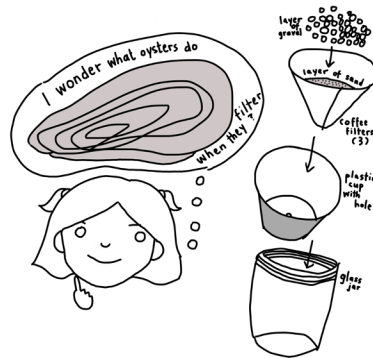


How do oysters help the water they live in as they filter feed? Let's do an experiment to find out!

Oysters like the San Francisco Bay's native Olympia oyster (*Ostrea lucida*) are filter feeders. They pump lots of water through their bodies and through their gills, where plankton and algae get trapped in the mucus. This gets moved to the oyster's mouth and stomach, where the food is digested.¹ Olympia oysters filter between 9 and 12 gallons of water per day!²

As scientists, we can ask ourselves:

I wonder how oysters can help the water they live in as they filter feed?



Let's do an experiment to see what oysters can do!³

You will need:

- 2 glass jars (1 empty, 1 filled with dirty water)
- 3 coffee filters
- 1 plastic cup with a small hole in the bottom
- Clean sand and gravel/pebbles

Follow these steps:

1. Fill one glass jar with dirty water. You can find a murky pond, or you can mix a bit of dirt into clean water to make it dirty.
2. Put the three coffee filters into the plastic cup with the hole, then put in a layer of sand, and top with a layer of gravel one to two thick each. Place the plastic cup on top of the empty glass jar.
3. Pour some of the dirty water into the plastic cup, and watch the water drain into the empty jar. What are your observations? Use words or pictures!
4. You've created a system that filters water, just like oysters! In what ways can you name how an oyster helps the environment? Use words or pictures!

Credits:

¹ <http://baybackpack.com/blog/how-does-an-oyster-filter-water>

² https://en.wikipedia.org/wiki/Ostrea_lucida

³ <https://teachbesideme.com/water-filtration-experiment/>

Video on oyster filtration on Anais Silber's YouTube channel:

<https://www.youtube.com/watch?v=goPjjMIb66A>

Ryan's World YouTube video with water filtering science experiment for kids:

<https://www.youtube.com/watch?v=6Z3JBH-Hg8w>