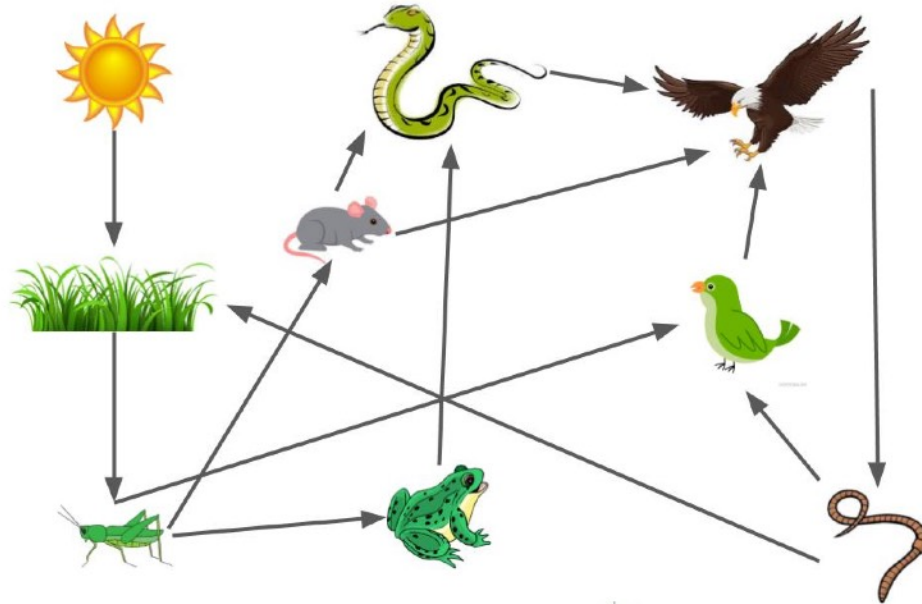


Worksheet Answer Sheets

FOOD WEB

Use arrows and complete the food web



Name: _____



THE DIGESTIVE SYSTEM ANSWER KEY



In the video you learned that animals have specialized structures that help them break down their food so they can get the nutrients they need to stay alive. **Seastars and brittle stars eat different types of food. Explain how their digestive system is designed to help them do this.....**



The seastar eats live food, but it has a very small mouth so it....

Uses 2 different stomachs, the cardiac goes outside of the body and starts to digest because they cannot pull the clam into the seastar.

Then the pyloric stomach pulls in the partially digested food and then digestive glands in each arm break it down further



The brittle star is a scavenger that has to crawl on top of its food and.....

Uses its 5 teeth to pull material off of the dead body of the animal it is eating. They use their arms to anchor onto the food.

Their stomach takes up most of the inside of their body cavity and has specialized pouches with a lot of surface area to digest and absorb the food

VASCULAR SYSTEMS ANSWER KEY



Based on what you learned in the video, fill in the table below comparing the cardiovascular system to the haemal system

	<u>CARDIOVASCULAR</u>	<u>HAEMAL</u>
What types of organisms have this system?	humans	seastars
What liquid moves around in this system? What are the components (cells) in that liquid?	Blood containing red blood cells, white blood cells, and platelets	Water - no types of cells since it is water and not blood
What are the important structures/anatomy for this system? What do they do?	Heart - pumps blood Vein - return blood to heart Artery - carry blood w/ oxygen from heart to body	Madreporite - brings water into animal Canals - tubes that carry water out to arms
What is carried around in the liquid for this system?	Nutrients and gases	Nutrients and gases
Why is this system ideal for the types of organisms that have it?	Humans have a complex body system that requires blood be pumped far from the heart, so strong muscular heart makes that possible plus pushing it through lots of small tubes	Seastars do not have a heart or need water to be pumped really far from the center of its body so the madreporite can easily bring in water and push it through like a hydraulic system

ANIMAL SENSES

In Long Island Sound, some animals live on the bottom and others actively move around in the water column

Which types of receptors would be most helpful for living in each area? Make sure to explain your answer!

Auditory receptors, Mechanoreceptors, Chemoreceptors, Photoreceptors

<u>Bottom Dwelling Animals</u>	<u>Actively moving around in water column</u>
<p><i>Example</i></p> <p>Bottom is often dark - less likely to be visual for most animals Instead other senses are heightened to make up for it</p>	<p><i>Example answers, could be others</i></p> <p>Wide open area to observe</p> <p>Mechanoreceptors (lateral line), Chemoreceptors (smelling organisms around) Auditory (echolocation)</p>

Which of your senses would be most important to you if you lived in the water? Explain your answer.

Answers vary

If an animal did not have any eyes, how could its other senses change or adapt to help it survive?

Answers vary, some examples are...

Other senses are heightened to make up for it. They may also have specialized body parts that help with smell, taste, hearing, or touch that differs from animals that can see. It may develop other defenses to protect it (sea anemone)

Name: _____

