

# Tropical storm sustainable management

## Aim and introduction

Tropical storms are becoming more intense<sup>1</sup>, people and governments need to find ways to mitigate the damage caused by them. Decision makers need to find a balance between immediate responses and long-term planning. This lesson explores different sustainable ways to manage the impacts of tropical storms, building in decision-making for stakeholders to find the best solutions for their place.

... This lesson will take approximately 1 hour to complete.

## 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. Extract key pieces of information to support points in an argument.
2. Construct a well-developed argument.
3. Work as a team to formulate a debate.

<sup>1</sup> [How is climate change affecting hurricanes, typhoons and cyclones?](#) BBC, December 16, 2024



## Learning outcomes

Greater depth: pupils will be able to confidently pose their point of view, which is supported with relevant examples, even if this point of view is different to their own opinion. The examples they use will be from their own knowledge and understanding as well as from those which have been provided. They will be able to reflect and respond appropriately to opposing views to their own supported with evidence. Pupils will be able to draw sound conclusions based on the evidence and their own knowledge.

Expected level: pupils will be able to pose their point of view with some confidence. Most of their points are supported with relevant examples. The examples they use will be sourced mainly from those which have been provided but also from their own knowledge. They will be able to respond appropriately to opposing views to their own. Pupils will be able to draw sound conclusions based on the evidence and their own knowledge.

Working towards: pupils will be able to share their point of view with some confidence. Most of their points are supported with relevant examples, some may be inaccurate. The examples they use will be sourced mainly from those which they have been provided with little to no reference to their own knowledge. They will be able to respond to opposing views to their own, these may lack evidence to support. Pupils will be able to draw some conclusions based on the evidence presented.

Support: with support, pupils will be able to share their point of view. Most of their points are supported with examples, expect some to be inaccurate. The examples they use will be sourced from solely those which they have been provided with. With guidance, they will be able to respond to opposing views to their own but with little to no evidence to support. Pupils may be able to draw partial conclusions based on the evidence presented.

## Key terms

- Mitigation
- Management
- Response
- Sustainable
- Immediate
- Long-term

## Learning resources

- Teacher presentation: Sustainable management of tropical storms
- Roleplay cards – found in the ‘resources’ section of the teacher presentation.

## What you will need

- Classroom set up in debate style i.e. a horseshoe
- Additional information on management of tropical storms (optional)

## Challenge and support

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



## **Starter**

Pupils complete a quick reflection on the social, economic and environmental impacts of their tropical storm case study. They can then analyse their responses to see which, they feel is the biggest impact and suggest reasons why. Challenge pupils by getting them to think critically about their responses, for example, would the results be different from another perspective, have they thought about long and short-term impacts?

## **Main**

Introduce the topic of the debate to the class. Inform them that before they are split into their debating teams, they must understand different methods to manage tropical storms for a sustainable future. Share a selection of different methods to manage tropical storms through a teacher presentation so that pupils can note down key points of all of them in any format they like e.g. a table, mind map or bullet points, for example.

Split the class into two groups. One will represent for the motion, the other, against. The pupils will then decide on which role to take within each group. Guidance from the teacher on this may be beneficial.

## **Plenary**

Use this time to conduct the debate with the teacher as the overall judge who will decide on which course of action will be taken based on a set of criteria in the teacher presentation.