

# Tropical cyclone case study

## Aim and introduction

Tropical cyclones are becoming more frequent and intense around the world. They are moving to places which did not historically have these types of events and therefore are usually underprepared. This lesson explores an unusual tropical storm – Shaheen, which started on the other side of India as tropical cyclone Gulab only to build in intensity once it passed over India and hit the northern coast of Oman. This lesson has been designed so that pupils can work together to problem solve and synthesise information drawing on their previous learning to produce a report in their preferred style.

This lesson should take 1 hour to complete. It would be advisable that set up before the lesson takes place if possible.

## Curriculum links

AQA

3.1.1.3 Weather hazards

Edexcel A

Topic 2: Weather hazards and climate change

Edexcel B

Topic 1: Hazardous Earth - How are extreme weather events increasingly hazardous for people?

Eduqas A and WJEC

5.2: Weather patterns and process

Eduqas B

2.3: Weather and climate

OCR A

2.3.5 Extreme weather conditions cause different natural weather hazards.

OCR B (1<sup>st</sup> teaching from September 2025)

1.1. How can weather be hazardous?

## Learning goals

1. To apply knowledge of tropical storms to a named case study.
2. To identify the effects and responses to a named tropical storm.



## Learning outcomes

Greater depth: pupils will be able to confidently apply previous knowledge and understanding to support content being prepared. They will be able to process and extract key pieces of information which are relevant showing a clear sequence of events. They can draw upon information from various sources to complete a coherent piece of work.

Expected level: pupils will be able to apply previous knowledge and understanding to support content being prepared. They will be able to extract key pieces of information, most of which are relevant showing a sequence of events. They can use information from other sources to complete a clear piece of work.

Working towards: pupils will be able to apply some previous knowledge and understanding to support content being prepared. They will be able to use information given, most of which is relevant but might not be sequential. They may use information from other sources to complete a piece of work; some may be inaccurate.

Support: pupils will be able to apply some previous knowledge and/or understanding to support content being prepared. With guidance, they will be able to use information given, most of which is relevant but not in sequence. They will not use information from other sources to complete a piece of work drawing only on the initial resources given.

## Key terms

- Cyclone
- Storm surge
- Hazard
- Responses
- Impacts
- Primary
- Secondary

## Learning resources

- Teacher presentation: Tropical Cyclone
- Resource packs 1-4 to accompany the newsroom task
- Textbooks / resources on tropical storms detailing their formation, location etc.

## What you will need

- Highlighters
- Pens
- Glue
- Pencils
- Large sheets of paper (if writing a newspaper report)
- Access to ICT / recording technology
- Scissors

## Challenge and support

Suggestions for challenge and support can be found within the main teaching and learning activities.



## **Starter**

Pupils guess the title of the lesson by the icons on the teacher presentation. Challenge them to write as many things down they associate / know about the topic on mini whiteboards or in their notebooks to share as a whole class summary. Teacher can then challenge any misconceptions at this phase in the lesson to ensure clear understanding.

## **Main**

Newsroom activity where pupils work in mixed ability groups to create a news report on the tropical storm case study. Information will be slowly fed to the groups throughout the lesson so that they have time to synthesise and summarise what is being sent. Full instructions will be on the teacher presentation. Support and challenge pupils accordingly by assigning them different roles within the group depending on their strengths. NOTE: the slides have been set to manually move on rather than timed so that teachers can adapt the times for information to suit the classes needs.

## **Plenary**

Presentation of reports, depending on the style, this might be completed for homework to be presented in the following lesson. Ensure all groups have a copy for reference in their own notes.