

Answer sheet

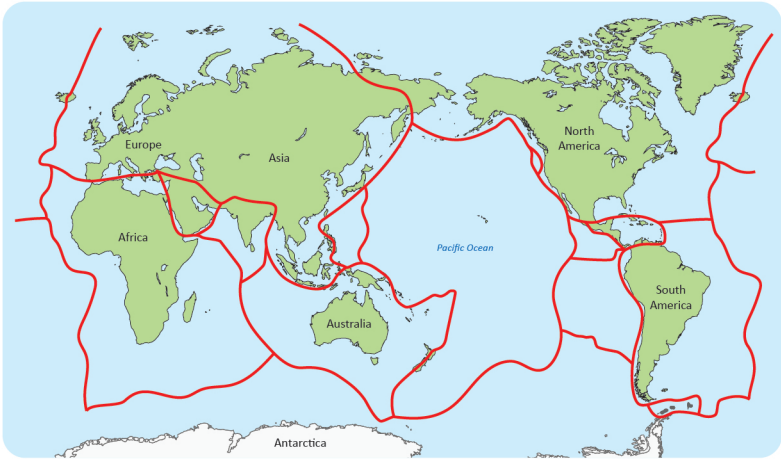
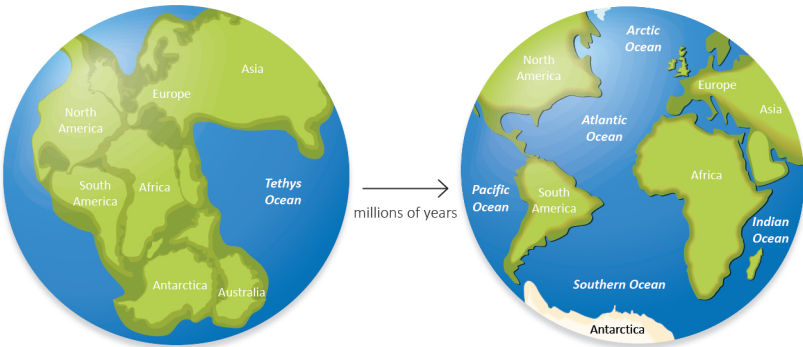
Rocks, Relics and Rumbles

Questions and answers	Subject/Aspect								
1. Match each description to the correct layer of the Earth. crust magma layer mantle hot, liquid metal layer inner core hard, solid rock layer outer core hot, solid metal layer	Geography The Earth's layers								
2. Write the appearance and properties of each type of rock in the table. The first one has been done for you. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Type of rock</th><th style="text-align: left;">Appearance and properties</th></tr> </thead> <tbody> <tr> <td>sedimentary</td><td>soft, permeable, layers, grains, fossils</td></tr> <tr> <td>igneous</td><td>contain crystals, no fossils, may be shiny, glassy or dull, hard, usually impermeable and may have tiny holes</td></tr> <tr> <td>metamorphic</td><td>very hard, may contain layers or bands of crystals, may be dull or shiny, no fossils and impermeable</td></tr> </tbody> </table>	Type of rock	Appearance and properties	sedimentary	soft, permeable, layers, grains, fossils	igneous	contain crystals, no fossils, may be shiny, glassy or dull, hard, usually impermeable and may have tiny holes	metamorphic	very hard, may contain layers or bands of crystals, may be dull or shiny, no fossils and impermeable	Geography Comparing and grouping rocks
Type of rock	Appearance and properties								
sedimentary	soft, permeable, layers, grains, fossils								
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metamorphic	very hard, may contain layers or bands of crystals, may be dull or shiny, no fossils and impermeable								
3. Use the useful words to fill in the missing word or words in each sentence. Sedimentary rocks form from layers of sediment that settle at the bottom of seas, lakes and rivers. The top layers squash the layers underneath and the layers turn into rock over millions of years. Igneous rocks are formed when magma or lava cools and hardens. Metamorphic rocks are formed when other rocks change due to the heat and pressure from underground. Also accept magma and lava, and pressure and heat given in the opposite order.	Science Formation of rocks								



Questions and answers	Subject/Aspect
4. What is a fossil? Tick one a type of rock that forms over millions of years ☐ a type of animal that is not alive anymore ☐ the preserved remains of a once-living thing ☒ the preserved remains of a building ☐	Science Formation of fossils
5. Number these facts about how fossils form from 1–5 in the order in which they happen. The first one has been done for you. Over millions of years, the rock is worn away by erosion to reveal the fossil. 5 Over time, more layers of sediment cover the remains and are compacted to form rock. 3 The soft parts of the living thing rot away, and the hard parts, like the skeleton, are left behind. 2 The living thing's remains are slowly dissolved and replaced with minerals from underground water. These minerals harden to form rock. 4 After a living thing dies, it becomes covered in layers of sand, mud and silt, called sediment. 1	Science Formation of fossils
6. Give two things Mary Anning did that were significant. E.g. • She taught herself about geology. • Her specimens changed scientific thinking. • She helped people to learn about animals that have been dead for a long time. • She discovered the fossilised remains of several dinosaurs, such as the <i>Ichthyosaurus</i>, <i>Pterodactylus</i> and <i>Plesiosaurus</i>. • Geologists and palaeontologists visited her so she could share her knowledge and lead expeditions. • She made some of the most important geological discoveries in history. • She inspired many fossil hunters. • She inspired artists and geologists, such as Henry De la Beche.	History Significant people
7. What are the three main types of soil? • sand or sandy • clay • silt or silty	Science Types of soil

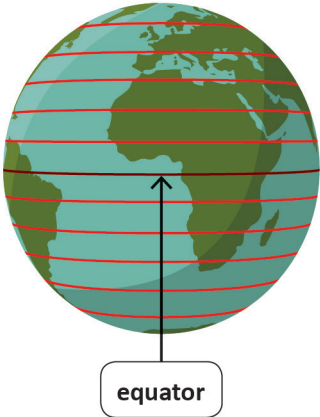
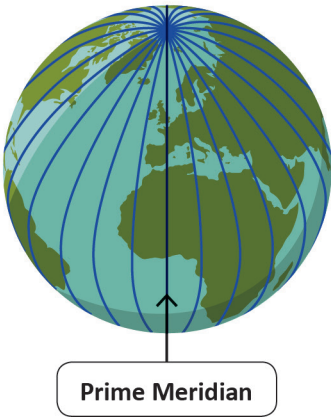


Questions and answers	Subject/Aspect												
8. Look carefully at the map.  a) What is the name of the pieces of the Earth's crust? b) What is the name of the places where the pieces meet? a) tectonic plates b) plate boundaries	Geography Plate tectonics												
9. These two diagrams show the process of continental drift. Explain what changes happened to Earth between the two diagrams.  E.g. • Earth's continents used to be joined together but they moved apart over millions of years. • There used to be a supercontinent called Pangaea and it took a long time for the pieces to move apart. • Continental drift happened, which means the continents slowly moved apart.	Geography Plate tectonics												
10. Put a tick in the correct box to show whether each statement about the Ring of Fire is true or false. <table><tr><th></th><th>True</th><th>False</th></tr><tr><td>Countries along the Ring of Fire are more likely to have volcanic eruptions and earthquakes.</td><td>✓</td><td></td></tr><tr><td>The Ring of Fire sits on top of several tectonic plates.</td><td>✓</td><td></td></tr><tr><td>There are no volcanoes along the Ring of Fire.</td><td></td><td>✓</td></tr></table>		True	False	Countries along the Ring of Fire are more likely to have volcanic eruptions and earthquakes.	✓		The Ring of Fire sits on top of several tectonic plates.	✓		There are no volcanoes along the Ring of Fire.		✓	Geography Significant volcanoes
	True	False											
Countries along the Ring of Fire are more likely to have volcanic eruptions and earthquakes.	✓												
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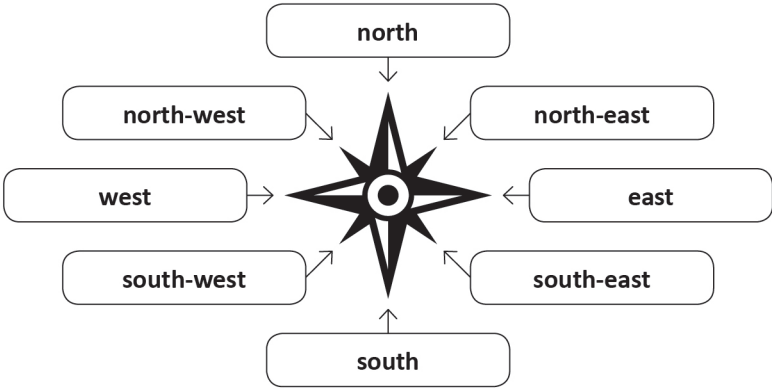


Questions and answers	Subject/Aspect
11. Use the useful words to fill in the gaps in the paragraph. A volcano is a mountain or hill with an opening in the Earth's crust that allows magma, gas and ash to reach the surface. There are two types of eruptions called effusive and explosive eruptions. When a volcano erupts, hot ash, lava and gas are released and an ash cloud forms. Hot air, ash and rocks sometimes rushes downhill like an avalanche. This is called a pyroclastic flow. Also accept effusive and explosive given in the opposite order.	Geography Features of volcanoes
12. Match each definition to the correct volcano status. active has not erupted in the last 10,000 years but may erupt again dormant has erupted in the last 10,000 years and will erupt again extinct is not expected to erupt again	Geography Features of volcanoes
13. Use the useful words to label the four main types of volcano. One has been done for you.  lava dome volcano  cinder cone volcano  shield volcano  stratovolcano	Geography Features of volcanoes



Questions and answers	Subject/Aspect
14. Use the useful words to label these maps of the Earth. Lines of latitude  Lines of longitude 	Geography Latitude and longitude
15. Number these facts about the eruption of Mount Vesuvius from 1–5 in the order in which they happened. The first one has been done for you. The huge column of ash and dust collapsed, sending a massive pyroclastic flow towards Pompeii, covering the city in a layer of ash, which hardened to rock. The people of Pompeii perished. 5 Ash and rock rained down on the city of Pompeii. People in the city took shelter in their homes. 3 Several pyroclastic flows surged down the sides of the volcano, pushing closer to the city of Pompeii. 4 A powerful earthquake shook the ground around Mount Vesuvius. 1 Mount Vesuvius erupted, creating a huge column of ash and dust above the volcano. 2	History Significant events
16. An earthquake is caused when... a tsunami hits the coastline. the Earth's crust sinks. the Earth's tectonic plates suddenly move at a plate boundary, releasing energy that shakes the ground. magma comes through a crack in the Earth's surface. Tick one ☐ ☐ ☒ ☐	Geography Causes of earthquakes



Questions and answers	Subject/Aspect
17. How do earthquakes affect humans? Give at least two ways. • They can injure people. • They can kill people. • Earthquakes can damage people's homes and other possessions. • People might have to leave their homes (evacuate). • Roads might be damaged so people can't travel. • People might be made homeless. • Earthquakes can cause tsunamis so people might drown or their houses could flood. • Businesses and schools may get destroyed so people can't go to work or school. • Shops may be destroyed so it is hard to buy food and other things people need. • Humans might have to spend a lot of money to rebuild homes or replace possessions.	Geography Significant events
18. Label the eight points of the compass. 	Geography Compass points

