

Dear Families,

Get ready for Splashy Science!

Your learner will roleplay as aquarium staff at *Anomaly Aquarium* and use their science and engineering skills to solve the mystery of an unknown spill on the second floor of the aquarium. Learners will gather evidence through a variety of science and engineering activities as they build the case for what caused this spill, eventually uncovering yet another aquarium mystery to solve!



To engage with your learners and learn about their day, you can ask them the following questions after each *Aquarium Antics* activity:

- *What did you learn about animals today?*
- *Did you make any mixtures today?*
- *What did you mix?*
- *What happened when you mixed them?*
- *Did you work with anyone else today?*
- *What did you and your fellow scientists discover?*
- *How were you like a scientist today?*
- *What did you and your fellow scientists discover?*
 - *Did you make observations?*
- *Did you ask questions and make predictions?*
- *Did you test an idea?*
- *Did you learn something new?*

Aquarium Antics @ Home Activities

Attached are activities related to *Aquarium Antics* that are easy to do at home! Try out any of these activities with your learners to engage them in further scientific thinking!



20 Questions- Water Animals!

Materials: none

- 1. Begin by asking your learner to tell you about some of the animals they learned about that might be kept in an aquarium. Ask questions like:**
 - *What kinds of animals might live in an aquarium?*
 - *Where might those animals live?*
- 2. Tell your learner you would like to play 20 Questions. Explain that in 20 Questions one person thinks of an animal they know some facts about. The other person asks questions to find out what animal the first person has in their head!**
- 3. Ask your learner to think silently of an aquarium animal and keep it in their head.**
- 4. Ask questions like the ones below until you have guessed the correct animal:**
 - *Does the animal live in freshwater or saltwater?*
 - *Can the animal go on land?*
 - *Does the animal live where it is cold or warm? Or in the middle?*
 - *Is the animal smaller or larger than a cat?*
 - *What colors can the animal be?*
 - *What does the animal eat?*
- 5. Once you've guessed the correct animal switch roles and have your learner ask the questions instead!**



Sink or Float

Materials: 2 cups of any size ,water, salt, spoon, objects that may sink or float like: carrot, cucumber, egg, marble, bottle cap, penny, anything made of wood, game pieces from your favorite game, etc.

- 1. Begin by asking your learner the following questions:**
 - *What do you know about the difference between saltwater and freshwater? How do they look different? How do they act differently?*
 - *Have you learned anything at camp about the difference between saltwater and freshwater?*
 - *What do you know about sinking and floating? What are some things that float in freshwater? What are some things that sink in freshwater?*
- 2. Tell your learner that you want to explore what things sink and float in both freshwater and salt water.**
- 3. With your learner, fill one cup with freshwater from your sink.**
- 4. Create saltwater with your learner by filling a second cup with warm tap water and then mixing in one spoon of salt at a time.**
- 5. Keep adding and mixing salt into the water until no more seems to dissolve and the salt gathers at the bottom of the cup.**
- 6. Make observations with your learner about how saltwater and freshwater look different.**
- 7. Next, ask your learner to choose some things to test in each type of water.**
- 8. Before testing if each object sinks or floats, ask your learner to make predictions:**
 - *Do you think ____ will sink or float or freshwater?*
 - *Do you think ____will sink or float in saltwater?*
- 9. Test each random object, making predictions before each test.**
- 10. Ask your learner to summarize what they observed at the end!**