Methodology**
CHP- Metals and non-metals	**LEARNING OBJECTIVES: -** Students will able to understand: -
physical properties of metal chemical properties of metal physical properties of non-metal chemical properties of non-metal	physical properties of metal chemical properties of metal physical properties of non-metal chemical properties of non-metal Examples and uses of metals and non-metals reactivity series of metals and non-metals reaction of metals and non-metals corrosion of metals and poisonous nature of metal and usefulness of metals and non-metals chemical symbols and formulas and elements present in the surrounding

Methodology	
Brainstorming:- to check the previous knowledge about metals and non-metals and make them interactive by making them remember about metals and non-metals in the surrounding how they are useful and what role they paly.	
Discussion and explanation with the help of :-	
PPT :- https://www.slideshare.net/abhinandanram/metals-and-non-metals-13911695	

Activities to make them learn:-

Reseach work	**Investigate:-** Do your body or plant body have metals within them if yes/no find which metal or non metals is present what is its role.
	 Investigate:- the properties of iron
	
	        react with Acid
	        react with water
	        react with oil
	        react with other metal
	        find more about rusting and its prevention
	        complete more	

Suggest an experiment: to compare the conductivity of electricity by iron, copper, aluminum and zinc. Perform the experiment and prepare a short report on the results.

learning with fun:-

Visit the following websites and enjoy the quiz on metals and non-metals:

chemistry.about.com/library/weekly/bl050303a.htm

chemistry.about.com/od/testsquizzes/Chemistry_Tests_Quizzes.ht
m

www.gcsescience.com/q/qusemet.html

www.corrosionsource.com/handbook/periodic/metals.htm
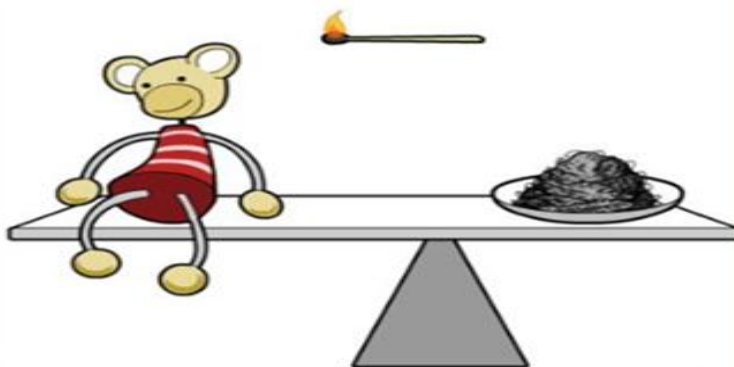
What is the equation?
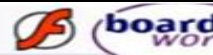
Complete the word equations

zinc	+	hydrochloric acid	→ A + hydrogen
iron	+	B	→ iron nitrate + hydrogen
magnesium	+	sulfuric acid	→ magnesium sulfate + C
calcium	+	hydrochloric acid	→ D + hydrogen
magnesium	+	E	→ magnesium nitrate + hydrogen

nitric acid

? C solve

Hots

A doctor prescribed a tablet to a patient suffering from iron deficiency. The tablet does not look like iron.

Ram stored copper sulphate solution in a container made of iron. He observed certain changes after few hours. Can you tell what changes did he observed?

Imagine that gold is reactive like copper. Will it be still wanted? Why or why not?

Remedial

Recap of the chp with the hints and clues for FAQ

picture based learning for easy learning

Assignment :-

complete the following
1. Metals are _____ of heat and _____.
2. Iodine is a _____ having lustre.
3. _____ and _____ are kept in kerosene to avoid explosion.
4. Non-metal oxides are _____ in nature.
5. _____ is more reactive than copper.

Multiple Choice Questions (MCQs)

1. Metals are

(a) shiny   b) Hard   (c) sonorous   d) All of these

2 .Non-metals are (a) non-ductile b) Non sonorous (c) non-malleable d) All of these	
3. Which of the following is a non-metal? (a) Aluminium b) Oxygen (c) Iron d) Silver	
4. Metalloids possess the properties of (a) metals b) Non metals (c) both metals and non-metals d) NONE of these	
5. The most reactive metal is (a) copper b) Zinc (c) Potassium d) gold	

Facts that Matter
- Materials around us can be broadly grouped into metals and non-metals.

(a) Physical Properties of Metals
- Lustre: Metals in the pure state generally shine. The shine on the metallic surface is called the metallic lustre.
- Malleability: The property of metals by which they can be beaten into thin sheets is known as malleability.

For example, silver metal is beaten to make silver foil used for decorating sweets.
- Ductility: It is one of the properties of metals by virtue of which they can be drawn into wires. For example, copper and iron can be drawn into wires.
- Conductivity: Metals are good conductor of heat and electricity. Heat and electricity can pass through them.
- Sonorous: Metals produce a ringing sound when struck hard. So, they are called sonorous.
- Solid: All metals are solid except Mercury, the only metal which is liquid at room temperate.

We can cut sodium (Na) and potassium (K) metals with the help of a knife. Mercury, sodium and potassium are exceptional metals. Examples of metals: iron, copper, gold, aluminium, silver, calcium etc.

(b) Physical Properties of Non-Metals
- Solid non-metals are soft and dull. They break down into a powdery mass on tapping with a hammer. For example, coal and sulphur.
- Non-metals are not sonorous.
- They are poor conductors of heat and electricity.
- They do not possess metallic lusture.
- They possess no malleability and ductility.

Examples of non-metals: phosphorus, sulphur, carbon, oxygen etc.

(c) Chemical Properties of Metals
- Oxidation: Metals except gold and silver (noble metals) react with oxygen to form basic oxides. Sodium also reacts vigorously with O_2. A lot of heat generated in this reaction.

For Example,

$$\text{Magnesium (Mg)} + \text{Oxygen (O}_2\text{)} \rightarrow 2\text{MgO}$$
$$\text{Magnesium Oxide}$$
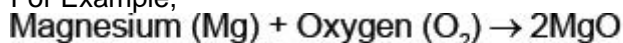
ï¿½ **Rusting of Iron:** In presence of moisture and air (L 0,), rust gets deposited over iron.

$$\text{Iron (Fe)} + \text{Oxygen (O}_2\text{)} + \text{Water (H}_2\text{O)} \rightarrow \text{Brown coloured rust}$$
$$\text{(Iron oxide Fe}_2\text{O}_3\text{)}$$
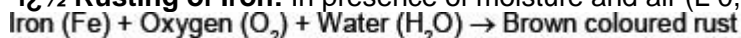
Greenish deposit on the surface of copper vessels: The dull greenish material deposited on the surface of copper is a mixture of copper hydroxide [$Cu(OH)_2$] and copper carbonate ($CuCO_3$) that takes place:
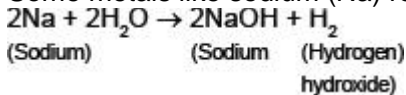
$$2Cu + \underbrace{H_2O + CO_2 + O_2}_{moist\ air} \rightarrow Cu(OH)_2 + CuCO_3$$
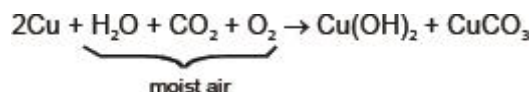
Metallic oxides are basic in nature.
• Reaction of Metals with Water
Some metals like sodium (Na) react vigorously with water at room temperature.

$$\underset{(Sodium)}{2Na} + 2H_2O \rightarrow \underset{\substack{(Sodium \\ hydroxide)}}{2NaOH} + \underset{(Hydrogen)}{H_2}$$

Potassium (K) and Calcium (Ca) are also active metals and react with water at room temperature. Such metals are stored in kerosene.
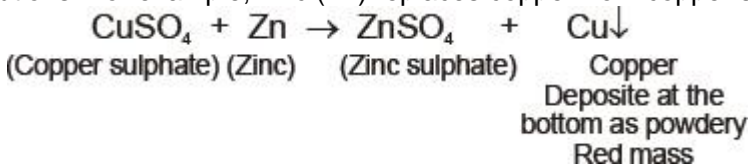
Some other metals do not do so. For example, iron reacts with water slowly.

• Reaction with Acids: Acids react with metals to liberate hydrogen and corresponding salt of the metal.

$$\underset{(Zinc)}{Zn} + \underset{\substack{(Hydrochloric \\ acid)}}{2HC1} \rightarrow \underset{(Zinc\ chloride)}{ZnCl_2} + \underset{(Hydrogen)}{H_2}$$

$$\underset{(Zinc)}{Zn} + \underset{\substack{(Sulphuric \\ acid)}}{H_2SO_4} \rightarrow \underset{(Zinc\ sulphate)}{ZnSO_4} + \underset{(Hydrogen)}{H_2}$$
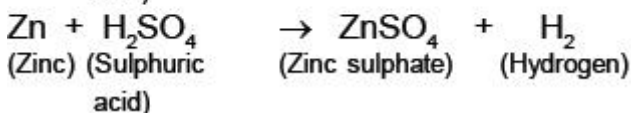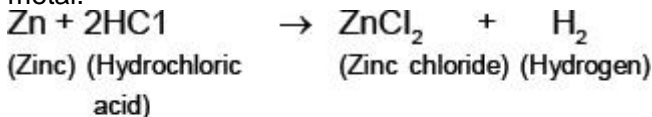
Hydrogen burns with a 'pop' sound, when a burning match-stick is brought near it.
• Reaction with Bases: Metals react with sodium hydroxide to produce hydrogen.
• Displacement Reactions: Certain metals are capable of displacing other metals from their solutions. For example, zinc (Zn) replaces copper from copper sulphate solution.

$$\underset{(Copper\ sulphate)}{CuSO_4} + \underset{(Zinc)}{Zn} \rightarrow \underset{(Zinc\ sulphate)}{ZnSO_4} + \underset{\substack{Copper \\ Deposite\ at\ the \\ bottom\ as\ powdery \\ Red\ mass}}{Cu\downarrow}$$
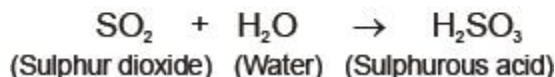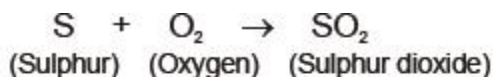
In general, more active metals displace less active metals from their solutions. In this case, Zinc is more reactive than Cu, so it replaces copper (Cu) from copper sulphate solution.

The rule is that 'a more reactive metal can replace a less reactive metal, but a less reactive one cannot replace a reactive metal'.

Thus, metals are arranged in the order of their decreasing activity. This arrangement is called the activity series.

(d) Chemical Properties of Non-Metals
• Oxidation. Non-metals react with oxygen to form oxides which are acidic in nature. For example, sulphur when reacts with oxygen forms sulphur dioxide and sulphur dioxide is dissolved in water to form sulphurous acid.

$$\underset{(Sulphur)}{S} + \underset{(Oxygen)}{O_2} \rightarrow \underset{(Sulphur\ dioxide)}{SO_2}$$

$$\underset{(Sulphur\ dioxide)}{SO_2} + \underset{(Water)}{H_2O} \rightarrow \underset{(Sulphurous\ acid)}{H_2SO_3}$$

The sulphurous acid turns blue litmus paper red i.e. it is acidic in nature.
• Reaction of Non-Metals with Water: Generally, non-metals do not react with water though they may be very reactive in air.

Some non-metals such as phosphorus, react with the air. It catches fire if exposed to air. So, phosphorus is stored in water.

(e) Uses of Metals

   • Metals are used in making wires and sheets, which are used for various purposes. For example, copper and aluminium wires are used for conduction of electricity, in electrical equipments etc. Iron wires are used for fencing and various other purposes. Iron sheets are often used for making roof sheds.

   • Metals are used in making machinery, auto mobiles, untensils, industrial gadgets, water boilers etc.

(f) Alloys

• An alloy is a solid mixture of two or more metals or a metal and a non-metal. Alloys of metals are used in making coins, satellite, stainless steel, wooden ships sheathing and casting (Muntz Metal, alloys of Cu 60% + Zn 40%).

   Alloy like duralium has great strength. It is used in aircrafts, pressure cooker, automobiles etc. Naval brass is used for marine and engineering castings.

   • Some metals like iron, sodium and calcium are essential parts of our body.

(g) Uses of Non-Metals

   Non-metals are widely used in our daily life. Many non-metals like iodine, chlorine, sulphur are used in medicine. Phosphorus is essential for our bones and teeth.

   Some of the interesting uses of non-metals are:

   • Non-metal (oxygen) is essential for our life, as oxygen is required for respiration.
   • Carbon dioxide (CO_2) is essential for green plants to carry out photosynthesis.
   • Non-metals like nitrogen and phosphorus are used in fertilisers for better plant growth.
   • Non-metal like chlorine (CI_2) is used in water purification process.
   • Non-metal (I_2) is used in the purple coloured solution (Iodine solution) on wounds as antiseptic.
   • Non-metal such as sulphur is used in crackers.

SUBJECT SANSKRIT

SUBJECT TEACHER MR. SANJAY

Video Link: https://youtu.be/msVlo-LTJp4

सदैव पुरतो निधेहि चरणम्

चल चल पुरतो निधेहि चरणम्।
सदैव .... निधेहि चरणम्।।

निजनिकेतनम्।
विनैव यानं नगारोहणम्।।
बलं ...... भवति साधनम्।
सदैव पुरतो .... ।।

पथि पाषाणा: ...... प्रखरा:।
पशव: परितो   :।।
....
सुदुष्करं ...... यद्यपि गमनम्।
सदैव पुरतो .... ।।

जहीहि .... भज-भज शक्तिम्।
विधेहि .... तथाऽनुरक्तिम्।।
कुरु कुरु सततं ....
सदैव पुरतो .... ।।

हिंदी असाइनमेंट-12
कक्षा 8
यह सबसे कठिन समय नही (कविता)
(कवयित्री: जया जादवानी)
(उपलब्धकर्ता: मिस सुजाता परमार)

निर्देश: दिए गए लिंक को ओपन करके व कविता की व्याख्या पढ़कर कविता को सरल रूप में समझे व सभी दिए गए प्रश्न - उत्तर कॉपी में करें।

https://youtu.be/hGvkml5xqWo

  ➤ **अधिगम बिंदु:**
  - आशावादी एवं सकारात्मक सोच विकसित होना
  - अंतरिक्ष विज्ञान के प्रति रुचि उत्पन्न होना
  - नई कविता शैली से परिचय

यह सबसे कठिन समय नहीं सारांश :

यह सबसे कठिन समय नहीं है कविता में कवयित्री ने बताया है कि यह समय संसार का सबसे मुश्किल समय नहीं है। अभी तो चिड़िया अपनी चोंच में तिनका दबाकर घोंसला बनाने जा रही है। अभी भी पेड़ से गिरती पत्तियों को थामने वाले हाथ मौजूद हैं।

इस पंक्ति में कवयित्री कह रही हैं कि समय इतना ख़राब नहीं है, आज भी समाज में लोग एक-दूसरे की मदद करने को तत्पर रहते हैं। अभी भी मंज़िल की तरफ़ जाने की राह देख रहे लोगों को लेने रेलगाड़ी आती है। अभी भी कोई है जो सूरज डूबने से पहले आपको घर बुलाता है। बूढ़ी नानी ने जो कहानी हमें सुनाई थी, वो आज भी हमें कोई सुनाता है कि आकाश से परे एक दुनिया और भी है। अतः यह सबसे कठिन समय नहीं है।

यह सबसे कठिन समय नहीं भावार्थ :

नहीं, यह सबसे कठिन समय नहीं!
अभी भी दबा है चिड़ियाँ की
चोंच में तिनका

और वह उड़ने की तैयारी में है!
अभी भी झरती हुई पत्ती
थामने को बैठा है हाथ एक
अभी भी भीड़ है स्टेशन पर
अभी भी एक रेलगाड़ी जाती है
गंतव्य तक

यह सबसे कठिन समय नहीं भावार्थ:

कवयित्री के अनुसार, भले ही हर तरफ अविश्वास का अंधकार छाया है, लेकिन अभी भी उनके मन में आशा की किरणें चमक रही हैं, वो कहती हैं – ये सबसे बुरा वक्त नहीं है। अभी चिड़िया अपना घोंसला बुनने के लिए तिनके जमा कर रही है। वृक्ष से गिरती पत्ती को थामने के लिए कोई हाथ अभी मौजूद है। अभी भी अपनी मंज़िल तक पहुंचने का इंतज़ार कर रहे यात्रियों को उनकी मंज़िल तक ले जाने वाली गाड़ी आती है।

जहाँ कोई कर रहा होगा प्रतीक्षा
अभी भी कहता है कोई किसी को
जल्दी आ जाओ कि अब
सूरज डूबने का वक्त हो गया
अभी कहा जाता है
उस कथा का आखिरी हिस्सा
जो बूढ़ी नानी सुना रही सदियों से
दुनिया के तमाम बच्चों को
अभी आती है एक बस
अंतरिक्ष के पार की दुनिया से
लाएगी बचे हुए लोगों की खबर!
नहीं, यह सबसे कठिन समय नहीं।

यह सबसे कठिन समय नहीं भावार्थ:

कवयित्री ने निराशा से भरे इस संसार में भी आशा का दामन थाम रखा है। तभी वो इन पंक्तियों में कहती हैं कि यह सबसे बुरा समय नहीं है। आज भी कोई घर पर किसी का इंतज़ार करता है और सूरज डूबने से पहले उसे घर बुलाता है। जब तक इस दुनिया में दादी-नानी की सुनाई दिलचस्प कहानियां गूँजती रहेंगी, तब तक ये दुनिया बसी रहेगी और सबसे बुरा वक्त नहीं आएगा।

प्रश्न 1 "यह कठिन समय नहीं है?" यह बताने के लिए कविता में कौन-कौन से तर्क प्रस्तुत किए गए हैं? स्पष्ट कीजिए।

प्रश्न 2 चिड़िया चोंच में तिनका दबाकर उड़ने की तैयारी में क्यों है? वह तिनकों का क्या करती होगी? लिखिए।

प्रश्न 3 कविता में कई बार 'अभी भी' का प्रयोग करके बातें रखी गई हैं, अभी भी का प्रयोग करते हुए तीन वाक्य बनाइए और देखिए उनमें लगातार, निरंतर, बिना रुके चलनेवाले किसी कार्य का भाव निकल रहा है या नहीं?

प्रश्न 4 अंतरिक्ष के पार की दुनिया से क्या सचमुच कोई बस आती है जिससे खतरों के बाद भी बचे हुए लोगों की खबर मिलती है? आपकी राय में यह झूठ है या सच? यदि झूठ है तो कविता में ऐसा क्यों लिखा गया? अनुमान लगाइए यदि सच लगता है तो किसी अंतरिक्ष संबंधी विज्ञान कथा के आधार पर कल्पना कीजिए वह बस कैसी होगी, वे बचे हुए लोग खतरों से क्यों घिर गए होंगे? इस संदर्भ को लेकर कोई कथा बना सकें तो बनाइए।

प्रश्न 5 घर के बड़े-बूढ़ों द्वारा बच्चों को सुनाई जानेवाली किसी ऐसी कथा की जानकारी प्राप्त कीजिए जिसके आखिरी हिस्से में कठिन परिस्थितियों से जीतने का संदेश हो।

प्रश्न 6 आप जब भी घर से स्कूल जाते हैं कोई आपकी प्रतीक्षा कर रहा होता है। सूरज डूबने का समय भी आपको खेल के मैदान से घर लौट चलने की सूचना देता है कि घर में कोई आपकी प्रतीक्षा कर रहा है- प्रतीक्षा करने वाले व्यक्ति के विषय में आप क्या सोचते हैं? अपने विचार लिखिए।

> ➤ <mark>रचनात्मक गतिविधि :</mark>

अपनी कल्पना से अंतरिक्ष का चित्र बनाकर मंगल ग्रह अथवा चाँद पर अपने विचार प्रकट करते हुए 100 शब्दों की एक एक कहानी लिखें।