2. Inside Our Earth

Worksheet 1

A **Answer the following questions:**

1. What layers is the Earth made up of?

2. Write a brief note about the Earth's mantle.

3. What is the difference between Extrusive and Intrusive Igneous Rocks?

4. What happens to minerals under high temperature and pressure?

5. Why are rocks significant?

B **Match the words in Column A with those in Column B:**

Column A	Column B
1. Magma	(a) Found in sedimentary rocks
2. SIMA	(b) Metamorphic rocks

3. Primary Rocks
4. Fossils
5. Granite

(c) Hot molten material
(d) Silica and magnesium in oceanic crust
(e) Igneous rocks

Answers to Worksheet 1

A. 1. The Earth is made up of three consecutive layers called the Crust, the Mantle and the Core.
2. The Earth's mantle lies just below the crust and extends for about 2900 km. At a depth of 100-250 km, it is partially molten and is called asthenosphere. The temperature increases with depth, ranging from 870° C in the upper layer to 2200° C at lower layers. The density varies from 3 g per cm^3 at the top to 4.5 g per cm^3 at the bottom.
3. Both extrusive and intrusive igneous rocks are formed by the cooling and solidification of molten lava. But extrusive rocks are formed by rapid cooling on the surface of the Earth and form smooth fine-grained rock like basalt while intrusive rocks are cooled slowly deep inside the Earth's crust and form hard, coarse-textured rocks like granite.
4. Under high temperature and pressure, minerals in rocks change their composition and texture.

B. Rocks are significant because (a) they provide all kinds of building materials for houses, buildings, roads, bridges, etc. (b) they are a source of metals like iron, copper, gold, silver, etc., and (c) they are a source of fossil fuels like coal and petroleum.

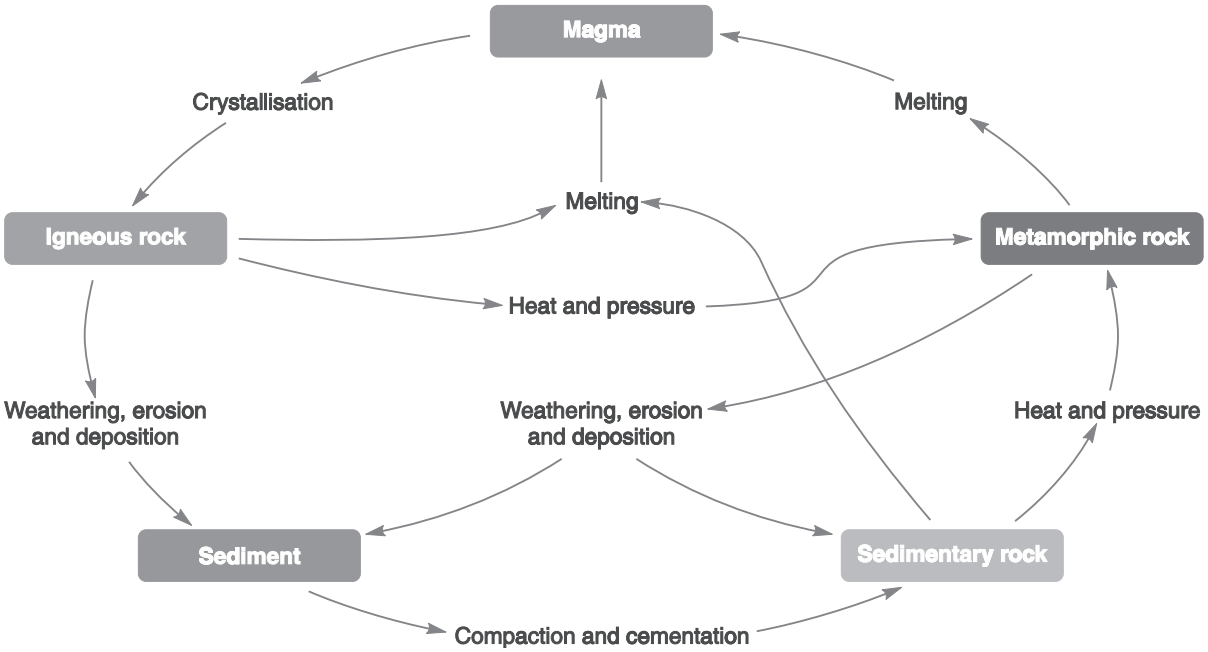
C. (c) 2. (d) 3. (e) 4. (a) 5. (b)

Worksheet 2

A **Draw a diagram to explain the Rock Cycle.**

Answers to Worksheet 2

A.



The rock cycle involves change of one type of rock into another type under certain conditions in a cyclic manner. Hot molten magma cools and solidifies into igneous rock. Weathering breaks this into fragments which are carried and deposited by agents of gradation and these are cemented to form sedimentary rock. Under great heat and pressure, these rocks are changed into metamorphic rock. Once again, heat and pressure melts the rocks to form magma and the cycle begins again.