Eyjafjallajökull Video Worksheet

Watch the film right through once

Then watch it again, pausing at the appropriate points to attempt the following questions

00.22

1. When was the main eruption of the volcano Eyjafjallajökull?

Do You Know?
How to pronounce 'Eyjafjallajökull'
Ey/ja/fjalla/jö/kull
ay/ya/fyatla/yø/kootl
- 'j' sounds like the 'y' in yes
- 'll' sounds like the 'tl' in 'kettle' in English

http://www.howdoyousaythatword.com/word/eyjafjallajokull/

Take a look at this YouTube link to hear some amusing pronunciations!
https://www.youtube.com/watch?v=7uCKSYTH-4o

00.45

2. How did the second eruption on 14 April differ from the earlier eruptions in March 2010?

Later in the video we'll find out why this second eruption was so explosive.

01.06

3. Explain why the explosive eruptions caused travel chaos throughout much of Europe.

01.20

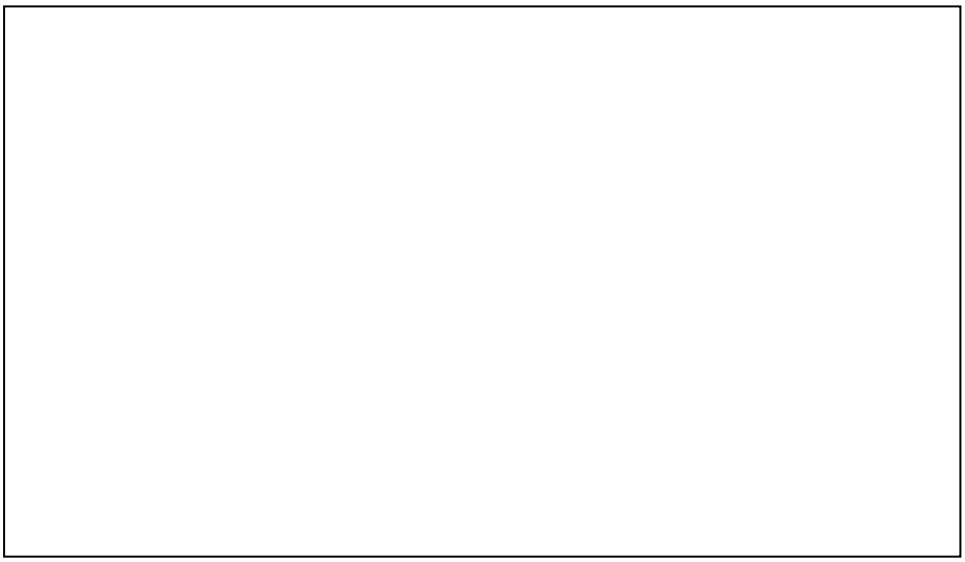
4. Why were local people in Iceland concerned about the threat of flooding?

Pause the video at 01.41

5. Imagine that the floodwaters had escaped down the valley behind the farm. Suggest the social, economic and environmental impacts of such a flood.

01.50

6. Draw a simple sketch to show how the long grass helped to trap the ash preventing it from being blown around. Use a scale to show that there was 5cm of ash, roughly the same height of the grass. Add labels to explain why farmers had a good crop.



02.36

7. What were the first signs that Eyjafjallajökull was about to erupt?

03.08

8. What were the effects of the eruption on Inga and her family living on the farm?

---

9. How many people have visited the Eyjafjallajökull Visitor Centre? How has this benefitted the family?

---

10. Why is Inga not particularly worried about flooding when Katla next erupts?

---

11. How are the family preparing themselves for future eruptions?

05.30

12. Describe the Markarfljót River today. What did it look like when the floodwaters poured into the river after the eruption?

Did You Know?
The Markarfljót River, with its multiple channels, is an example of a *braided* river.

06.01

13. Describe the shape and composition of the embankments alongside the river.

---

14. Evaluate the success of the embankments in preventing widespread flooding.

06.20

15. How did the action of quick thinking road engineers help to save the metal bridge carrying the main road across the Markarfljót River? Use a simple diagram to show what happened.

Did You Know?
The explosiveness of volcanic eruptions is measured using the VEI (Volcanic Explosiveness Index). It was devised by Chris Newhall at the University of Hawaii in 1982 to enable eruptions to be compared with each other.

07.23

16. Make a copy of the VEI index diagram to show the position of the eruption of Eyjafjallajökull.

07.40

17. How did the presence of water and the chemical composition of the magma affect the eruption of Eyjafjallajökull?

Did You Know?
The term ‘tephra’ describes rock fragments and particles of all sizes, from ash to large boulders called ‘volcanic bombs’, erupted from a volcano

09.04

18. Watch the clip about volcano monitoring and complete the table below.

	Seismometers	GPS Antennae
How does the instrument help to predict a volcanic eruption?		
How many instruments are there in Iceland?		
What happens to the data collected?		

10.25

19. Consider the threat posed by an eruption of the volcano Katla. Complete the factfile table below and then attempt the question that follows.

Katla Factfile

Question	Answer
When was the last eruption of Katla (shown by the old photo)?	
Katla has erupted twenty times between 930 and 1918. Calculate the frequency of eruptions.	
Is an eruption overdue?	
Does it matter if an eruption is ovedue?	
What are the warning signs to look out for?	

20. To what extent can scientific monitoring and knowledge help to reduce the volcanic hazard posed by Katla?

12.15

21. Describe how the eruption of Eyjafjallajökull has boosted tourism in Iceland.
