Zig Zag Education

Geography

GCSE (9–1) | AQA | 8035

Learning Grids for GCSE AQA Geography

Paper 1: Section A

The Challenge of Natural Hazards

zigzageducation.co.uk

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Contents

Teacher's Introduction

These learning grids are a tool designed to help you deliver the **GCSE AQA Geography specification (8035)** for **Paper 1, Section A: The Challenge of Natural Hazards**. This resource covers all of the content outlined in the specification, presented in spec order. The concept is that your students are assigned a topic to learn about as part of your scheme of work (or by giving them a set of pages to read from a textbook), possibly for homework, and then asked to complete the learning grid which matches that section of the spec. These activities are particularly useful for your weaker students as they encourage students to *read* their notes or the textbook pages in order to find the required answers.

Each Learning Grid is cross-referenced to the ZigZag Education Teaching Pack (ZZTP) of the same topic so that you, and your students, know which lessons cover the content of each grid. They are also cross-referenced against two popular AQA-endorsed textbooks (HOD and OUP – see details below).

Completed grids are provided so that your students' answers can be self- or peer-marked or checked. The answers may also be useful to hand out to students during their revision to assist with any unanswered questions, or to ensure that students are revising from the correct answers.

Advantages of using these learning grids are:

- Some students will find this method of studying of great value, particularly if they find it difficult to absorb information in class – they are perfect for consolidation.
- Resulting grids contain a bullet-point summary that may be useful for revision.
- They are an easy-to-set, yet valuable, homework.
- They are a useful catch-up tool to help students who have missed a lesson.
- They can be used as a basis for cover lessons as they require minimal preparation and minimal interaction from the cover teacher.
- They are an independent learning resource.

Textbook Abbreviations:
HOD refers to Widdowson et al. (2016). *AQA GCSE (9-1) Geography.* [Hodder] ISBN 978-1471859922.
OUP refers to Ross et al. (2016). *GCSE Geography AQA Student Book*. [Oxford University Press] ISBN 978-0198366614.

Selected Question and Answer Pages

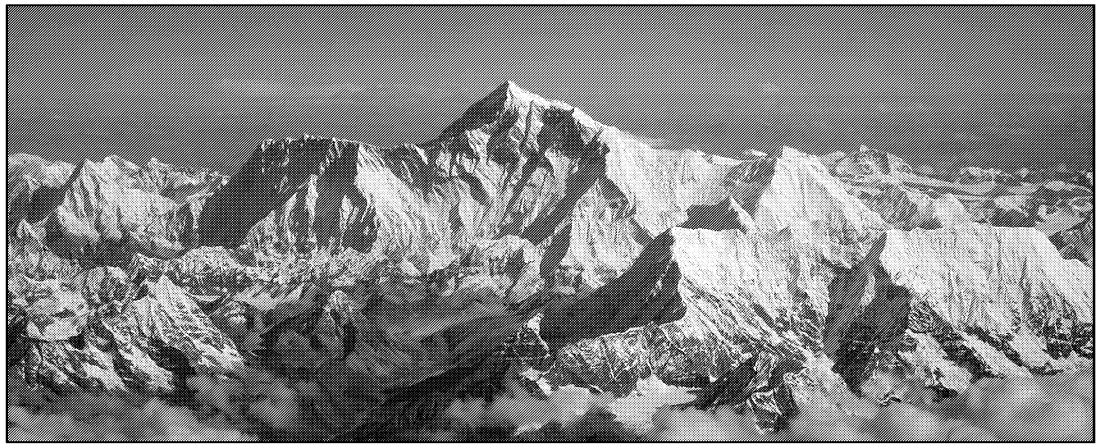
For demonstration only, the sample answer pages immediately
follow their corresponding question pages

Learning Grid 1: Natural Hazards

ZZTP:	Lesson 1
HOD:	pp. 2–3
OUP:	pp. 8–9

<table>
<tr><th colspan="3">Question</th><th colspan="2">Answer</th></tr>
<tr><td rowspan="4">What are natural hazards?</td><td>1</td><td>Complete the sentence which describes natural hazards.</td><td colspan="2">Natural hazards are things that are _____ our control that can impact life and property, and can cause _____. Many people live in _____ regions. The hazard is always a _____, but may not happen. But when that threat is realised, that is called a _____.

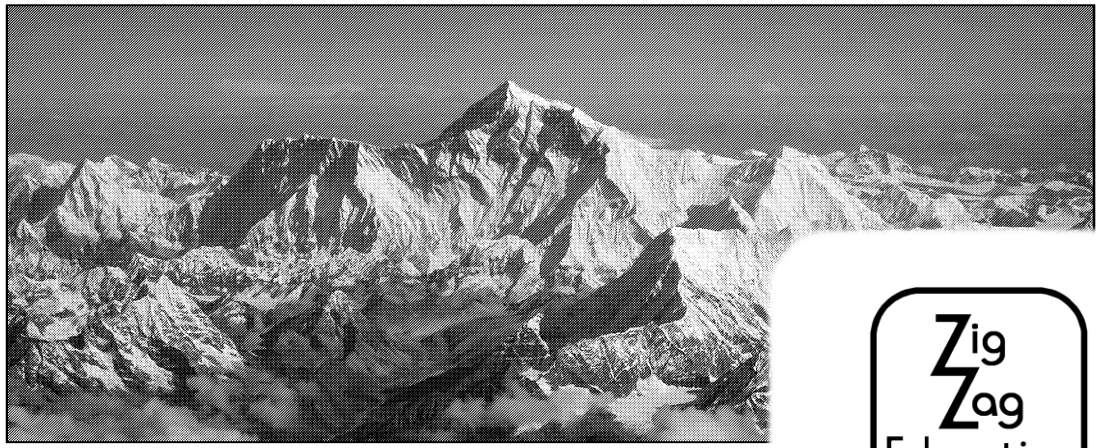
threat | beyond | disaster | fatalities | hazardous</td></tr>
<tr><td rowspan="2">2</td><td rowspan="2">There are several classifications of hazard. Give two examples of each.</td><td>Geological, geomorphological, and tectonic hazards</td><td></td></tr>
<tr><td>Atmospheric hazards</td><td></td></tr>
<tr><td>3</td><td>The photograph shows Mount Everest in the Himalayas. The mountains are formed because two continental plates are colliding.

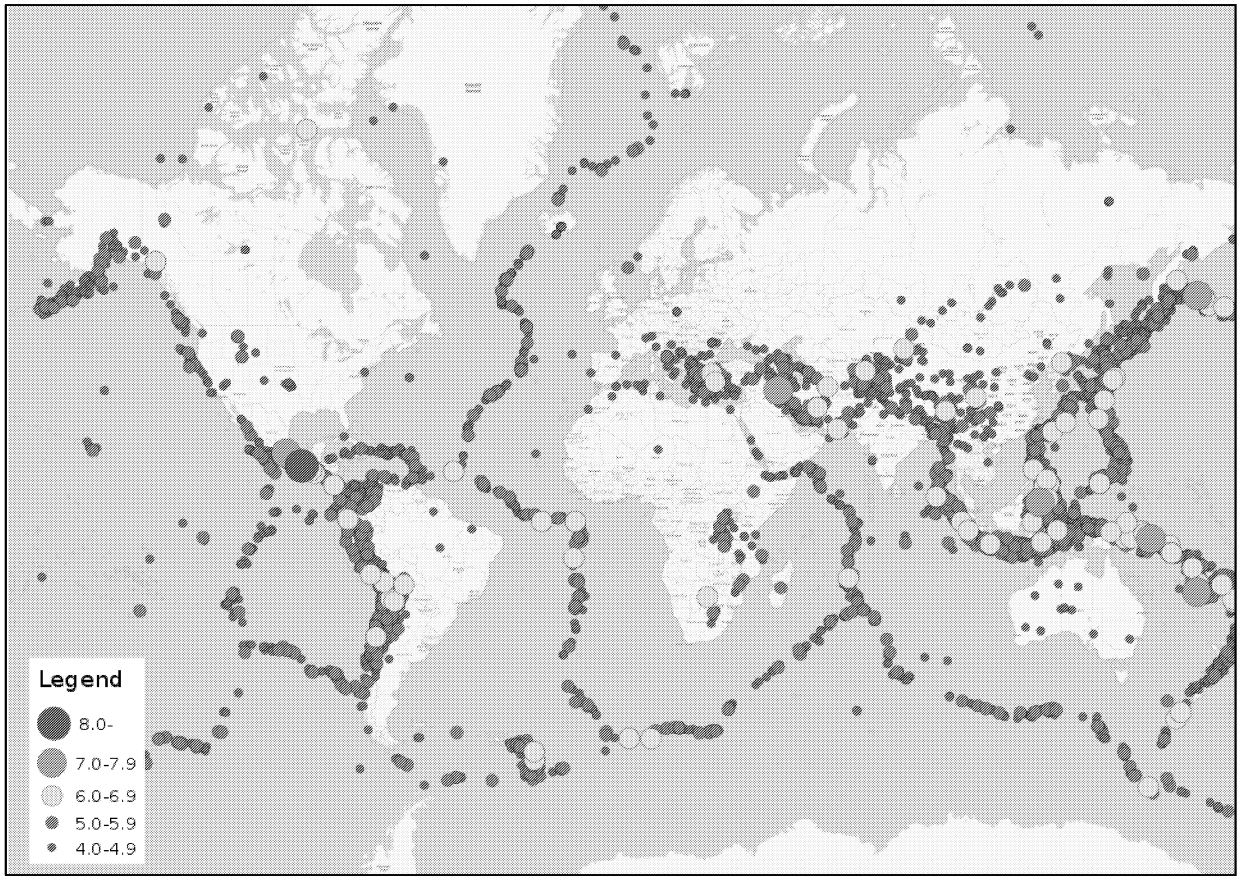
Can you think of two hazards which may be experienced in the region?</td><td colspan="2"> 
1.
2.</td></tr>
</table>

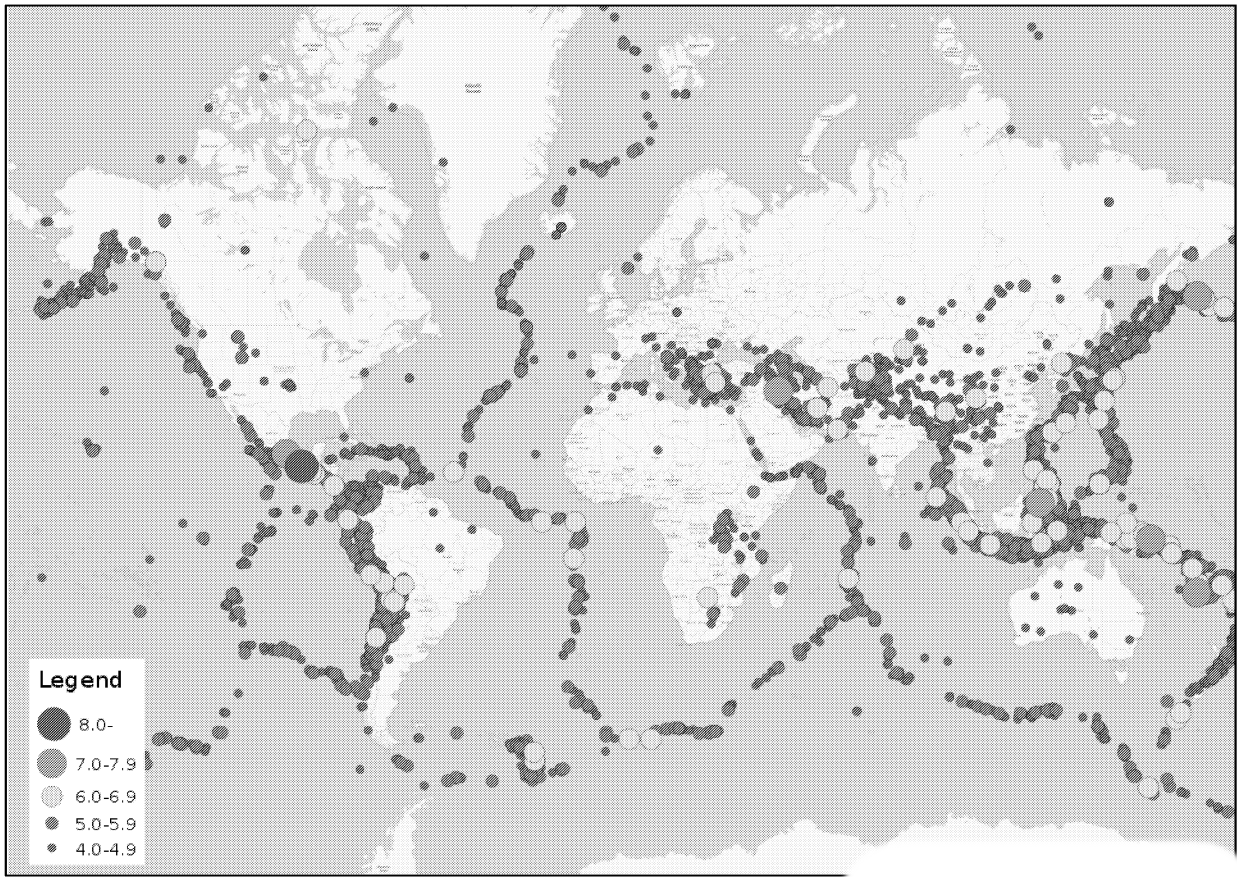
Learning Grid 1: Natural Hazards

ZZTP:	**Lesson 1**
HOD:	**pp. 2–3**
OUP:	**pp. 8–9**

<table>
<tr><th colspan="3">Question</th><th colspan="2">Answer</th></tr>
<tr><td rowspan="4">What are natural hazards?</td><td>1</td><td>Complete the sentence which describes natural hazards.</td><td colspan="2">Natural hazards are things that are <u>beyond</u> our control that can impact life and property, and can cause <u>fatalities</u>. Many people live in <u>hazardous</u> regions. The hazard is always a <u>threat</u>, but may not happen. But when that threat is realised, that is called a <u>disaster</u>.
threat | beyond | disaster | fatalities | hazardous</td></tr>
<tr><td rowspan="2">2</td><td rowspan="2">There are several classifications of hazard. Give two examples of each.</td><td>Geological, geomorphological, and tectonic hazards</td><td>Allow earthquakes and tsunami, volcanic eruptions, landslides, mudflows, etc.</td></tr>
<tr><td>Atmospheric hazards</td><td>Tropical storms, heavy rainfall or snowfall, droughts and heatwaves, high winds, etc.</td></tr>
<tr><td>3</td><td>The photograph shows Mount Everest in the Himalayas. The mountains are formed because two continental plates are colliding.

Can you think of two hazards which may be experienced in the region?</td><td colspan="2"> 
1. Earthquakes
2. Avalanches</td></tr>
</table>

Question			Answer
Earthquakes	12	**Study the map of earthquakes recorded in 2017. Can the plate margins be seen? If you can make them out, explain why.**	 *Contains map data © OpenStreetMap contributors*

	Question		Answer
Earthquakes	12	**Study the map of earthquakes recorded in 2017. Can the plate margins be seen? If you can make them out, explain why.**	 *Contains map data © OpenStreetMap contribut* Yes – the plate margins can clearly be seen. This is because earthqu plate margin. At destructive margins, the plates don't move freely. They move in suddenly released. At conservative margins, the plates lock togeth At constructive margins, there are gentle earthquakes as the plates

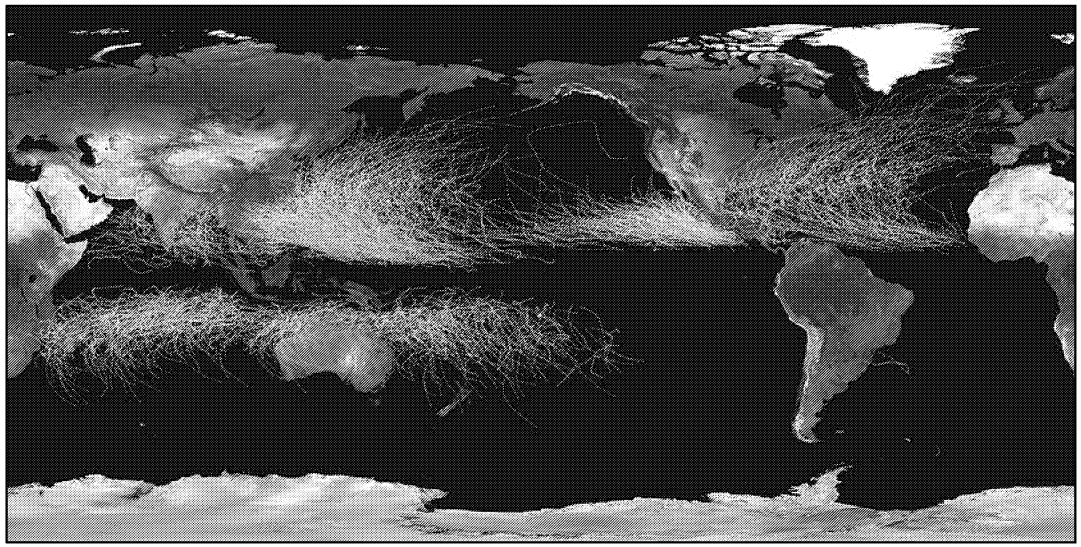
Question			Answer
Adaptation and mitigation	10	**Name one international agreement which targets climate change.**	
	11	**How does the agreement work?**	
	12	**Outline one difficulty in implementing international agreements.**	

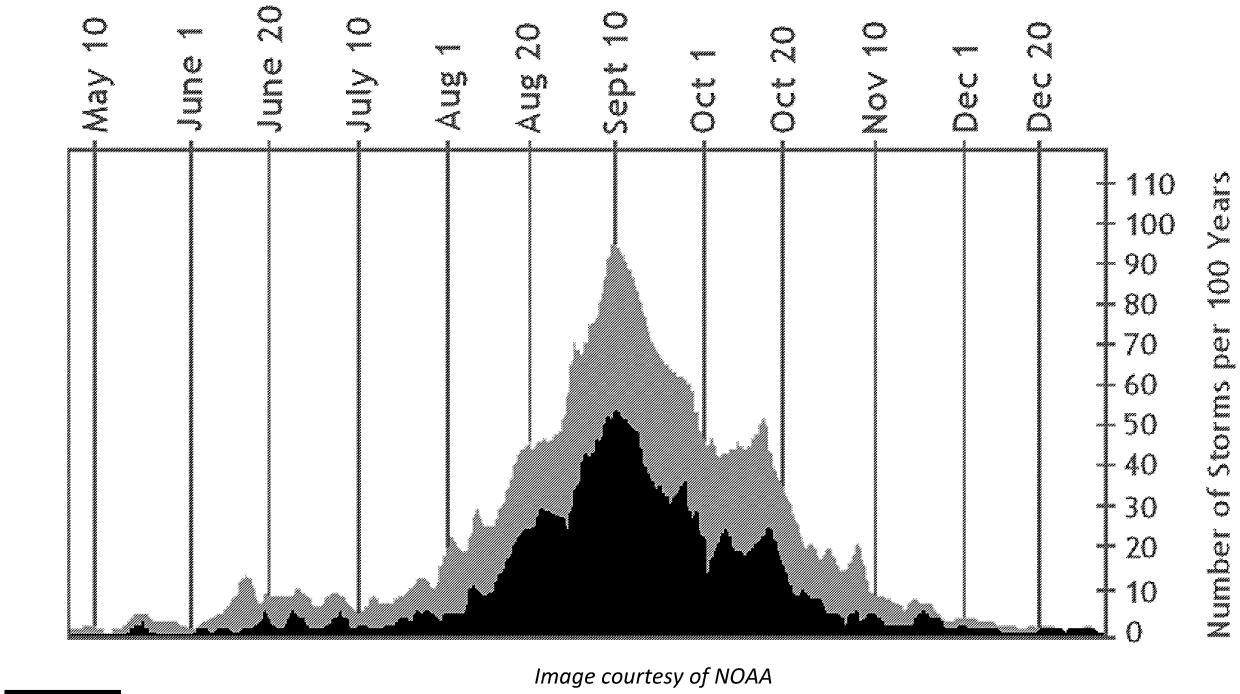
	Question		Answer
Adaptation and mitigation	10	**Name one international agreement which targets climate change.**	Allow any suitable agreement such as the Kyoto Protocol (1997) (and the Doha Amendment (2012)), and the Paris climate agreement (2015).
	11	**How does the agreement work?**	**Kyoto Protocol** – developing countries signed up to a legally binding agreement to reduce CO_2 emissions to 5.2% below 1990 levels (on average). One of the schemes in use was the emissions trading scheme. The scheme ran until 2012. **The Doha Amendment** – covers the period 2013–2020 and is a continuation of the Kyoto Protocol with stricter targets – 18% below 1990 levels (the European Union committed to 20%). **The Paris Climate Agreement** – follows on from the Doha Amendment and was agreed in 2015. The agreement agrees to limit CO_2 emissions, and includes a large number of countries, including the members of the European Union. The aim is to stop 'dangerous' climate change (of 2 °C above pre-industrial levels), with a maximum change of 1.5 °C.
	12	**Outline one difficulty in implementing international agreements.**	There are challenges – for example: • Voluntary agreements – countries can withdraw or not ratify agreements – such as the USA signalling intent to withdraw from the Paris climate agreement in 2017. Therefore the agreements may fall short of their intended targets. • Difficult to enforce or may not be legally binding. • The scope or timing may be too short.

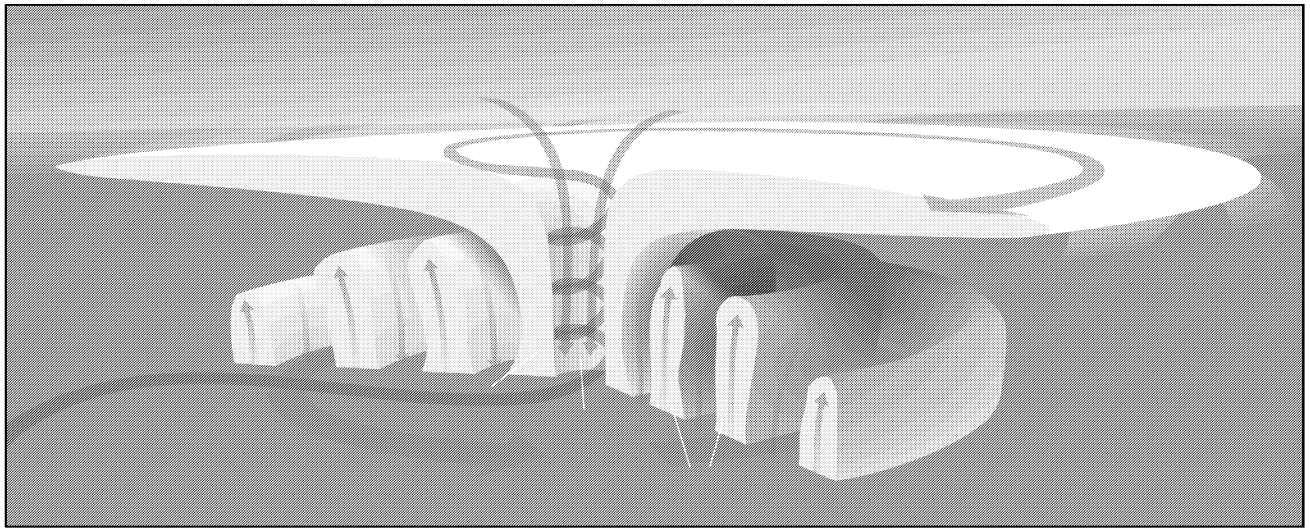
Additional Selected Question Pages

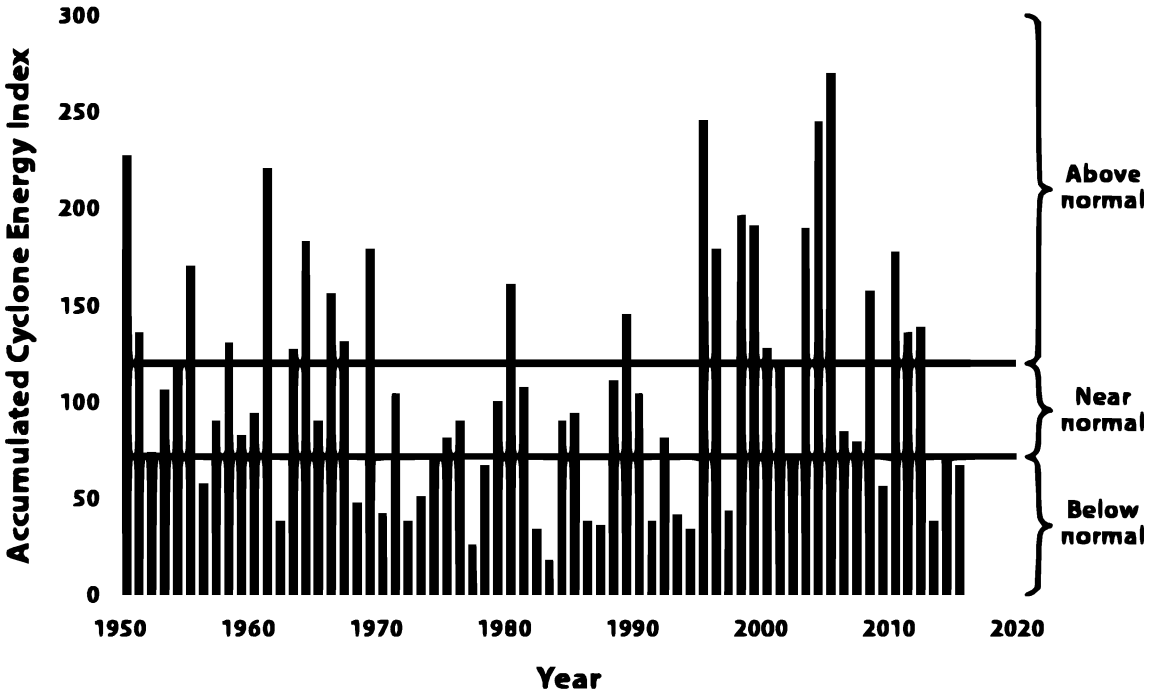
Learning Grid 5a: Tropical Storms and their Formation

ZZTP:	Lessons 9 and 10
HOD:	pp. 24–29
OUP:	pp. 24–27

		Question	Answer		
The location and development of tropical revolving storms	1	Describe a tropical revolving storm.			
	2	Match the names of the storms to the oceans where they occur.	Hurricanes		South Pacific, Indian Ocean
			Cyclones		Atlantic, East Pacific
			Typhoons		North Pacific
	3	Describe the areas where tropical revolving storms are located.			

	Question		Answer
The location and development of tropical revolving storms	4	**Explain why tropical storms form where they do.**	
	5	**The graph shows the number of hurricanes in the Atlantic.** **Explain the distribution of hurricanes throughout the year.**	 *Image courtesy of NOAA*

	Question		Answer
The structure of tropical revolving storms	6	**Label the diagram of the tropical storm with the following three labels:** **Rain bands** **Eye wall** **Eye**	
	7	**What type of clouds are tropical storms made from?**	
	8	**Describe and explain the conditions experienced under the eye of the storm.**	
	9	**How does heat power a tropical storm?**	
	10	**Why do tropical storms weaken as they move over land?**	
The effects of climate change	11	**How is climate change predicted to change the sea surface temperature (SST)?**	

	Question		Answer
The effects of climate change on tropical	12	How could increased sea level increase the damage caused by tropical revolving storms?	
	13	How can climate change affect how much water can be stored in the atmosphere?	
	14	Use the graph to suggest how the power of tropical revolving storms may be affected by climate change.	
	15	How might the number of tropical revolving storms increase due to climate change?	

