



Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 31

1 Key words**[4]**

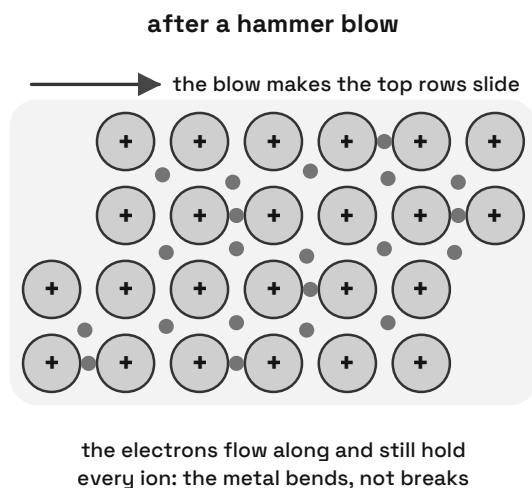
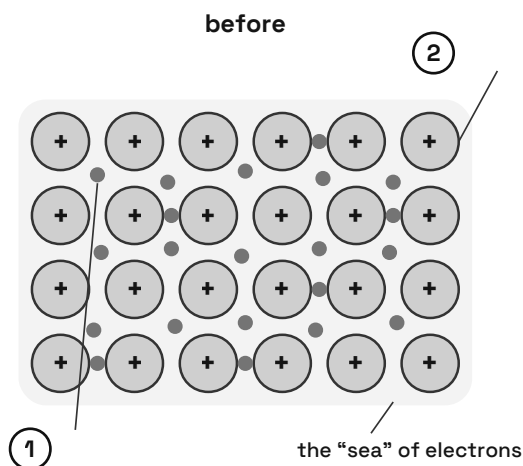
Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

acidic basic brittle ductile free state malleable metalloids ores reactivity series
sonorous

Gold and platinum are found in nature as the pure metal: they occur in the _____. Most metals are found in rocks as compounds, called _____. Elements such as silicon and boron, which behave partly like metals and partly like non-metals, are _____. A metal that can be beaten into thin sheets is _____, and one that can be drawn into thin wires is _____. Metals ring when struck: they are _____. Metals combine with oxygen to form _____ oxides. The list of metals from the most reactive to the least is the _____.

2 Label the diagram**[1]**

The diagram shows what is inside a metal. Write what 1 and 2 are. Each carries 0.5 mark.



1. _____

2. _____

3 Multiple choice**[5]**

Choose the correct option for each of the following questions.

i. Which of the following is a non-metal?

[1]

- a. mercury
c. iron

- b. bromine
d. copper



b. Give a reason: metals can be beaten into thin sheets and drawn into wires. [2]

c. Give a reason: a mercury thermometer should not be given to children to put in their mouths. [2]

d. Why should sour foods such as pickles (achar) not be stored for long in aluminium or iron pots? [2]

6 Long answer [4]

Write a long answer to the following question.

Write any two chemical properties of metals, with a chemical equation for each.

7 Complete and balance [4]

Complete and balance these equations.

a. $\text{Al} + \text{O}_2 \rightarrow \dots\dots$ [1]

b. $\text{Na} + \text{H}_2\text{O} \rightarrow \dots\dots + \text{H}_2$ [1]



c. $\text{Fe} + \text{HCl} \rightarrow \dots + \text{H}_2$ [1]

d. $\text{Ca} + \text{H}_2\text{O} \rightarrow \dots + \text{H}_2$ [1]

8 Think [2]

Think, then answer.

Metal X doesn't react with cold water but gives bubbles of hydrogen in dilute hydrochloric acid. Metal Y gives no bubbles in water or in the acid. Put X, Y and sodium in order of reactivity, and name one metal that X could be and one that Y could be.

9 Activity: Will the bulb glow? (Activity 17.4) (not marked)

Make a circuit of a torch cell, a bulb and wires, with a gap between two bare ends. Put each thing across the gap, then fill in the table.

Thing put across the gap	Does the bulb glow?	Conductor or insulator?
copper wire		
iron nail		
coin		
lump of sulphur		
piece of coal		
piece of wood		

