The rock cycle

1. The sentences below describe processes in the formation of sedimentary rock. Draw lines to match the sentences to the correct words.

- Layers of material settle to the river or sea bed. ● cementation
- Material is squashed by more material above it. ● deposition
- Dissolved minerals form crystals that glue the grains together. ● compaction

2. These statements are about sedimentary rocks. Tick the ones that are true.

- A sedimentary rock ...
  - ... is made of grains. ☑
  - ... is made of crystals. ☐
  - ... is porous. ☑
  - ... is not porous. ☑
  - ... may contain fossils. ☑
  - ... never contains fossils. ☑

3. Complete these sentences about the formation of limestone by crossing out the wrong words.

   Limestone is one type of sedimentary/metamorphic/igneous rock. It is formed when bones and skins/shells/organs of sea creatures are deposited on the sea bed. There are many different types of limestone, each containing a different mixture of gases/liquids/minerals. All types of limestone are made mainly of nitrates/sulphates/carbonates.

When an acid/alkali/indicator is added to limestone, carbon dioxide gas is given off.

4. These sentences describe stages in the formation of metamorphic rocks. Put them in order by writing numbers in the boxes.

- Under high temperature and pressure, the rock grains are changed into crystals of new minerals.
- This heat comes from earth movements or by the rock being warmed by magma.
- Sedimentary rock is heated over millions of years.
- As well as heat, the rocks may also be put under high pressure.
5. Complete the sentences about the formation of igneous rocks using the words below.

Igneous rocks are formed when molten rock called magma cools. If the molten rock is forced to the surface it cools quickly to form crystals. An example of this is granite. If the rock does not reach the surface it cools slowly to form crystals. An example of this is basalt.

6. Use the words below to label the diagram of the rock cycle.

- weathering
- deposition
- partial melting
- cooling and solidifying
- compaction and cementation
- erosion
- burying and squeezing

7. Put a tick in the correct row for each example of rock.

<table>
<thead>
<tr>
<th>Example of rock</th>
<th>basalt</th>
<th>limestone</th>
<th>granite</th>
<th>marble</th>
<th>sandstone</th>
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</thead>
<tbody>
<tr>
<td>Sedimentary</td>
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<td>Metamorphic</td>
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<tr>
<td>Igneous</td>
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