

# What are adaptations?



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What does an *ORGANISM* need to survive? Plants, animals, and other living things need *RESOURCES* such as food, water, and space in order to live, grow, and *REPRODUCE* (produce offspring). Many organisms also need to protect themselves from being eaten, or need to compete with other organisms in order to get resources. An organism's *ENVIRONMENT*, the place where it lives, can also create challenges. For instance, a *TIDE POOL*, a puddle left behind by the ocean during low tide, is a constantly changing environment. Sometimes there are crashing waves in a tide pool, and sometimes there is not much water at all. Sometimes the hot sun heats up the tide pools, and sometimes rain changes the water's salinity by making it less salty. (makes the water less salty) An *ADAPTATION* is a trait or behavior that an organism has or does to help them survive and thrive!

## Tide Pool Adaptations: Shells

Adaptations are *INHERITED*, or passed down from parents. For example, baby crabs *inherit* their claws from their parents, and so do lobsters. Crabs and lobsters have a common ancestor, which means they share a great-great-great-great-great-(lots more greats)-grandmother that passed on its claws to both species. In this way, animals that are related can have similar adaptations. However, multiple animals living in the same environment may find similar ways to survive, even if they aren't related at all. In the tide pools, many organisms have *adapted* ways of staying stuck to rocks so that they don't get swept away in the waves.

**Make a guess! Drag and rotate the lines to match the organism to its sticky adaptation:**



Sea Snail



Sea Star



Seaweed



Mussel



Barnacle

Shoots out sticky threads

Foot acts like one large suction cup

Cements onto rock with "glue"

Holdfast (like a plant's roots)

Sticky tentacle-like tube feet

