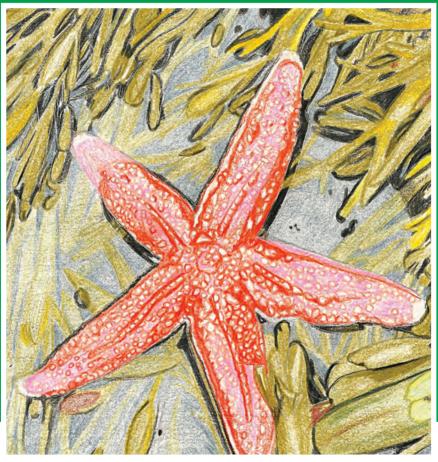
## **Tidepools Alive!**

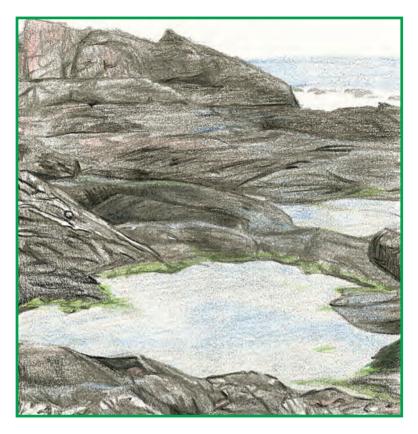


Level 3 Reader



Protecting the blue planet





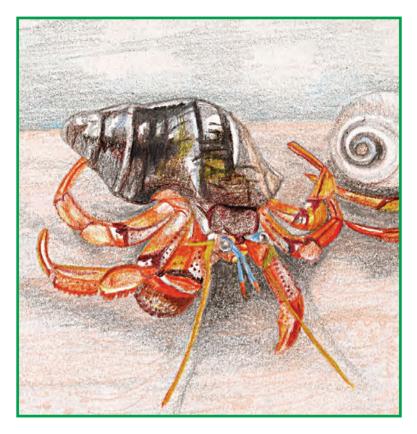
Every day the water crawls up the beach and back down the beach. This is called the tide. When the ocean water covers most of the beach, it is high tide. When much of the beach is exposed, it is low tide.

As the tide changes from high tide to low tide, water is left behind and becomes trapped in holes and between rocks. These pools of water made by the tide are called tidepools. Many interesting animals can be found in these tidepools.



This is a snail. It has a hard shell that protects its soft, slimy body. As the snail moves by using its body, or its foot, it leaves behind a trail of slime. The snail also has two antennas with eyes at the bottom. It uses these antennas to feel around for food to eat. When the snail senses a predator, it hides inside its shell and closes its front door to protect itself.

How do you protect yourself?



This is a hermit crab. It has two antennas, two claws, ten legs, and a shell that it carries on its back. Unlike the snail, the hermit crab does not grow its shell. Rather, it borrows its shell from the snail that grew it or from another hermit crab. As the hermit crab grows bigger, it has to find a larger shell.

What do you outgrow when you get bigger?



These are clams. Each has two shells that close tightly together to protect its soft body. To eat, the clam opens slightly and sticks out its two straws. It uses the first straw to slurp up salt water containing plankton. Then it uses the second straw to spit out the excess water. To protect itself the clam digs down into the sand using its foot.

How do you dig in the sand?



These are mussels. Each one has a soft body and two shells. Mussels produce sticky byssal threads. They use these threads to stick to rocks and to other mussels for protection. By sticking to each other, the mussels are often too heavy for predators, like seagulls, to pick up.

Can you think of other animals that stay together for protection?



This is a sea star. It has an eyespot at the tip of each of its five arms. The sea star has two mouths, one for drinking and one for eating. It eats by using its five arms to pull open a mussel. Then, it spits out its stomach and digests the mussel's soft body for about four hours.

How do you eat? How long does it take to eat your food?



You are a helpful human. You have a body that you can use to gently explore the tidepool. How can you keep the tidepool clean and the animals safe?

Explore a local tidepool or beach. What did you find?

Add what you see in a tidepool.

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