



Coasts 1: All About Waves

Teaching Ideas

Learning Objective: To understand how waves form and how they vary.

Success Criteria:

- Explain how waves form.
- Describe the differences between constructive and destructive waves.
- Explain what longshore drift is.

Context: This is lesson 1 in a unit of work at KS3 looking at coastal processes and management techniques. This lesson introduces wave formation and longshore drift.

Starter

Starter Discussion

Have students talk in pairs about their best trip to the beach ever. What made it so good? Where was it? What did students do there?

Main Activities

What Even Is a Coast?

Introduce the concept of coasts by firstly explaining what a coast is, and then highlighting the basics of wave formation, including how why some waves are bigger than others. Slides 5 and 6 on the [All About Waves PowerPoint](#) presentation will help with this. Follow up with a quick recap quiz on slide 7.

Wave Formation Diagram

Using the [Wave Formation Activity Sheet](#), students should complete their own diagram to show how waves form. This is done by adding the labels onto the blank diagram. When completed, show students the completed diagram on slide 8 and allow students to modify any errors or fill in a new diagram so they have a perfect copy.

Geography Dictionary

Students make a note of key terms provided on slide 10.

Constructive Waves

Students draw a copy of the constructive waves diagram on slide 12, to show the key features of constructive waves.

Destructive Waves

Students draw a copy of the destructive waves diagram on slide 13, to show the key features of destructive waves.

Longshore Drift

Show the illustration of longshore drift on slide 14 and explain how it moves sediment along the coast. Students complete the [Longshore Drift Activity Sheet](#) to reinforce their understanding of it.

Plenary

Know Your Wave!

Students show their understanding of constructive and destructive waves by taking part in the Plenary Game Show on slide 17, where they have to select whether the factor relates to constructive or destructive waves.