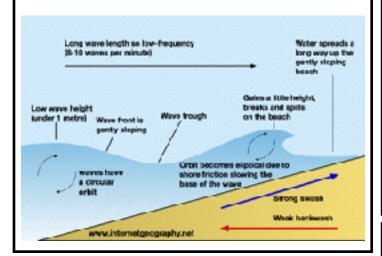


# Memory Geogger

Identify the type of wave shown in the image below.



Why are some waves stronger than others?

What causes a wave to break?

What is swash?

- 1. A wave returning to the sea. This pulls beach material towards the sea.
- 2. A wave moving up a beach. This pushes sediment up the beach away from the sea.

Constructive or destructive waves? Look at the characteristics below and identify whether they are features of constructive or destructive waves.

Build beaches.	Low wave frequency (8-10 waves per minute).	Strong swash, weak backwash.
Weak swash, strong backwash.	Steep wave front, typically over 1 metre.	Wave spills onto a beach.
Some backwash soaks into the sand.	Destroy beaches.	Can form offshore bars.
High wave height.	Wave plunges into a beach.	Low wave height.
Typically found in sheltered bays.	High wave frequency (10-14 waves per minute).	Short wave length.

## Identify the type of wave shown in the image below.

Constructive wave

#### What causes a wave to break?

Friction from the beach slows the lower part of the wave but the upper part continues to move forward and breaks.

### Why are some waves stronger than others?

The size of a wave depends on its fetch. The fetch is the distance a wave travels. The greater the fetch, the larger the wave. Wind speed also has a significant effect on the size of waves. The stronger the wind the larger the wave. This is because energy is transferred from the wave. Finally, wind duration also affects the size of a wave. The longer wind blows over the sea or ocean the larger the wave.

#### What is swash?

1. A wave returning to the sea. This pulls beach material towards the sea.

### Constructive (C) Destructive (D)

Build beaches. (C)	Low wave frequency (8-10 waves per minute). (C)	Strong swash, weak backwash. (C)
Weak swash, strong backwash. (D)	Steep wave front, typically over 1 metre. (D)	Wave spills onto a beach. (C)
Some backwash soaks into the sand. (C)	Destroy beaches. (D)	Can form offshore bars. (D)
High wave height. (D)	Wave plunges into a beach. (D)	Low wave height. (C)
Typically found in sheltered bays. (C)	High wave frequency (10-14 waves per minute). (D)	Short wave length. (D)