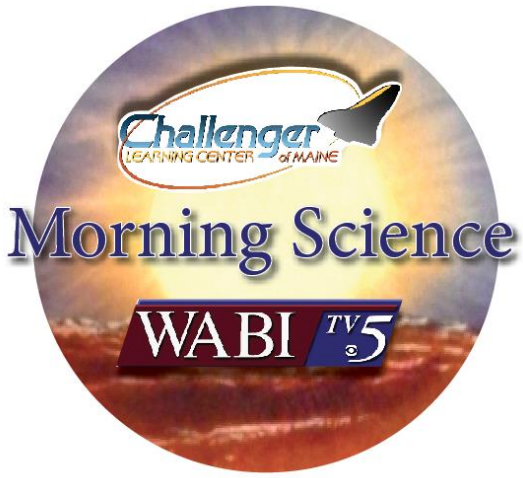

Challenger's Morning Science Segment:

June 5, 2017

Topic: Bernoulli's Principle

Build: Make balloon act like magnets

Credit:

https://www.nasa.gov/sites/default/files/543568main_ps1_bernoulli_more_bernoulli_c6.pdf

Materials Needed:

2 Balloons / string / scissors

Making balloons attract: Blow up two balloons and tie off the ends. Blow up the balloons to be fairly large in size. Cut two pieces of string that are ~12 inches long. Tie one end of each string to the knot of each balloon. Next have a partner hold the free ends of the strings so the balloons are hanging ~2 inches apart. Next blow very hard into the space between the two balloons. Watch what happens! [Note: a small amount of water can be added to the balloons while blowing up to help stabilize.]

The science

[credit: https://www.nasa.gov/sites/default/files/543568main_ps1_bernoulli_more_bernoulli_c6.pdf**]:**

Bernoulli's Principle states that "when a fluid moves faster, the molecules inside the fluid exert less pressure on the objects around them; as the speed of a moving fluid increases, the pressure within the fluid decreases. This applies to all fluids, including water, air, and gases." Blowing fast air between the balloons will cause the different curved surfaces to move together faster. So it looks as if the balloons are magnets attracted to each other!

Upcoming at the Challenger Learning Center of Maine: Challenger holds STEM camps all summer long for entering grades K-8. We discuss physics principles and many more activities during camp days filled with science and innovation. FMI- www.astronaut.org