

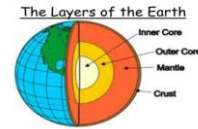
Grade 7

Social Sciences – Geography

Term 2 - Week 1 – Memorandum

Sub-topic 1

Unit 1 – Core, mantle and crust (Pages 28 and 29)



Activity

1. Write the thickness of each layer next to the correct label.

Structure of the Earth	Thickness of layer
Inner core	1 250 km
Outer core	2 250 km
Mantle	2 800 km
Crust	10 – 70 km

2. Describe the oceanic crust.

- *Thinner than the continental crust.*
- *Usually less than 10 km thick.*
- *It is made of heavier rock rich in magnesium and iron e.g. basalt.*

3. Describe the continental crust.

- *Usually about 30 km thick.*
- *It is made up of rocks that are rich in silica such as granite.*

Unit 2 – Tectonic plates and plate movement (Page 30 and 31)

Activity

Answer the questions

1. What are tectonic plates?

Giant sections of Earth's crust / Earth's crust is divided into large slabs called tectonic plates.

2. Name the tectonic plates.

- *North American Plate*
- *South American Plate*
- *Pacific Plate*
- *Nazca Plate*
- *African Plate*
- *Antarctica Plate*
- *Caribbean Plate*
- *Eurasian Plate*
- *Arabian Plate*
- *Indian Plate*
- *Indo-Australian Plate*
- *Philippine Plate*
- *Scotia Plate*
- *Cocos Plate*
- *Juan de Fuca Plate*

3. At what speed do the plates move per year?
They move very slowly, about 3 cm a year.
4. What is the circular movement in the mantle called?
Convection currents.
5. What do scientists believe this movement causes?
They believe that convection currents in the mantle slowly move the plates that 'float' on top of the mantle.
6. Explain briefly how new crust is formed.
New crust is formed when liquid rock bubbles up from the mantle. This happens when a volcano erupts. Hot lava from the volcano cools down to form solid rock.

Sub-topic 2

Unit 1 – Volcano locations (Page 32 and 33)

Activity

Explain briefly what 'The ring of fire' refers to.
Some of the world's most active volcanoes occur around the edge of the Pacific Plate. This area is called the 'Ring of fire'.

Unit 2 – Why volcanoes occur (Page 34 and 35)

Activity

Explain two ways that volcanoes occur.

1. *Volcanoes caused by tectonic plates moving apart.*
2. *Volcanoes caused by tectonic plates colliding or moving together.*

Sub-topic 3

Read page 36 to 39

Unit 1 – Location of earthquakes across the world

Activity

1. Where do earthquakes occur?
Earthquakes happen along plate-boundaries in the same area as volcanoes.
2. How many earthquakes occur every year?
Scientists estimate that several million earthquakes happen each year.
3. Why do we not know about all the earthquakes that occur?
Most earthquakes are small and too weak to do any damage.

Unit 2 – Causes of earthquakes

Activity

Copy and complete:

Like volcanoes, earthquakes happen along the margins of the tectonic plates. Earth's plates move unevenly. They move slowly and grind against each other, creating shock waves that vibrate through Earth's crust. This causes the ground to shake.

Earth's crust is weakest where the tectonic plates meet. Convection currents in the magma causes pressure to build up at the plate margins. Earthquakes happen along lines of weakness called faults.

Unit 3 – Effects of earthquakes

Look at the pictures on page 38 and complete the activity.



Activity

1. Copy and complete the table.
- 2.

Effects of the earthquake on people	
Figure 3	<i>Buildings collapse and crush people.</i>
Figure 4	<i>Tsunamis wash over land, killing people and destroying farms and buildings.</i>
Figure 5	<i>Pipes carrying gas and petrol break and cause fires.</i>
Figure 6	<i>People are left homeless and disease can spread quickly.</i>

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Term 2 - Week 2 Memorandum

Unit 4 – Why some communities are at higher risk than others (Page 39)

Activity

Read page 39 and answer the questions

1. How an earthquake affects people depends on a number of things. What are these things?
 - *How many people live in the area.*
 - *The quality of the buildings they live in.*
 - *How well the area is prepared for an earthquake.*
 - *The availability of people who can rescue and treat earthquake survivors.*
2. How do people living in places like New Zealand or Japan prepare themselves for the effects of earthquakes?
They make their buildings strong and have very good emergency plans.
3. Name two areas in the world where you should not live if you want to avoid the risk of earthquakes.
Living close to a plate margin increases the risk and also, in developing countries, where governments do not have enough money to deal with the effects of earthquakes by building stronger buildings and having rescue teams and doctors to help people.
4. Why are urban areas in some parts of the world more at risk of serious damage than rural areas?
Urban areas have larger numbers of people living in them and therefore there is a larger number of people at risk.
5. Give two reasons why rural areas could be safer during an earthquake.
There are less people living in rural areas and less buildings which can collapse.
6. Do you agree with Christina Gonvaes that people who live in richer countries will be less at risk from the effects of earthquakes?
Yes

Unit 5 – (Page 40)

Activity

Look at the pictures in figure 7 on page 40. Write a sentence for each one to explain how the impact of an earthquake can be reduced.

1. *Good equipment such as helicopters, cranes and diggers help to cope with earthquakes.*
2. *Well trained rescue teams help.*
3. *Doctors, nurses and medical supplies as well as medical supplies, water and food.*
4. *Emergency plans cut off gas and electricity when an earthquake strikes.*
5. *Warning systems warn people of earthquakes or tsunamis.*
- 6.

Unit 6 – A case study of the 2010 Haiti earthquake (Page 41)

Activity

1. Look at the map on page 41. Name the tectonic plates that meet near Haiti.

- The North American Plate, Cocos Plate, South American Plate and Caribbean Plate.*
2. Near which city did the 2010 earthquake strike?
The island of Haiti
 3. Give two example of poverty found in Haiti.
Haiti is the poorest country in the western hemisphere and one of the poorest in the world.
In 2010, more than 70% of people in Haiti were living on less than R10 per day.
 4. Describe how being poor makes the impact of earthquakes worse. Mention the income levels and the kind of buildings in an area.
Port-au-Prince had over 2 million people living there before the earthquake.
86% of the people lived in poorly built concrete buildings.
1.5 million people became homeless. 230 000 people died.
 5. Refer to your answer in question 4 and explain why this had an impact on the amount of people that died as a result of the earthquake.
Many people could have been saved if international aid had arrived sooner. Later in 2010, there was an outbreak of cholera which killed 900 people and infected 216 000 others.

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Term 2 - Week 3 Memorandum

Unit 1 and 2 – Causes and effects of floods(Page 44 and 45)

Activity

1. Read page 44 and complete the activity. Draw the table in your book. List the following causes of floods under the correct headings. Some causes will fit under both headings.
- 2.

Heavy rain over grazing burning buildings destroying wetlands and dams
earthquakes animals slopes lightning fires tsunamis

Human causes	Environmental causes
<i>Burning</i> <i>Buildings</i> <i>Destroying wetlands and dams</i>	<i>Heavy rain</i> <i>Over grazing</i> <i>Earthquakes</i> <i>Animals</i> <i>Slopes</i> <i>Lightening fires</i> <i>Tsunamis</i>

3. Explain how the following can create a flood.
 - a) *Earthquakes – can cause tsunamis at the coast.*
 - b) *Over grazing – if animals eat the grass, water flows quickly into rivers off the bare land.*
 - c) *Buildings – in cities, water flows quickly off streets and buildings.*
4. How can floods cause food shortages?
Floods can also destroy crops and animals resulting in food shortages.
5. What causes soil erosion?
Floods can wash away soil and make the land infertile and bad for farming.
6. Give a possible reason for disease spreading quickly after floods.
Floods can wash out sewage works, polluting food and water supplies. This causes diseases.

Unit 3 – Why some communities are at higher risk than others (Page 46)

Activity

Places next to rivers often experience floods. Millions of people across the world live next to rivers. Give six reasons why people live next to rivers.

- *They use river water for drinking, washing and cooking.*
- *They need water to keep their soil fertile and make their crops grow.*
- *The land next to rivers is flat and easy to build on.*
- *There is not enough suitable land in other areas.*

- *They do not have money to live in areas where there is no risk of flooding.*
- *They have ways of protecting themselves from the dangers of flooding.*

Unit 4 – Reducing the impact by preparing and responding to floods (Page 47)

Activity

Floods are natural events. People cannot stop floods from happening but they can reduce the damage caused by floods. Give six ways to reduce the damage caused by floods.

- *Build walls and barriers along the banks of rivers and coastlines.*
- *Build settlements away from river banks.*
- *Improve drainage so that water can flow away quickly.*
- *Laws to prevent people from living in high-risk flood areas.*
- *Teach people about the dangers of flooding.*
- *Use lakes, natural vegetation and wetlands to prevent water from flowing too quickly into rivers.*

Unit 5 – Case study of a flood (Page 48 – 49)

Activity

1. Read the newspaper article on page 48. List the following information about the floods in South Africa:
 - a) When the floods happened
24 January 2011.
 - b) The number of deaths
At least 123 people died.
 - c) Other damage caused
Heavy rains damaged thousands of homes and flooded farmlands. 20 000 people were in need of immediate help.
 - d) The cost of the floods so far.
The cost is R356 million so far.
2. Read the news report on page 49 and answer the questions.
 - a) Where does Precious Thabethe live?
Ivory Park which is east of Johannesburg.
 - b) What damage did the flood cause to Precious Thabethe's house?
The flood washed away one of the walls of her house.
 - c) What reasons does she give for not leaving her home?
They have nowhere to go that is why they haven't left.
 - d) How have Precious and her family managed to live since their house was damaged?
She has put some plastic and corrugated iron in the place of the wall. The church has been helping her family with food parcels and clothes.
 - e) Do you think Precious' community is more at risk from floods than communities who live in other parts of Johannesburg? Give reasons for your answer.
Yes, they live in a poor community that is prone to flooding.
 - f) Suggest ways people in Precious' community could have reduced the impact of the 2011 floods.