

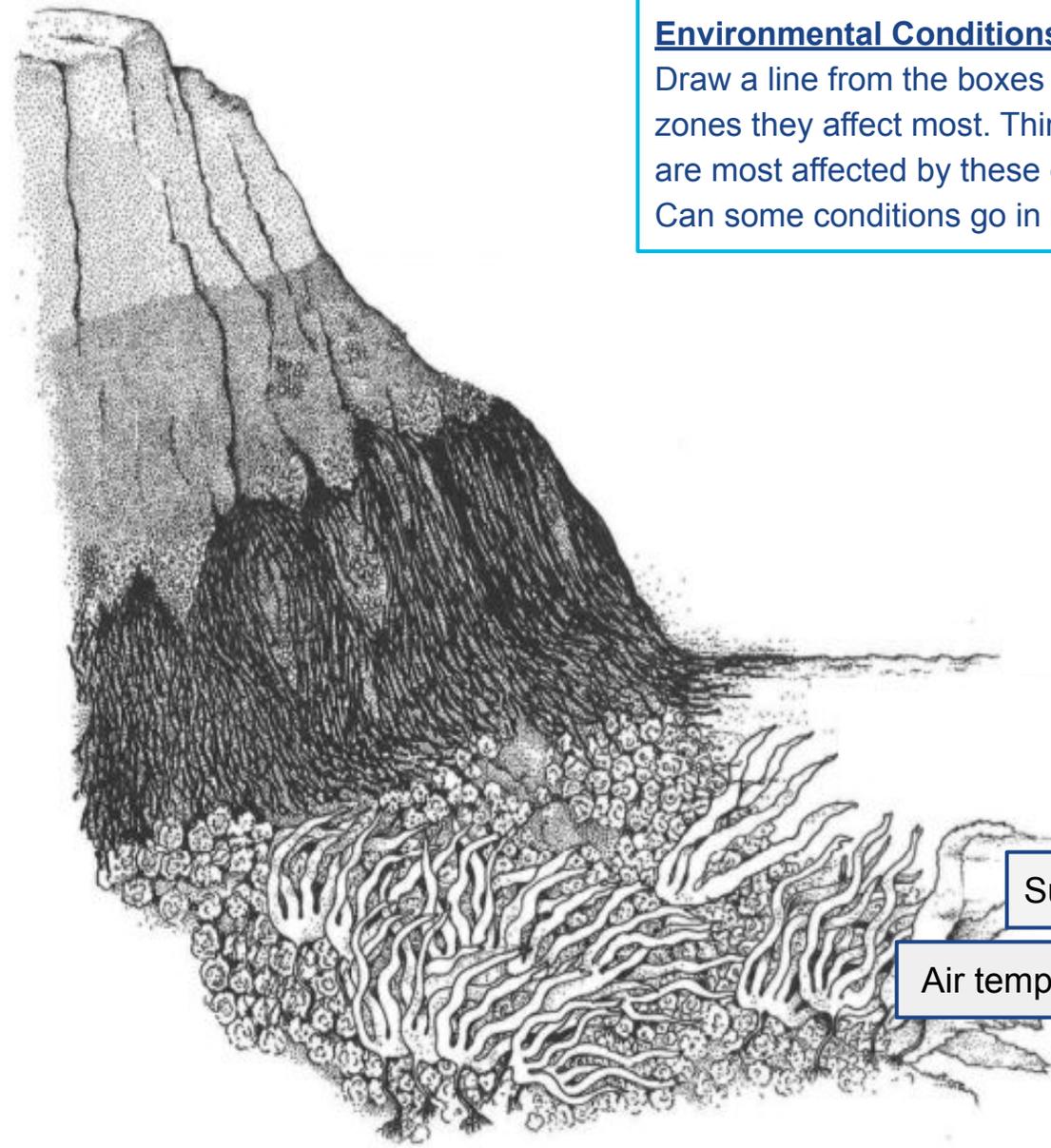
# MISSION: In the Zone



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Animals and plants living on the rocky shore have developed behaviors and structures that enable them to survive in the stressful conditions of the intertidal *ENVIRONMENT*. These *ADAPTATIONS* can be observed in the *ORGANISM'S* shape or form (shells, spines, air bladders, tube feet) and behaviors (hiding, feeding, defense mechanisms).

Take a look at the different zones that exist in the intertidal below. Some zones are under the water more than others, as the tide moves in and out, twice each day. Think about the relationship of these zones with the tide, sunlight, saltwater, freshwater, and wind. Then, think about what adaptations might help an animal or plant successfully survive in these conditions.



**Environmental Conditions**  
Draw a line from the boxes below to the intertidal zones they affect most. Think about which zones are most affected by these environmental factors. Can some conditions go in multiple zones?

Crashing waves

Water temperature

Underwater half of the time

Salinity (saltiness of water)

Predators

Sunlight

High winds

Air temperature

Pollution

Rain/Snow



# MISSION: In the Zone



Animals and plants living on the rocky shore have developed *ADAPTATIONS* to help them live and thrive in their environment. Some organisms are *SPECIALISTS*, which means they are well adapted to the environmental conditions in one specific area. Specialists in the intertidal environment can only live in one zone. Others are *GENERALISTS* that have adapted to live in a wide variety of environments and survive in multiple ways. Generalists in the intertidal environment can move across multiple zones. Do you notice any patterns in the types of adaptations present in certain zones? Can you spot the generalist?

Match the organisms to their **ADAPTATION** superpowers.

Hard shell  
...protection  
from predators  
and sunlight

Byssal threads  
...attach to  
rocks so I don't  
get washed  
away!

Spines...  
Protection  
from  
predators

Air-filled  
sacs  
... help  
me float  
to get  
sunshine!

Pinching claws  
...protect me  
from predators

Softy, squishy  
body  
...can fit into  
tight, crowded  
spaces

Pinching claws  
... help me  
break up my  
food

Sticky tube fee  
...attach to  
rocks so I don't  
get washed  
away!

