

Why do oceans matter?

- Climate
- Environment
- Industry

Year 5 Term 3



Key geographical concepts

- Location
- Place
- Human and physical geography



Key learning

- Humans use oceans in a variety of ways including for trade, leisure, research and to create energy. These can be helpful and harmful to the oceans.
- There are five different ocean zones as the ocean gets deeper. In the zones closest to the surface, the water is warmer and lit up by sunlight but as it gets deeper, the water gets colder and sunlight is unable to penetrate it. Different animals and plants live in different zones.
- Tides are caused by the moon's gravitational pull as it pulls the ocean towards it. They change depending on the position of the moon and the rotation of the earth.
- Ocean currents move water all around the world and this can distribute heat away from the equator. The UK has a mild climate because of an ocean current called the Gulf Stream
- Climate change is having adverse effects on the world's oceans, such as increasing sea temperatures, increasing acidity due to more carbon being absorbed, coral bleaching and ocean levels rising.



Key vocabulary

climate change	Long term shifts in average temperature and weather patterns.
erosion	The geological process in which earthen materials are worn away and transported by natural forces such as wind or water
Gulf Stream	The Gulf Stream is a strong ocean current that brings warm water from the Gulf of Mexico into the Atlantic Ocean
gyre	A large system of circular ocean currents formed by global wind patterns and forces created by Earth's rotation
ocean current	The movement of a large area of seawater driven by the wind, gravity and water density.
ocean trench	Long, narrow depressions on the seafloor; these chasms are the deepest parts of the ocean.
ocean zones	Layers of the ocean based on how deep it is. Made up of: sunlight zone, twilight zone, midnight zone, the abyss, trenches
overfishing	The number of fish decreasing as a result of extreme amounts of fishing.
tides	The alternate rising and falling of the sea, due to the gravitational pull of the moon.



Big Ideas – Our Learning Journey

Reception
Environment - Outdoor adventures
Settlement - Exploring maps

Year 1/2
Climate - Hot and Cold Places
Environment - Coasts, Hot and Cold Places, Wonderful World
Industry - Coasts, Hot and Cold Places

Year 3/4
Climate - Rainforests
Environment - Megacities, Local Area study, Rainforests, Earthquakes
Industry - Megacities, Local Area study

Year 5/6
Climate - Rivers, Country Survival, Oceans, Deserts
Environment - Rivers, Oceans, Deserts
Industry - Oceans, Deserts



Ethics

How should we be protecting our oceans?