

Yeti Crab Lab

Name:

Period:

Scientists often use models for experiments if using the real thing is too difficult. Yeti Crabs live around black smokers on the ocean floor in very high temperatures and in total darkness. Because of where they live, it is very hard to collect these crabs for study. However, we can learn how parts of their bodies function without having an actual crab in front of us. Use the items provided to explore how the Yeti Crab uses the bristles on its body to collect bacteria to eat.

You have been provided with several kitchen utensils:

- salad serving spoon and fork
- tongs
- bristle brush

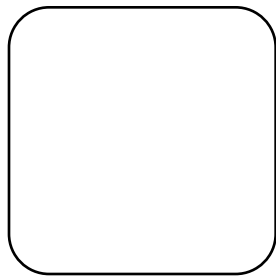
These items work like different parts of a crab's body that could be used for collecting food.

1. The serving spoon and fork work like the crab's _____ because they both...

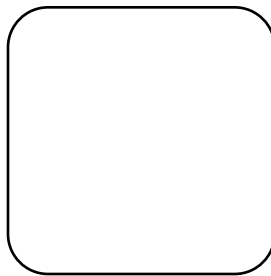
2. The tongs work like the crab's _____ because they both...

3. The bristles work like the crab's _____ because they both...

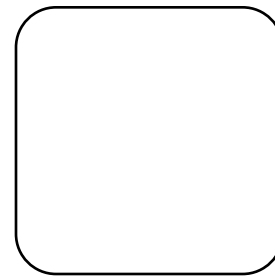
4. Take turns at your table using the utensils to try and pick up the "bacteria" floating in the bowl of water. In the boxes below, draw what each utensil looks like after you try to collect the "bacteria". Using dots, show how much "bacteria" you were able to get out of the water using each of the different utensils.



SERVING SPOON & FORK



TONGS



BRISTLE BRUSH

5. Which of the utensils was the most effective at collecting "bacteria" from the water?

6. Why was this utensil the most effective at collecting the "bacteria"?

7. Turn your observations into a statement by finishing the sentence below:

Yeti crabs collect bacteria from the water by...