



## Summary Questions: C3. Chemistry of the Earth

Before you answer these questions, look over your summary sheets and the success criteria from this topic.

### 1. STRUCTURE OF THE EARTH

- Draw a labelled diagram of the structure of the earth.
- Which parts of the earth structure are liquid?
- How do we know the earth has a molten mantle?
- Do all planets have the same structure as the earth?

### 2. THE ROCK CYCLE

- Describe how a sedimentary rock is formed.
- Describe how an igneous rock is formed.
- Describe how a metamorphic rock is formed.
- What is meant by weathering?
- Give examples of ice, wave and sand weathering.
- Try to describe the rock cycle in a few sentences.

### 3. EXTRACTING METALS

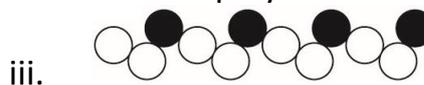
- Give an example of a metal that is found in the crust in element form.
- Give an example of a metal that is found in the crust in compound form.
- What is the name given to a metal compound found in the rock?
- Give one example of how metals can be extracted by the compound they are formed in.

### 4. CRYSTALLISATION

- Explain how to make a saturated solution.
- What is a solvent?
- What is a solute?
- How are the biggest crystals formed?
- Not all crystals are the same shape but they do always have one thing in common, what is it?

## 5. PLASTICS AND POLYMERS

- Give two examples of natural polymers.
- Name the source that is used to create synthetic polymers.
- Decide if each of the below is a monomer or polymer



- A monomer is shown below. Draw what the polymer for this monomer could look like.



- Name three different polymers and explain what they are used for.
- List three properties of polymers.
- Describe the difference between thermosetting plastics and thermoplastics.
- List the advantages and disadvantages of using polymers.

## 6. SCIENTIFIC SKILLS

- Read the passage below and display the information in a table showing the name and use of different polymers.

*Polymers have many uses in modern-day life. Rubber for example is used to make tyres in cars and bikes, Teflon is used to make cookware, PVC is used to make pipes and nylon is used to make clothing.*

- The table below shows the number of crystals found in different types of rock. Display this information in a bar graph.

Type of Rock	Number of Crystals per m <sup>2</sup>
Granite	86
Basalt	35
Dolomite	21

- After the Scottish Government introduced a 5p charge on plastic bags the number of bags being used fell from 812 million to 162 million. Calculate this drop as a percentage.