Geography Summer 1 - answers

This booklet contains answers to all the questions in the Summer 1 booklet. They are in the order as outlined below.

Some pages also have tips on answering the more challenging questions. Therefore, it may be useful to have a brief look at the relevant answer page before you start. Remember to honestly mark and reflect on the work you have completed.

Week Beginning Monday 18th May					
Lesson 1	Where do earthquakes and volcanoes happen?	Pg 28-29			
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Week beginning 13th July					
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Lesson 2 - How do volcanoes and earthquakes happen?

- 1.
- a. Britain lies on the **Eurasian plate**.
- b. Britain has no active volcanoes or major earthquakes because it does not lie on or near a plate boundary. Most of the world's earthquakes and volcanoes are found on plate boundaries.
- c. **The Pacific and North American plates** meet along the west coast of the USA.
- d. Earthquakes happen in San Francisco (inside the circle on the map) because it lies on a plate boundary (Pacific and North American plates). These plates slide past each other to cause earthquakes.
- Plates move towards each other Plates rub together Friction melts the rock Molten rock rises Volcanoes erupt at the surface



3. When plates move they scrape together which makes the ground shake and sets off earthquakes. Pressure builds up over time and is suddenly released.





Lesson 1 - Where do earthquakes and volcanoes happen?



1.

- a. In narrow belts; In Iceland; In Japan; Along the west coast of North and South America.
- b. Volcanoes are also found in southern Europe, Indonesia, New Zealand and Hawaii (centre of the Pacific Ocean).
- 2. The 'Ring of Fire' may be called this because there are lots of volcanoes around the edges of the Pacific Ocean. This forms a circle or a ring. The lava is very hot and glows orange and red when they erupt. This is similar to a fire.
- Fuji Japan Krakatoa - Indonesia Ngauruhoe - New Zealand Mauna Loa and Mt. St. Helens - USA Popocatapeti and Paricutin - Mexico Nevada del Ruiz - Colombia Cotopaxi - Ecuador Aconcagua - Argentina Heimaey - Iceland Vesuvius and Etna - Italy
- 4. Earthquakes can happen anywhere either in the oceans or on land. They are more common in some places than others.. They mostly happen in narrow belts/lines like the one down the centre of the Atlantic ocean. They can also happen away from these belts like in China in 1976. They often happen in the same places as volcanic eruptions.
- Both earthquakes and volcanoes could be studied together in: Japan, New Zealand, Mexico, Indonesia, Iceland, Italy, USA (northwest), Argentina - The question asks to name just five.
- Both earthquakes and volcanoes are uncommon in: Australia, Antarctica, Africa, north west Asia, Greenland, eastern coast of North America, Northern Europe - The question asks to name just five land areas





Lesson 1 - What happens in an earthquake?

1.

Fact filePlace: San Francisco, CaliforniaDate: 17th October 1989Injured: 3 000Time: 5:04pmHomeless: 13 000Dead: 63 or 200 people*Damage cost: \$7 billion*Both of these answers are given (63 in source B and 200 in source D) Itshows that for many days after a disaster numbers of dead and injured areonly estimates. They often change day by day for weeks.

2. You should have written a newsflash (40 words) for each of the headlines.

A good newsflash should:

- * Be written in the third person
- ★ Be written in the past tense
- ★ Have a very informative first sentence
- ★ Use simple language in short and snappy sentences
- ★ Not give your own opinions can give opinions of others

Check each against the checklist for what makes a good newsflash.

For three reflect on what you did well and what you could do to improve.

Then choose one of your newsflashes and redraft it.

Consider sharing your redraft with us by including it in your Geography Learning Review.

The example below may help:

Avalanche kills one in Japan ski resort after volcanic eruption

An avalanche in central Japan that may have been triggered by a volcanic eruption kills one and injures at least 11 people.



Eyewitness described hearing a huge boom and seeing black smoke rise from the top of the mountain. Several people were hit by falling rocks.

23rd January 2018





Lesson 1 - The world's worst natural disaster?

Photo A:



What is happening here?	A tsunami is approaching the coast
What are the likely dangers?	A tsunami is very dangerous because it is so powerful. As a result it is impossible to swim in the turbulent water. It can also move large objects such as cars around. Both of these can kill or injure people .
What would you do if you were here?	If you were here you may just stand and stare as you would be in shock. You might run away from the sea and try to get to high ground . You might go into a building and climb the stairs . You might climb a tree to escape the fast flowing water.

Turn to next page for answers to questions about photo B

Photo B:



If you were a survivor... Immediate help needed?

Future problems?

Who could help? How?

What could we in the UK do to help?

The **UK government** could help by sending experienced people such as engineers to help rebuild. The **UK public** could make donations to charities such as Unicef which helps with disaster relief. UK companies or government could start an emergency relief fund.



This is patong beach after the tsunami hit the town. **People are walking through streets full of debris.**

Immediate help is designed to help people survive in dangerous conditions. Therefore they need water and food, medical assistance and shelter.

As time moves on people will try to rebuild homes and lives. They may **not have enough money, equipment or resources** to do this. People may **lose their jobs** as shops, hotels and restaurants were badly damaged. **People may have to move elsewhere** to find jobs and homes.

Help could come from lots of places. Insurance companies could provide money to businesses and families. Local and national government could send emergency services and the military to provide support. Foreign governments could send money and people to help.This is called foreign aid. Charities could also provide aid in the form of money, people, equipment or supplies.



Lesson 2 - What caused the tsunami?

 Plates move towards each other Plate movement causes earthquake Sea above earthquake forced upwards Sea movement causes tsunami Tsunami waves spread quickly outwards Waves crash onto shore



2.

3. The main feature of the tsunami:

In the deep ocean the tsunami was travelling at 800 km/hr. As the waves reached shallow water it slowed down and got much taller. In shallow water it was 15 meters high and moving at 40 km/hr.

Optional extra:



If you haven't already used teh support materials, use the QR code or the address below to see a video which explains the cause of the tsunami.

https://www.bbc.co.uk/bitesize/clips/zmtc87h



Lesson 1-How did the tsunami affect different countries?

 You were asked to imagine you were one of the people in this photograph who survived the tsunami. It can be seen in the background. You needed to describe the events and how they made you feel.

This is called a **recount**. Here is a list of what a good recount should include.

A good recount should:

- Be written in the first person
- ★ Be written in the past tense
- ★ Be written in chronological order
- ★ Clearly describe what took place
 - Use descriptive words
- ★ Include how it made you feel



In this case you could also have included what you did, saw, said and heard.

Check your recount and redraft one or two sentences to improve it.

Country	Deaths	Injuries	Homeless	Distance from earthquake	Time for wave to reach the coast
Indonesia	235 410	120 000	700 000	105 Km	Under ½ hr
Sri Lanka	38 195	15 686	573 000	1 600 Km	1½ - 2 hrs
India	16 413	<mark>6 270</mark>	380 000	1850 Km	2½ - 3 hrs
Thailand	11 884	<mark>8 4</mark> 57	264 000	400 Km	1 - 1½ hrs







Lesson 1-How did the tsunami affect different countries?

1. a. Check that you have followed these rules for describing the features shown in the photo you chose:

You should not be using the word 'you'. So instead of writing **'In the photo you can see...'** write **'The photo shows...'** or **'In the photo there is...'**

b. In this part you have been asked to describe what you would do and how you would feel. This should be written in the first person. You should describe one or two actions you would take. A list of three feelings would be great. Perhaps you could redraft your description to improve it.



 a. Short-term problems should be listed. Choose <u>two</u> from the following: People have no shelter People have no food It is difficult to travel People are worried

b. Long-term problems. Choose <u>two</u> from the following Hospitals are damaged and need to be rebuilt Schools are damaged and need to be rebuilt People have lost their jobs as business buildings were damaged People have lost their livelihoods as boats were washed away

c. This answer will vary. Here are some ideas:

Stay - Perhaps because you come on holiday here every year and so you know lots of people. You want to help the people clear up and get their lives back on track. Or because you lost a family member and are trying to find them.

Return home - Perhaps because you are scared another tsunami may hit and you want to leave before it does. Or because you have nowhere to stay as your hotel was damaged. Or perhaps you are suffering from worry and shock. As a result you just want to get home where you feel safe.

- The key ideas you need to get across in your description of the effects described by the headlines are:
 Lots of buildings were destroyed or damaged by the wave
 The wave damaged transport links
 People have lost their jobs as factories were destroyed
 Local people are worried about their futures.
- 4. You should have used the information in source C:



<u>Prediction</u> - There is **no early warning system** as the technology is not available.

<u>Preparation</u> - Local rescue workers don't have as good training or equipment. The emergency services have fewer people and vehicles so cannot help as many people.. The buildings are weaker and so get damaged easily. There are fewer stores of emergency supplies like shelters and medical supplies.



Lesson 2-How did the world help?

1. Please note: some can appear in more than one column.

Emergency relief	Short-term aid	Long-term aid	
Rescue teams	Medical supplies	Tractors	
Shovels	Food	Building equipment	
Rescue dogs	Clean water	Lorries	
Medical supplies	Clothing	Education materials	
Food	Cooking utensils	Expert help	
Clean water	Blankets	Hospital equipment	
First aid	Tents	Money	
Expert help	Expert help		
	Money		

2. There are lots of things which you could do. Here are some ideas for things you could do to help:

Join a group searching for survivors, clear rubble from the streets, build shelters, provide first aid, collect clothing and blankets from amongst the rubble, share any food or water you have, speak to people who are in shock, care for children who have been separated from their families... Add up to two to your list to improve it.

 Your poster could be advertising anything but there are some things it should include.

Check it against this example.

Reflect on what you did well and what you could do to improve. Name of the organisers Title of the event Brief description of event Charity being supported Details about the event Date, time and place Eye catching image Contact details The Rotary Clubs of Plymouth Present
A SPLASH OF PURPLE

 Gala Charity Ball

 In aid of End Polio Now

 The per person

 The per person

 The scattering

 Pymouth Ukuelee Players

 Di Robbiemac

 On Friday 3rd May 2019

 Pin for 7.30pm

 Punduk of Cornwall

 Pymouth

 Deck via saltramrotary@outlook.com



Lesson 1-How can the tsunami danger be reduced?

- Three signs an earthquake may be about to happen: There will be small foreshocks (mini earthquakes) Snakes and rats crawl out of their holes Dogs howl.
- 2. a. A tsunami warning system could save lives because **people could be alerted to the danger earlier. They could use this time to move out of the danger zone**. They could move inland or climb to higher ground.

b. Early warnings may <u>not always</u> save lives. Here are a few reasons why: **People may think the warning is a false alarm** and so stay where they are. **People may not have access to transport** and so can't travel quickly out of the danger zone.

People may live a long way from high ground and so can't get there in time.

People may not hear warnings early enough to give them time to escape. **Tourists may not understand the warnings** and so don't act on them. **Roads could get blocked with traffic** as everyone tries to leave the coastal area at once.



 People can be informed about earthquakes and tsunamis in a number of ways. Here are some examples:
 Emergency broadcasts on all TV channels and radio stations
 Automated alerts by text, phone and email
 Emergency announcements across social media platforms
 Sirens could be sounded with signs and posters explaining what it means



Lesson 1 - The tsunami enquiry

The enquiry question is: How can we help people affected by the tsunami disaster?

1. a. Lots of people are currently homeless, injured and frightened. So the schemes which are the most important are the ones which help people straight away. For me the most important are the shelter and warmth, feeding and medical aid schemes. These will help the people who are suffering now.

D.				
Immediate and short-term	Long-term			
Feeding scheme Shelter and warmth Medical aid scheme	Emergency warning system Home building scheme Hospital reconstruction Job provision Building equipment			

2. Your job was to decide how best to spend the funds raised in the UK. Your aim was to provide **both** immediate and long-term support.

In the table you should have outlined how much you would spend on each of the schemes. The total should be no more than the £500 000 available.

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You should also have written about which schemes you decided to fund / not fund and explained why.

E.g. I have decided not to fund the early warning system as it does not meet our aims to help people solve local problems.

Remember ...

- You do not have to spend the full amount for each scheme but, if you don't, the scheme will be less effective.
- The total cost must be no more than £500,000.
- Your decisions must reflect the aims of the Disaster Emergency Agency.
- 3. For this you should have ranked your choices of help schemes from most to least important.

For your <u>top two</u> you should have explained why you feel they are so important. Answers will very much depend on what you cose. High quality answers will be detailed. This can be done by using connectives such as 'which means that...' and 'as a result of this...'

E.g. I think the feeding scheme is the most important. It will provide people with clean drinking water. *As a result of this* people are less likely to become ill *which means that* there will be less pressure on medical services.



Lesson 2 - The tsunami enquiry

The enquiry question is: How can we help people affected by the tsunami disaster?

This is where you have brought together all your learning about the impacts and responses to natural disasters.

- 4. I would expect the report to include:
 - ★ A summary of the natural disaster where, when, number of people affected (dead, injured, homeless).
 - ★ A summary of the impact it has had on the people and the environment
 - ★ A description and justification of the action you have decided to take. This should include costs, how it will help the people and time frames.
 - ★ Links made between your decisions and the aims of the agency this one can be quite tricky.

Reflect on your work and make at least one improvement.

Which of these responses would also be appropriate if there had been a Typhoon (tropical storm) in the region?

It would be fantastic to see a photo your final report shared through the Google Classroom or by email.