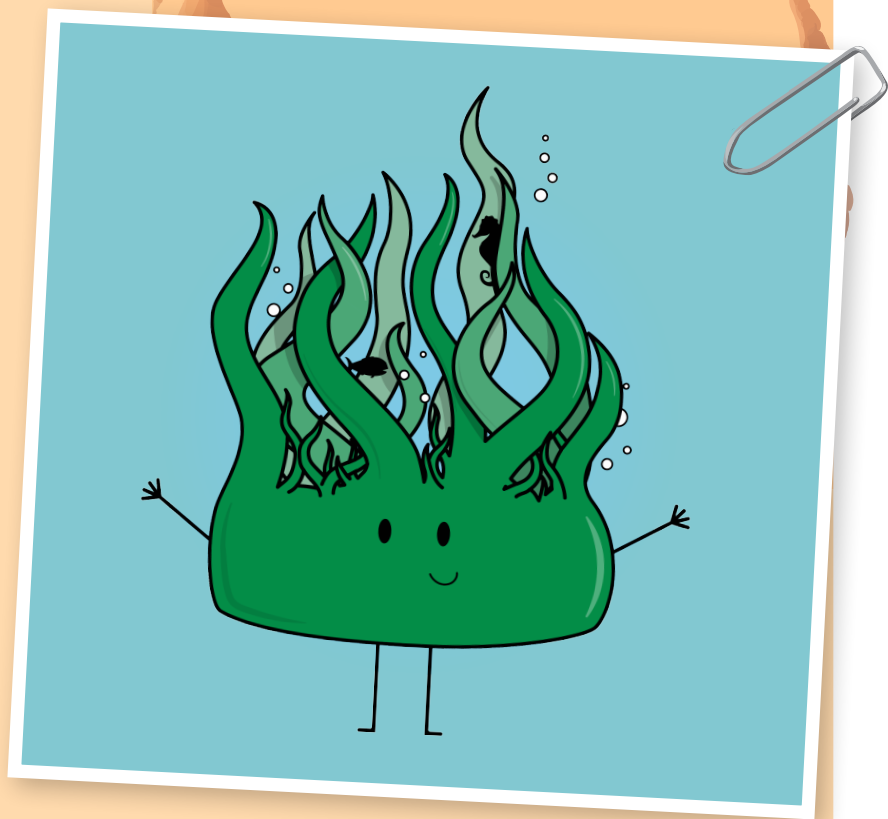
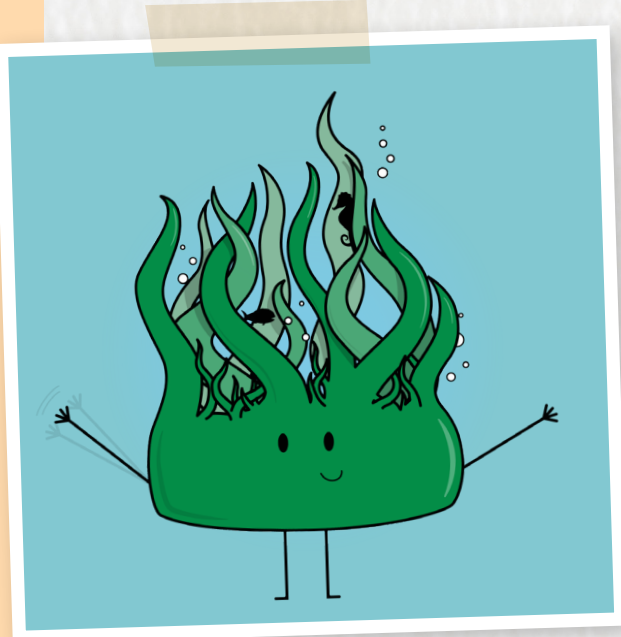


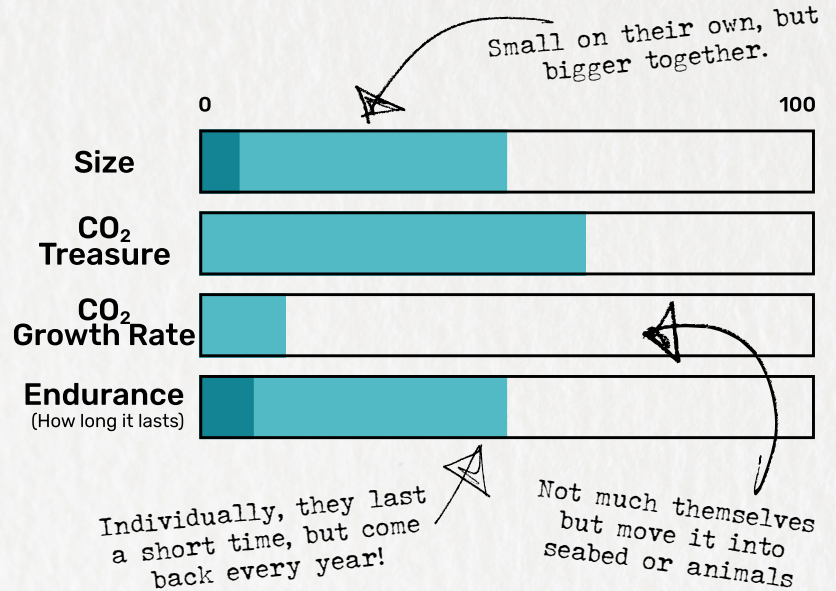
TOP SECRET



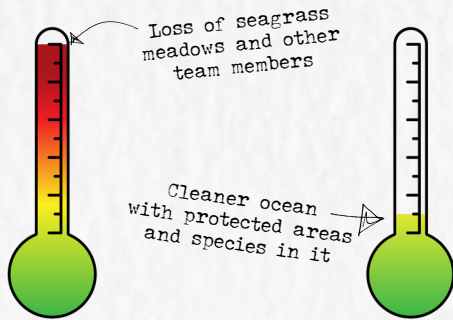
HERO PROFILE



POWER FEATURES.



CLIMATE CHANGE INDICATOR.



HISTORY.

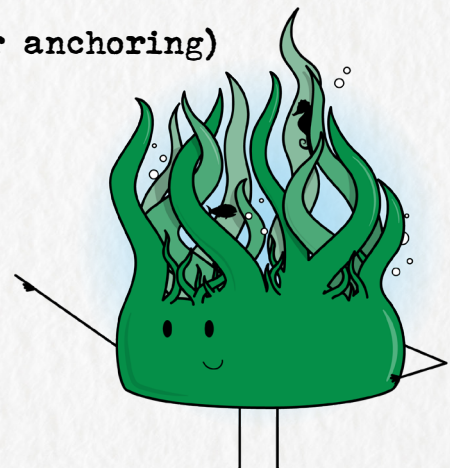
Sitting on the sea floor, quietly getting on with the job of protecting us all. This hero can be found all over the world, working together with a team of hidden heroes under the waves, gathering in large meadows collecting CO₂ and passing it on to animals that feed on them.

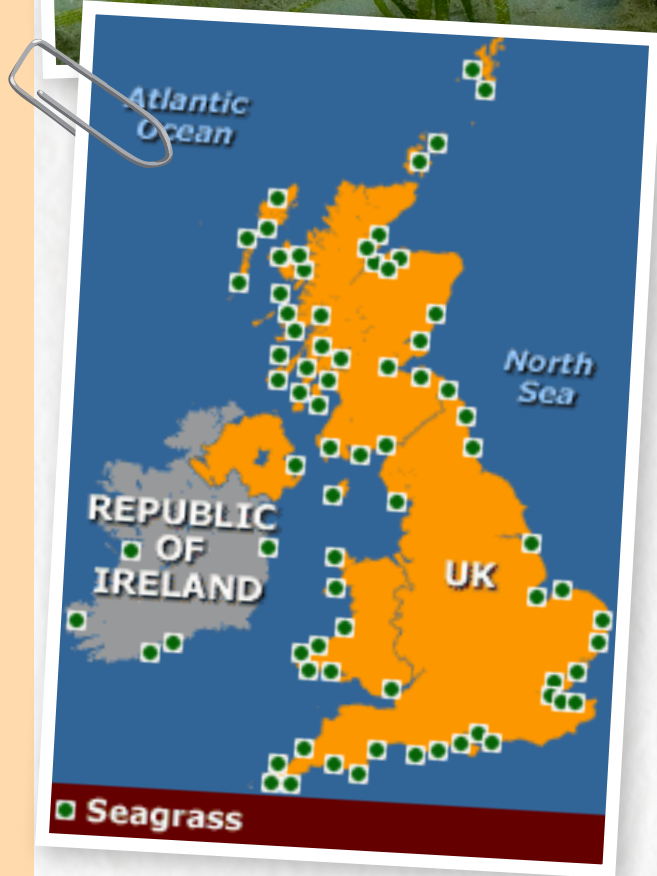
THREATS/VULNERABILITIES.

Pollution (coming from the land and the sea)
Removal (by fishing practices like dredging or anchoring)
Building (developments at the coast)

TEAM MEMBERS.

Plankton
Seaweed
Seabed





Seagrass is the only flowering plant growing in marine environments.

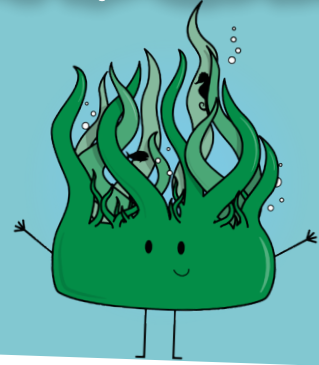
Where they grow in large numbers they are known as "meadows" because it looks like grassland.

They are found all across the UK and are important habitats for species like seahorses and cuttlefish.



SEAWEED

Seagrass team member



One type of seaweed called kelp can grow in "forests", like in the picture above; others grow on rockpools at the shore.

Seaweed (algae) comes in three different types known as green, brown and red.

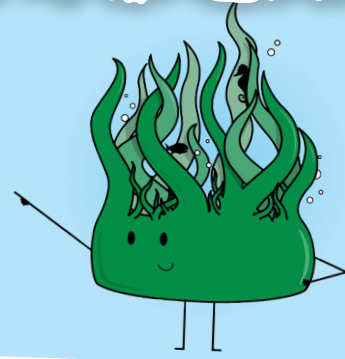
Lots of animals rely on seaweed to eat. Seaweed is at the bottom of the food chain. Even humans eat seaweed.

Fun fact: toothpaste has seaweed in it!



PHYTOPLANKTON

Seagrass team member



Phytoplankton are tiny organisms that act a bit like plants, using chlorophyll to absorb sunlight and grow. It's so small you need a microscope to see it, but it is SUPER important!

Around the world, phytoplankton makes more oxygen than trees!

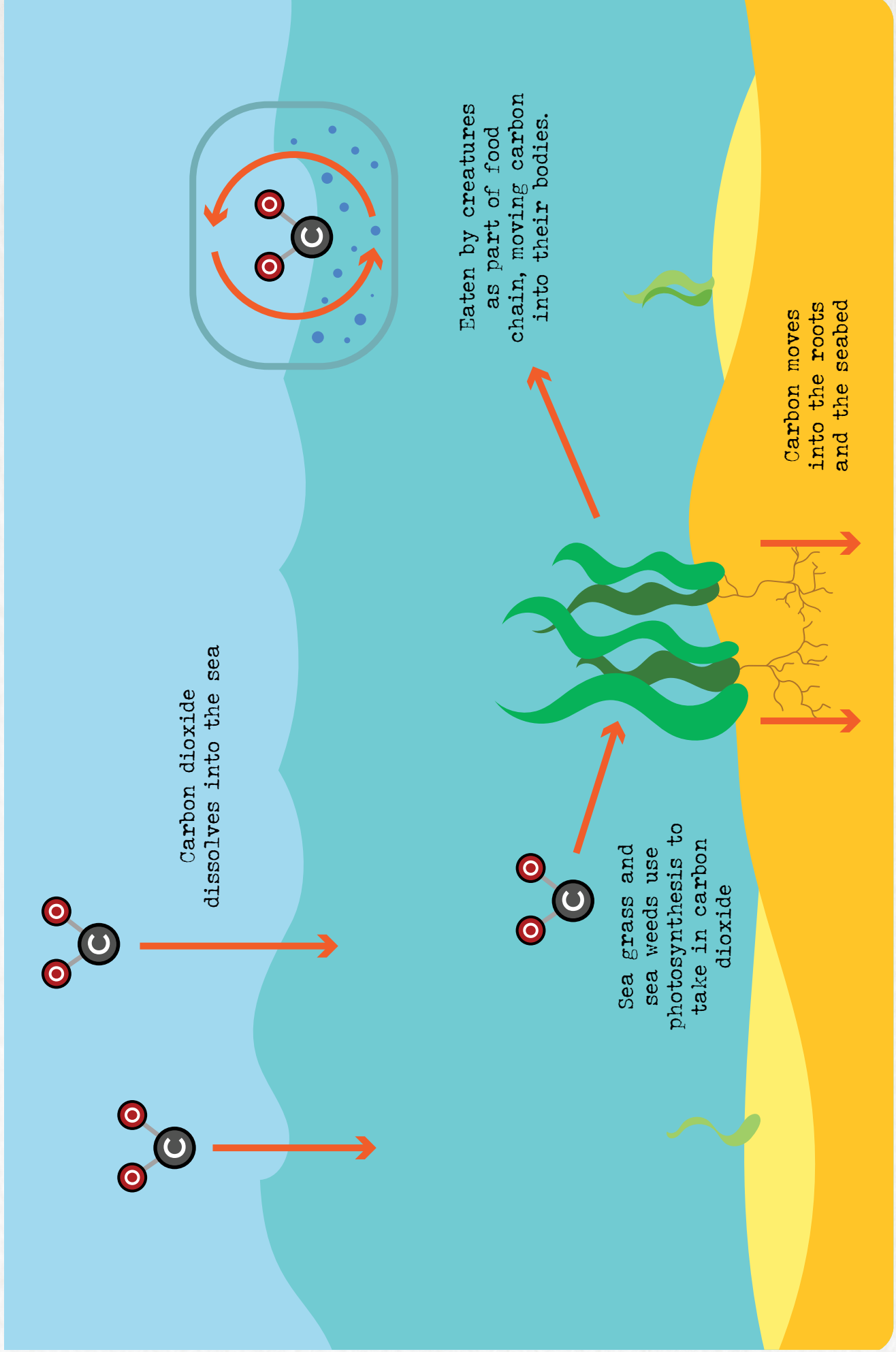
Even though it is tiny, when it "blooms" you can see it from space!

Some of the ocean giants (like this basking shark — which could be as big as a bus) depend on plankton (both phytoplankton and zooplankton) for food.



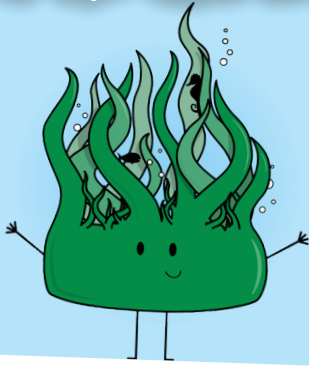
© ALEXANDER MUSTARD / ZOOVISION

How does seagrass and seaweed help take carbon from the atmosphere?



SEABED

Seagrass team member



© ALEXANDER MUSTARD/2020 DIVISION

Around the UK, there are some shallow seas before it gets really deep in the Atlantic Ocean.

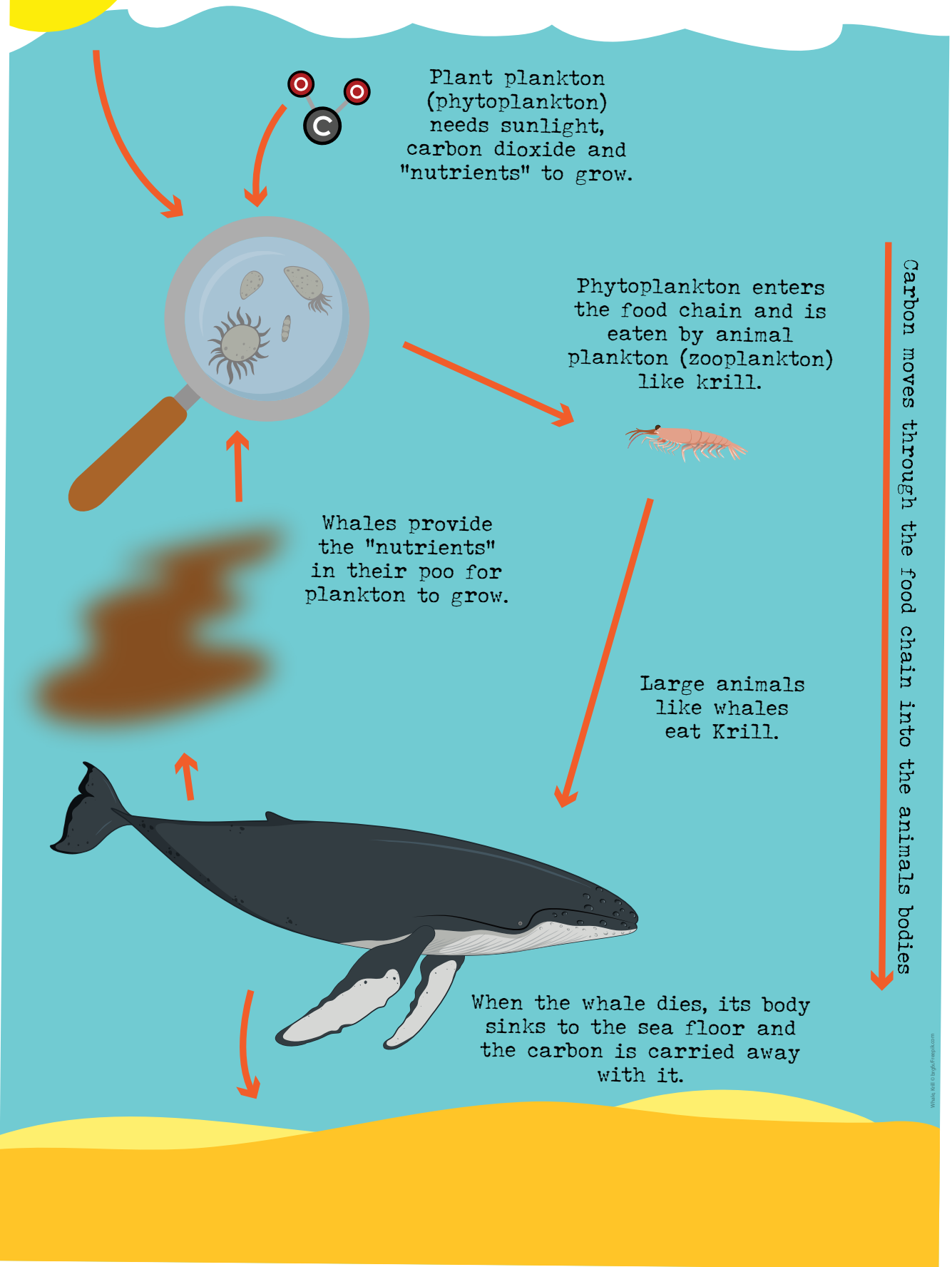
There are lots of different habitats on the seabed around the UK.



Anything that dies in the ocean may fall to the ocean floor in what scientists call "marine snow".



How do Plankton and the Seabed link to help take carbon from the atmosphere?



Plant plankton (phytoplankton) needs sunlight, carbon dioxide and "nutrients" to grow.

Phytoplankton enters the food chain and is eaten by animal plankton (zooplankton) like krill.

Whales provide the "nutrients" in their poo for plankton to grow.

Large animals like whales eat Krill.

When the whale dies, its body sinks to the sea floor and the carbon is carried away with it.

Carbon moves through the food chain into the animals bodies

PLASTIC POLLUTION



LAND POLLUTION



SEWAGE



SOIL EROSION

THREATS

MOORING BOATS



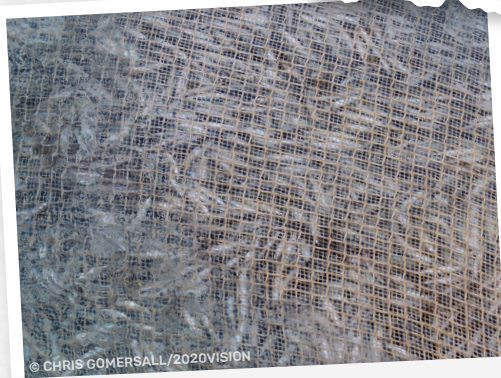
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POLLUTION AT SEA



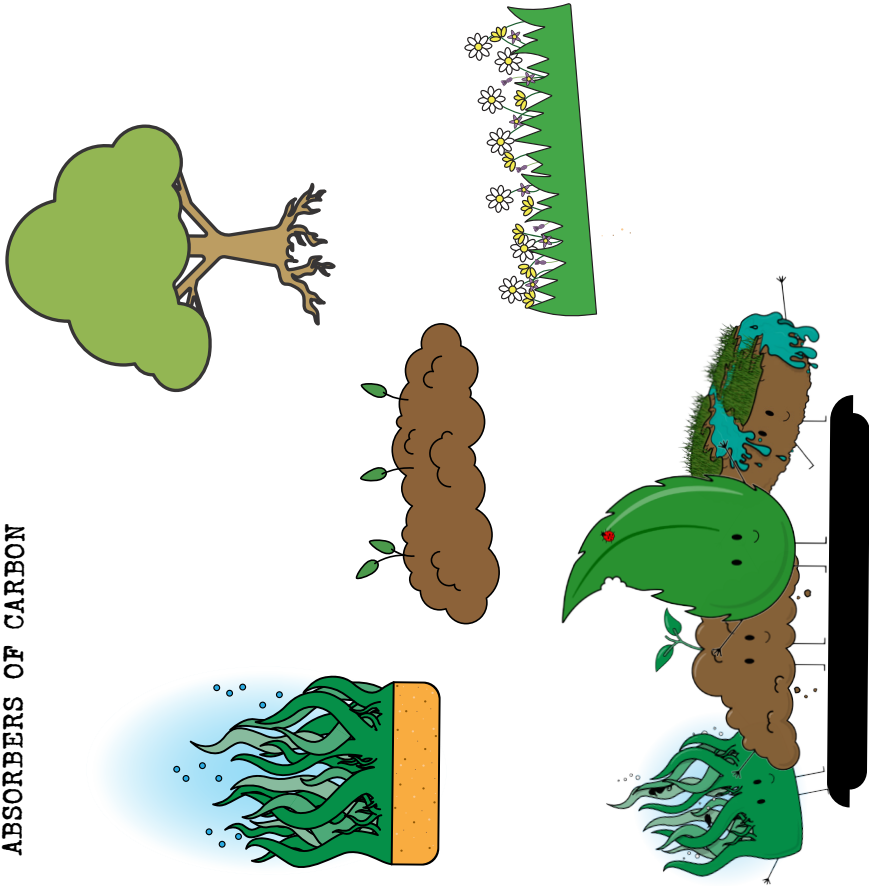
BUILDING AT THE COAST



© CHRIS GOMERSALL/2020VISION

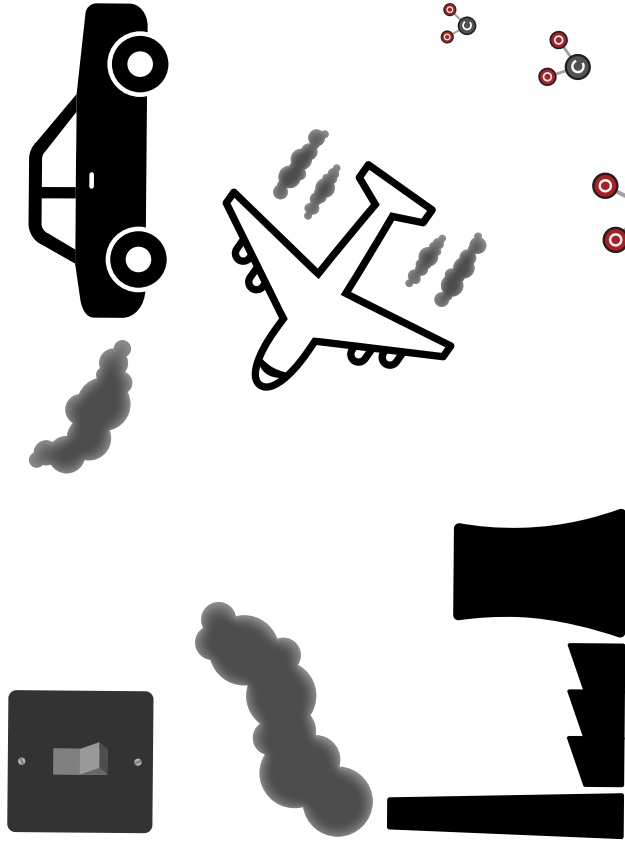
OVERFISHING

ABSORBERS OF CARBON

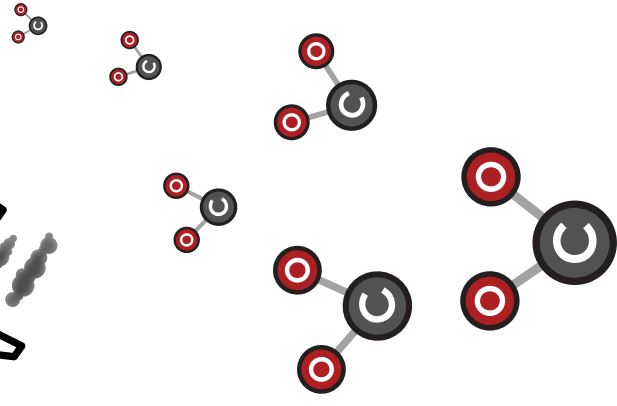


Another way to bring balance is to increase the number and strength of heroes to absorb carbon so **MORE** is taken out of the atmosphere.

PRODUCERS OF CARBON



One way to bring balance is to **REDUCE** the amount of carbon emissions we are producing so **LESS** is being released into the atmosphere.



How can I help?
Who can I influence?



Some ideas to investigate:

How? Assembly? Noticeboard? Webpage? Letters? Newspapers?
Videos? Posters? Leaflets? Support Campaigns?

Other sources of information

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Habitats

kids.kiddle.co/Seagrass

mocomi.com/what-is-seaweed/

vimeo.com/401661838

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Pollution

nationalgeographic.org/encyclopedia/marine-pollution/

Fishing

mcsuk.org/goodfishguide/search



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Plastics

plasticfreeschools.org.uk/

lessplastic.org.uk/9-ways-to-reduce-plastic-in-your-school/