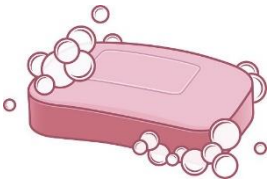
All About BUBBLES (3-5)

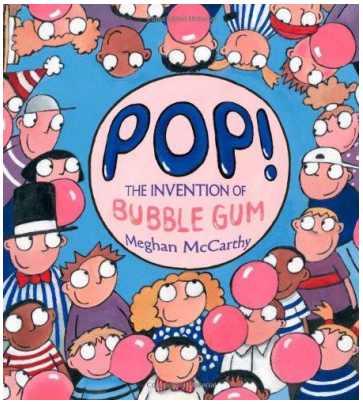
The SCIENCE of BUBBLES:

Surface Tension is when the surface of a liquid is strong. Water has a strong surface tension, enough to float a paperclip or for insects to rest on the surface.



Bubbles happen when air is trapped in water, but they easily pop.

Soap makes the surface tension of water more **flexible**, so the bubbles don't pop right away. It helps the water molecules stretch away from each other.



LITERACY CONNECTION:

POP! The Invention of Bubble Gum by Meghan McCarthy is a fun place to start thinking about bubbles!
Don't have the book? There are also places to hear the book online.

ACTIVITY: BUBBLES

Materials: Dish soap (Dawn or Joy work best), water, bowl and/or plate, straw, fork, paper clip, pipe cleaner (optional)

1. Pour water in the bowl/plate. When the water is still, challenge yourself to "float" the paperclip on the surface!
2. Using a straw, blow bubbles in the water.
3. To make longer-lasting bubbles, add 1-2 drops of dish soap. Stir the water with a fork and try blowing bubbles again.
4. To make more bubbles, add more soap!

GET OUTSIDE! Try making your own bubble wand using items like pipe cleaners, wire coat-hangers, or a flyswatter.

- What do you notice about the *shape* of the bubbles no matter the shape of your wand?

What is happening? Soap makes the surface tension of the water more flexible. The air you add by blowing through the straw put air pressure inside the water, making a bubble!

For step-by-step instructions, watch the video at: Bubbles STEM

This at-home educational activity is from the Literacy Coalition of Palm Beach County's literacy-based Stories & STEM program.
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Having fun? Send pictures or video links of you and your Stores & STEM projects to **csharkey@literacypbc.org**