

YEAR 4 SCIENCE ACTIVITY

Australia's Marine Habitats: Who Eats Who?

AC9S4U01 – Producers, consumers, decomposers and food chains

Name: _____ Date: _____

Learning goal: I can explain the roles of producers, consumers and decomposers and use arrows to show feeding relationships in a marine habitat.

1. Sort the organisms

Write **P** for producer, **C** for consumer or **D** for decomposer.

Algae _____	Seagrass _____
Sea turtle _____	Sea urchin _____
Sea star _____	Shark _____
Black sea cucumber _____	Marine bacteria _____

2. Build a food chain

Use these organisms to make a simple marine food chain. Remember: the arrow points towards the organism that gets the food.

SUN → _____ → _____ → _____

Choose from: algae • sea urchin • sea star • shark

What is the producer? _____

Which organisms are consumers? _____

3. A different food chain

Complete this food chain using a producer and a sea turtle.

SUN → _____ → SEA TURTLE

Why is the sea turtle a consumer? _____

4. What do decomposers do?

Black sea cucumbers and decomposers have important roles on the seafloor. Bacteria and fungi break down dead organic material and help recycle nutrients.

In your own words, explain why decomposers are important in a habitat:

5. Think like a scientist

Imagine the algae in a marine habitat suddenly became much less abundant.

What could happen to sea urchins that eat algae?

What could happen to animals that depend on those consumers?

6. Challenge: Food web

Draw arrows to connect at least four of the organisms below into a food web. Add another marine producer if you can.

ALGAE • SEAGRASS • SEA TURTLE • SEA URCHIN • SEA STAR • SHARK • BLACK SEA CUCUMBER

Extension question: How is a food web more complex than a single food chain?
