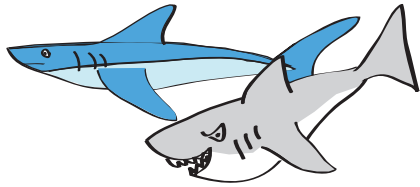


WHERE DO SHARKS GO FOR DINNER?

1.



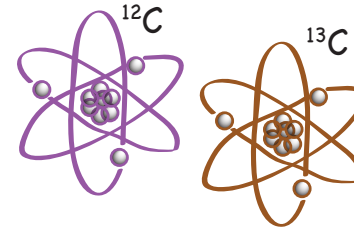
GLOBALLY, SHARK POPULATIONS ARE DECLINING: TO PROTECT THEM, WE NEED TO KNOW HOW THEY MOVE AROUND THE OCEANS FOR FOOD

TRACKING SHARKS ACROSS THE OPEN OCEAN IS VERY DIFFICULT, SO WE TURNED TO FORENSIC TOOLS..

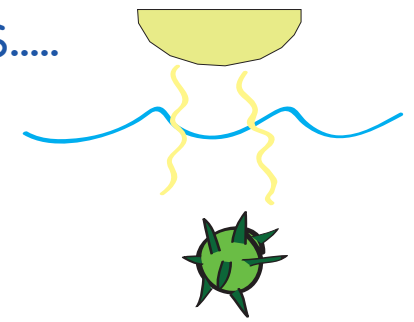


HOW IT WORKS....

2.



TWO ISOTOPES BEHAVE DIFFERENTLY IN REACTIONS. . .



...INCLUDING DURING PHOTOSYNTHESIS. . .

WHAT WE DID....

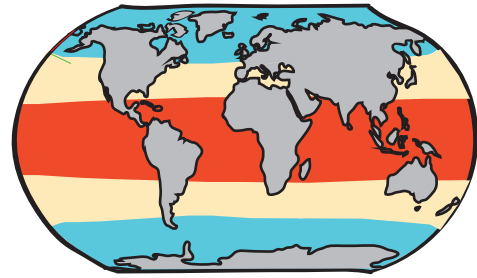
3.



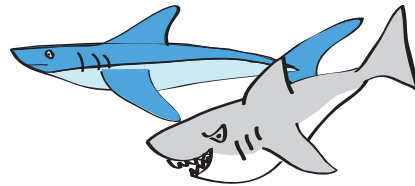
SCIENTISTS MEASURED ISOTOPES IN **5394** SHARKS FROM **114** SPECIES AROUND THE WORLD ...



... AND COMPARED THEM TO PLANKTON ISOTOPES FROM THE SAME PLACES



... LEADING TO DIFFERENCES IN ISOTOPE RATIOS IN PLANKTON ACROSS THE GLOBAL OCEAN

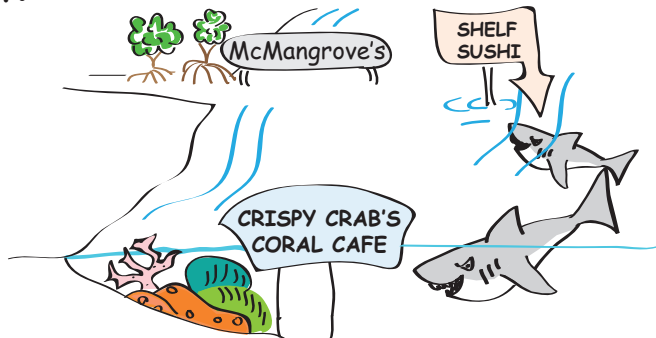


ISOTOPES IN PHYTOPLANKTON ARE PASSED THROUGH THE FOOD CHAIN TO SHARKS, LEAVING A CHEMICAL RECORD IN THE SHARK'S TISSUES OF WHERE THEY ATE

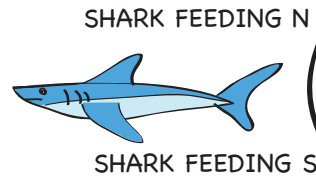
WHAT WE FOUND....

4.

SHELF AND OCEANIC SHARKS MOVE AND FEED IN VERY DIFFERENT WAYS. . .



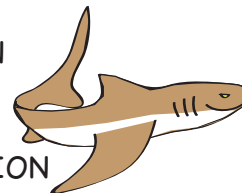
SHARKS FROM SHELF SEAS FEED CLOSE TO HOME AND DIFFERENT INDIVIDUALS SPECIALISE IN DIFFERENT HABITATS



OCEANIC SHARKS GET MOST OF THEIR FOOD FROM MID-LATITUDE AREAS WITH LOTS OF PLANKTON (AND HIGH FISHING PRESSURE)

SO WHAT?

THIS INFORMATION CAN HELP TO DESIGN BETTER SHARK CONSERVATION MEASURES



paper: Bird et al 2018: A Global perspective on the trophic geography of sharks Nature Ecology and Evolution [link]

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