

Design your own super plankton

What are plankton?

In the ocean there are tiny plants and animals that can only be seen with a microscope, called *plankton*. The plant-like creatures are called *phytoplankton* or *marine algae*, and there are millions in our ocean, providing food for marine life all over the world. There are different types of plankton with lots of different forms and features. Some forms have spikes to help defend themselves, while others have tails that help them to swim in the ocean. Some even have compounds inside them that make them glow in the dark, called *bioluminescence*.

Why are they important for the environment?

Phytoplankton make their own food using carbon dioxide (CO₂) in the water for *photosynthesis*, just like plants do on land from the air. Through this process, they help remove CO₂ from the water and atmosphere and produce oxygen, which helps combat climate change. Even though phytoplankton are tiny, they are vast in number, and can have a big impact on the amount of carbon on our planet. In fact, all the phytoplankton in the ocean remove as much CO₂ from the air as all the plants on land do!

How do plankton survive?

Plankton have a tough life in the ocean with everything trying to eat them, so some plankton have evolved into different shapes to help them survive:

- Some are spiky or spiny to stop them from being gobbled up
- Some band together by forming colonies
- Some can swim away using their long tails
- Some have scales that act like armour
- Some even light up to alarm their predators

Let's design one!

If you could make your own plankton, what would it look? What features would you give it to help it survive in our ocean? What colour would you like it to be, and what size? Can you make up any special powers that could turn it into super plankton? Be creative and use your imagination!