Magic Moving Ball

Materials needed:

- Ping Pong Balls at least 1
- Plastic cups at least 2
- Manual balloon inflator

Instructions:

- 1. Place the cups in a line. Drop the ping pong ball into the first cup. Tell the kids that you are going to move the ball from the first cup to the second without ever touching the cup or the ball. Ask them if they think this is possible and how you might do it.
- 2. Using the balloon pump, blow air across the top of the cup with the ping pong ball. For best results, you might need a slight angle. Be sure to practice this before the activity to test out what direction the air should come in and how much force is needed.
- 3. Compare how you did it with what the kid's predictions were. Was anyone right or close?
- 4. Explain to the children that for the air to make something move, there must be a pressure difference between the top and the bottom of the object.
- 5. Give the children a chance to experiment and play with moving the ping pong ball.



Linkage to Kentucky School Standards:

2.1 Students understand scientific ways of thinking and working and use those methods to solve real-life problems.

2.3 Students identify and analyze systems and the ways their components work together or affect each other.

5.1 Students use critical thinking skills such as analyzing, prioritizing, categorizing, evaluating, and comparing to solve a variety of problems in real-life situations.

6.3 Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences.