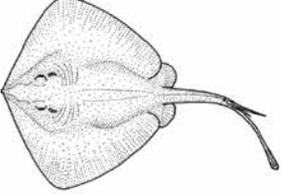
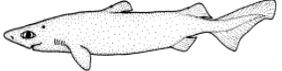
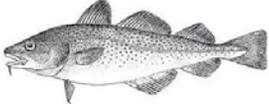
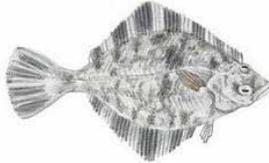
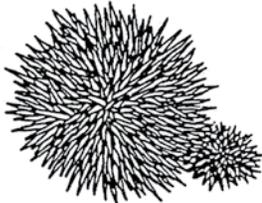


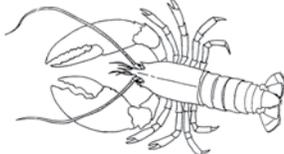
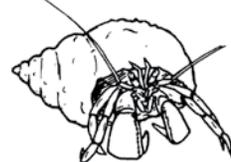
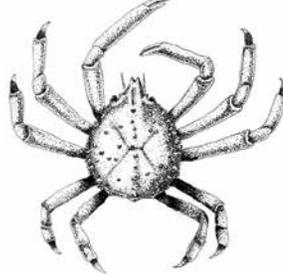
# Animal Adaptation Guide

Cartilaginous Fishes (Sharks, rays and skates have cartilage skeletons.)	
Senses	Examples
<b>Sight:</b> Can see well in the dark	 <p><b>Skate</b> No stinging barb Lays eggs Mostly found in cold water</p>
<b>Smell:</b> Very strong sense of smell	
<b>Touch:</b> Skin can feel whatever they touch.	 <p><b>Stingray</b> Stinging barb (for defense only) Live birth Mostly found in warm water</p>
<b>Taste:</b> Most fish can taste their food.	
<b>Hearing:</b> You can't see their ears, but most fish have very good hearing.	 <p><b>Shark</b> Most less than 4 feet long Some species lay eggs Others have live birth</p>
<b>Movement:</b> Most fish have lateral lines, which can sense motion and vibration.	
<b>Electricity:</b> Most cartilaginous fish have <i>ampullae of lorenzini</i> , which can feel electricity.	

Bony Fishes (“Regular fish” have bone skeletons.)	
Senses	Examples
<b>Sight:</b> Large eyes see well, small usually cannot	 <p><b>Cod</b> Barbel on chin Visible lateral line down the side</p>
<b>Smell:</b> Very strong sense of smell	
<b>Touch:</b> Skin can feel whatever they touch.	 <p><b>Flounder</b> Both eyes on one side of the head</p>
<b>Taste:</b> Most fish can taste their food.	
<b>Hearing:</b> You can't see their ears, but most fish have very good hearing.	 <p><b>Lumpfish</b> Modified fins on the bottom act as a suction cup</p>
<b>Movement:</b> Most fish have <i>lateral lines</i> , which can sense motion and vibration.	
<b>Electricity:</b> Some bony fish have <i>barbels</i> , which can sense electricity.	

# Animal Adaptation Guide

Echinoderms (Animals with “spiny skin”)	
Senses	Examples
<p><b>Sight:</b> Sea stars and sea urchins can sense light and dark.</p>	
<p><b>Smell/Taste:</b> Can <i>chemosense</i>—similar to smell or taste.</p>	<p><b>Sea Star</b> Suction-cup tube feet on the bottom to cling to rocks; one eye spot on the end of each arm</p>
<p><b>Touch:</b> Skin can feel whatever they touch.</p>	 <p><b>Sea Urchin</b> Suction-cup tube feet all over the body to cling to rocks; spines all over for walking and protection</p>
<p><b>Vibration:</b> Can sense vibration in the water and through the ground</p>	 <p><b>Sea Cucumber</b> Suction-cup tube feet in five rows down the body. Feathery arms catch plankton in the water to eat.</p>

Crustaceans (Lobsters and crabs with many-jointed legs)	
Senses	Examples
<p><b>Sight:</b> Most crustaceans have <i>compound eyes</i>, like a fly or a spider.</p>	 <p><b>American Lobster</b> Eight walking legs, plus two legs with large claws—one narrow “pincher” claw and one wide “crusher” claw.</p>
<p><b>Smell/Taste:</b> Can <i>chemosense</i> with their short antennae.</p>	 <p><b>Hermit Crab</b> Six walking legs, the front two have claws. Four hidden legs hold onto a reused snail shell for protection.</p>
<p><b>Touch:</b> Can feel with their long antennae, and with their legs and claws</p>	 <p><b>Spider Crab</b> Ten long walking legs, the front two have claws. Glue algae and other material to their shell to camouflage.</p>
<p><b>Vibration:</b> Can sense vibration with their antennae and their legs</p>	