

**INTERNATIONAL INDIAN SCHOOL BURAI DAH**  
**WORKSHEET FOR THE ACADEMIC YEAR 2026-27**

**Class- 7th Subject: Science**

**LESSON # 4 The World of Metals and Non-Metals**

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**A. Choose the correct option:**

1. Which of the following is a metal?  
a) Oxygen    b) Sulphur    c) Aluminium    d) Carbon
2. Which of the following is generally a property of metals?  
a) Brittle    b) Malleability    c) Poor conductors of heat    d) poor conductors of electricity
3. Which of the following is a good conductor of electricity?  
a) rubber    b) wood    c) Copper    d) sulfur
4. Which of the following is an example of a non-metal?  
a) Aluminium    b) Sulphur    c) iron    d) Copper
5. Metals react with oxygen to produce metal oxides which are \_\_\_\_ in nature.  
a) acidic    b) basic    c) both acidic and basic    d) neutral
6. Which of the following substances is most likely to rust in the presence of air and moisture?  
a) Iron    b) Copper    c) Aluminium    d) Steel
7. Which of the following is an example of a of non-metal used in daily life?  
a) Iron nail    b) Aluminium foil    c) Copper wires    d) Oxygen
8. What happens when a metal reacts with oxygen?  
(a) A salt is formed    (b) A non-metal is formed    (c) A metal oxide is formed    (d) A acid is formed

**B. Fill in the blanks:**

1. \_\_\_\_\_ is a non-metal used in fertilizers.
2. The property of materials by which they can be drawn into wires is called \_\_\_\_\_.
3. \_\_\_\_\_ and \_\_\_\_\_ are the most malleable metals.
4. The property of metals that enables them to produce a ringing sound when struck is called\_\_\_\_\_.
5. Iron gets covered with a brown deposit called \_\_\_\_\_ when exposed to air and moisture.
6. Materials that allow electricity to flow through them easily are called \_\_\_\_\_ of electricity.
7. Metals are good conductors of \_\_\_\_\_ and \_\_\_\_\_.
8. A metal is \_\_\_\_\_ if it can be drawn into wires.

**C. The question below consists of an Assertion and a Reason. Use the following key to choose the appropriate answer.**

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false but R is true.

1. **Assertion:** Aluminium is used to make cooking utensils and foils.

**Reason:** Aluminium is malleable and a good conductor of heat.

2. **Assertion:** Coal cannot be drawn into wires.

**Reason:** Gold can be drawn into wires.

3. **Assertion:** Magnesium oxide turns blue litmus paper red.

**Reason:** Magnesium oxide is basic in nature.

**D. Answer the following:**

- 1. Which metal is used to make foils for wrapping food?
- 2. Which property allows metals to be drawn into wires?
- 3. What happens when magnesium ribbon is burned in air?
- 4. What is corrosion?

**E. CASE STUDY:**

Read the passage carefully and then answer the given questions.

Fathima, a curious Class 7 student, performed an experiment to understand how rusting happens. She took three clean iron nails and placed them in three different bottles, each with a different condition:

Bottle A: Contained dry air only with silica gel to absorb moisture.

Bottle B: Contained boiled water, covered with a thin layer of oil.

Bottle C: Contained tap water and was left open to air.

After 7 days, she observed that only the nail in Bottle C had developed a brown, powdery coating, while the nails in Bottles A and B remained shiny.

1. What conclusion can you draw from the rusting observed in Bottle C only?

- (a) Iron rusts only in dry air.                      (b) Iron rusts in water alone.
- (c) Iron rusts when both air and water are present.                      (d) Iron never rusts in sealed bottles.

2. What is the brown substance seen on the iron nail in Bottle C?

- (a) Copper    (b) Rust    (c) Sulphur    (d) Paint

3. What role did the oil layer in Bottle B play in the experiment?

- (a) It helped the nail float in the water.                      (b) It prevented air from entering the water.
- (c) It made the water cool.                      (d) it stopped water to conduct react with nail