1. The Earth is made up of layers. Here is a diagram showing the structure of the Earth, but the labels are missing.

Here are the labels. You need to put the right label in the right box. [4 marks]

<table>
<thead>
<tr>
<th>Crust</th>
<th>Mantle</th>
<th>Inner core</th>
<th>Outer core</th>
</tr>
</thead>
</table>

2. Jules Verne wrote a story about travelling to the centre of the Earth. You need to imagine you have made this journey. Here are some statements, but not all of them are true. You need to write TRUE or FALSE in the box next to each statement. [5 marks]

- It gets colder towards the centre
- It gets hotter towards the centre
- The heaviest material is at the outside of the Earth
- The heaviest material is in the middle
- The temperature at the middle is about 5500°C
- The temperature at the middle is about 100°C
- The distance of the journey to the centre of the Earth is about 6380km
- The distance to the centre of the Earth is about 400 km
- The centre of the Earth is solid
- The centre of the Earth is liquid
3 You have learnt that the surface of the earth is broken up into pieces called plates, and that these move because they float on top of the mantle. Look at this map (you have seen it before in your textbook).

Use this map to help you answer these questions:

a What plate is Britain on? _______________________________________________ [1 mark]

b Name two plates which are moving apart from each other. ________________________________ [1 mark]

c Name two plates which are crashing into each other. ________________________________ [1 mark]

d Why do you think the USA and the UK are getting further apart? ________________________________ [2 marks]

4 Sometimes plates pull apart from each other. Here is a flow diagram about this, but the drawings are missing. You need to put a diagram in each box. Remember to add labels showing the names of the plates, the directions they are moving in, and what happens in-between. [6 marks]

The plates are pulled apart by convection currents in the mantle. Earthquakes would happen here.

Magma rises in the gap between the two plates, and starts to harden into basalt.

The gap gets bigger, with new crust made of basalt forming in the middle.
Plates, earthquakes and volcanoes Test

5  Here are some words about earthquakes. You need to draw a line to match up the words with the correct meaning. [3 marks]

Richter scale  an instrument to measure the strength of the earthquake
Magnitude  the place deep in the earth where the rocks are moving
Focus  smaller earthquakes after the main, large one
Epicentre  the point at the surface above the focus
After-shock  the scale on which the strength of the earthquake is measured
Seismometer  how strong an earthquake is

6  Here are some descriptions of earthquakes. Choose which magnitude on the Richter scale you think goes with each description [2 marks]

Magnitudes to choose from:

<p>| | | | |</p>
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<thead>
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</thead>
<tbody>
<tr>
<td>6</td>
<td>1</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

Windows shatter and break
People not even certain there has been an earthquake
Light fittings sway and ornaments fall off shelves
Buildings damaged, with crumbled walls and broken windows; signs fallen off shops

Magnitude _______  Magnitude _______  Magnitude _______  Magnitude _______

7  Plates can also be pushed into each other. Here is a diagram which shows this happening.

Use this diagram and your own knowledge to answer these questions:

a  Describe what is happening in the diagram. [2 marks]

________________________________________________________________________________
________________________________________________________________________________
b Explain why earthquakes would be expected here. [4 marks]

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

8 For ONE earthquake or ONE volcano that you have learnt about, write a short script for a radio news broadcast, saying what happened. Include as much detail as you can, and make it interesting for your audience to listen to. [8 marks]

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
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________________________________________________________________________________

9 It is dangerous to live in an area that is prone to earthquakes or volcanoes. Give 3 reasons why people might want to live in one of these areas. [6 marks]

________________________________________________________________________________
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Total marks: 50  Total score:  /50