



# Rainbow Fish STEM Activity

Looking for fun ways to combine literacy and STEM in the classroom? You can foster a colorful opportunity for STEM learning with the Rainbow Fish STEM Activity. Inspired by the classic children's tale *Rainbow Fish*, this activity is a creative and fun way to support STEM instruction through hands-on experimentation while integrating literacy themes from the book. Children ages four years and up will be excited to discover how the primary colors mix as a result of capillary action.

**Science:** Teachers can introduce the concept of capillary action by having children examine the paper towels at various stages of the activity (i.e. dry versus wet). Capillary action takes place when the colorful water travels up the paper towel, which then enables the primary colors to mix as they drip into the containers. This is the same process in which trees obtain water from its roots to its leaves.

**Technology:** Children can use a timer to determine how long it will take for the primary colors to mix.

**Engineering:** Teachers should provide direction while encouraging hands-on opportunities for children to properly set up the experiment so the colors can mix appropriately.

**Math:** Children are able to count and measure the materials.

## Required Materials:

- Six wide-mouth containers (we used 5" round bowls with a crimped edge for a "fish bowl" look)
- Water
- Liquid Watercolor Paint in Blue, Yellow, and Red
- Paper Towels

## Optional Materials:

- *Rainbow Fish* (Item #31186)
- *Rainbow Fish Counting*
- Fish Counters
- The Rainbow Fish Felt Story Set
- Fishy Tales Felt Set
- Rainbow Fish Ocean Fort

## 1. Arrange the Containers

Arrange the six containers into a circle, having the edges touch.

## 2. Add Water

Fill every other container  $\frac{1}{2}$  full with room temperature water.

## 3. Add Watercolor Paint to the Jars with Water

Mix in several drops of blue liquid watercolor paint, making sure that the water is well pigmented. Repeat with the yellow and red paint for the other two containers.

## 4. Add Fish Counters (Optional)

Add Fish Counters into the bowls for a fish bowl theme and counting activity.

## 5. Fold Paper Towel Sheets Accordion Style

Take a paper towel sheet and fold it over five times (accordion style). Repeat until you have six folded sheets.

## 6. Place the Folded Paper Towels Between Each Bowl

Bend the folded paper towel sheets in half and place one between each bowl, creating a bridge between the filled containers and the empty. Continue until the circle is complete.

## 7. Leave the Containers Overnight

Let the containers sit overnight and watch the rainbow form. We observed ours after 24 hours and again after 48 hours.

## 8. Make Observations

Have your students draw or write down their observations.

Scan this QR Code to view this activity on our [website](#) and to check out more of our [Insights and Inspirations](#) articles!

