

Indoor Activity: Playdough River Ecosystem

Oil spills cause major long-lasting effects on numerous ecosystems. Hypothermia is a common occurrence in otters within the vicinity of a spill as the oil will coat their fur leaving them vulnerable to temperature drops. In addition, breathing and communication in marine mammals can become extremely difficult when their blowholes are clogged by the oil. These are only a few of the reasons it is extremely important for us to be aware of and take precautions regarding our impact as humans on other ecosystems. In this experiment you will be able to think critically about behaviors and relationships within a river ecosystem.

Benefits

- Learning the relationships between organisms in an ecosystem.
- Fun for all ages!
- Understand the effects of habitat loss.



Supplies

- Playdough
- Greenery
- Toy Animals
- Rocks
- Easy to Clean Work Surface
- Marbles for Water (Optional)

What to do

- Press the playdough onto your surface to create your desired terrain and river.
- Next add to the terrain using rocks and marbles.
- Once your terrain is finished place the animals in your ecosystem where you would find them in the wild. While doing this step think about the behaviors they might display.
- Add the finishing touches! Try making tracks in the playdough or adapting specific habitats for your animals.

Outdoor Activity: Explore the Creek with an Underwater Scope

A great way to understand river ecosystems is to observe them in action! Using an underwater scope can give you a clear image of what really lies beneath the water's surface. It is important to be careful when on adventures in the creek because you never know what organisms have made their home on the creek floor. While using your underwater scope see if you can find any of the following critters: crawfish, tadpoles, snails, or caddisfly larvae.

Supplies

- Large Sports Drink Bottle
- Plastic Wrap
- Rubber Band
- Tool To Cut With
 - Parent Supervision and Assistance



What to do

- Start by having an adult help you cut both the top and bottom off the bottle making the bottle a cylinder with an opening at both ends.
- Use the plastic wrap to cover one of the openings of the bottle.
- Secure the plastic wrap with a rubber band.
- You want the plastic wrap to go up pretty high on the container, because water will leak in if the container is submerged above the rubber band.
- Now you're ready for the creek!
 - Place the plastic wrapped end of the bottle to the water's surface keeping the rubber band above the water.
 - Scan the creek bed with your underwater scope. What critters can you find?