

Lesson Plan - Week Feb 25, 2019

DATE

2/25/2019

TOPIC

LEVITATING BALL

INSTRUCTOR

MS. KRISTY

OVERVIEW/PURPOSE

LEVITATING BALL WITH AIR PRESSURE

STANDARDS ADDRESSED

THE LAW OF PRESSURE DIFFERENTIAL

Objectives: (Skills/information that will be learned)	<ul style="list-style-type: none"> ➤ Learn about the law of pressure differential ➤ Experiment Bernoulli's Principle ➤ Create a device to float a foil ball. 	<p><u>MATERIALS NEEDED:</u></p> <ul style="list-style-type: none"> ➤ Bendy straw ➤ Tape ➤ Paper ➤ Scissors ➤ Tin foil
Information: (Demonstration or lesson details)	In fluid and air dynamics, Bernoulli's principle states that a rise (fall) in pressure in a flowing fluid must always be accompanied by a decrease (increase) in the speed, and conversely, if an increase (decrease) in the speed of the fluid results in a decrease (increase) in the pressure.	
Activity: (Activity/demonstration to reinforce lesson)	Students will be assisted by the instructor to create an airstream device out of straws and paper to experiment and create different air pressure.	
Verification: (Students understand the lesson objectives)	<ol style="list-style-type: none"> 1. How long can you make the ball float? 2. Is there a difference in pressure? 	
Summary: (Expected Observations)	When you blow into the straw, you are creating a column of fast moving, low-pressure air. The tinfoil ball gets blown upwards, and then stays within the stream because the stationary air around it is at a higher pressure.	Additional Notes: Bernoulli's Principle