FT for schools: Iceland on high alert activity sheet 7

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The article

<u>www.ft.com/content/8709c3a2-0085-48cb-88b2-9052ecf59480?shareType=nongift</u> Iceland on high alert as increased seismic activity raises volcano threat.

Specification links

AQA

A level 3.1.5 Hazards 3.1.5.4 Seismic hazards The nature of seismicity and its relation to plate tectonics.

Edexcel A

A level Topic 1 Tectonic Processes and Hazards Enquiry question 1: Why are some locations more at risk from tectonic hazards? 1.3 Physical processes explain the causes of tectonic hazards.

OCR

A level Topic 3.5 Hazardous Earth 3. What are the main hazards generated by seismic activity? 3.a. There is a variety of earthquake activity and resultant landforms and landscapes.

Eduqas (WJEC)

A level Section A Tectonic Hazards 3.1.3 Earthquakes, processes, hazards, and their impacts. *Use examples of at least two contrasting contexts to demonstrate the varied degree of risk and impacts of earthquake activity.*

Activity

Answer the following questions using the link above.

- 1. Describe the location of the recent earthquake swarms in Iceland.
- 2. Why is a potential eruption along the Reykjanes peninsula expected to be different to recent eruptions in Iceland, such as Eyjafjallajökull in 2010?
- 3. Outline the potential economic benefits associated with an eruption on the Reykjanes peninsula.

Further work

- Read <u>South-west Iceland is shaking and may be about to erupt</u>. Answer the additional questions below
 - Why are there huge uncertainties associated with any eruption in the SW of Iceland?
 - If an eruption does occur, why is it likely to have less impact on international travel than recent eruptions such as Eviafiallajökull in 2010?
- Listen to the podcast series on volcanology basics hosted by two geoscientists, Erik Klemetti and Janine Krippner. It is a great way to expand your knowledge of volcanoes

• One of the best ways to keep track of new volcano developments in Iceland is by following academics and researchers on Twitter. Here are some suggestions:

- o Dr Dave McGarvie @subglacial, Lancaster University
- o Dr John Stevenson @volcan01010, BSG software developer and geologist
- Buy and read Eruptions that shook the world by Clive Oppenheimer and/or Island on Fire: The Extraordinary Story of a Forgotten Volcano That Changed the World by Alexandra Witze
- Watch and listen to our free recent Hazards <u>A narrated slideshow from Dr Matthew Blackett</u> lecture, from Coventry University, to learn more about the research and monitoring of Geohazards
- The National Geographic <u>Eruption in Iceland may mark the start of decades of volcanic activity</u>