

# Bubble Snakes

Connected Standard: 3.2 K.A.6 Participate in simple investigations of matter to answer a question or to test a prediction.

What You Will Need:

- Water Bottle
- Rubber Band
- Thin Rag
- Spoon
- Shallow Bowl
- Water
- Dish Soap
- Scissors or Knife



Instructions:

1. With an adult's help, use a knife or scissors to cut the top of the water bottle to a smaller size (cut where the paper label begins).
2. Wrap your rag up around the neck of the water bottle, but be careful to make sure the top hole is still exposed and the rag is pulled tight on the bottom opening. Secure the rag to the bottle using the rubber band.
  - ❖ TIP: Trim your rag to a smaller size to avoid excess material hanging off the ends!
3. Create your bubble solution by mixing about  $\frac{1}{4}$  cup water and 2 teaspoons of dish soap in your shallow bowl.
4. Dip the bottom end of your water bottle and rag creation into the bubble solution. Blow into the top of the water bottle (where you would normally drink out of) to create bubbles!

The Science Behind It:

We were able to make our bubbles because of *surface tension*, or, in other words, the stuff that holds liquid molecules together. When you add soap into water like we did for our bubble solution, it lowers the surface tension of the water. This means that it has more space between the molecules in the liquid, which gives it enough room to form bubbles!

Books to Pair with this Experiment:

- *Big Bad Bubble* written by Adam Rubin and Illustrated by Daniel Salmieri
- *Curly's Fun With Bubbles* written by Sherry Boddie and illustrated by Sara Sanchez