

SECTION 7: THE BER NOULLI'S PRINCIPLE

LAB

INTRODUCTION

Bernoulli's Principle: Faster moving air has less pressure than the air surrounding it. The surrounding air moves to this area of less pressure. The slower moving air under the wing as higher pressure and pushes the wing up, causing lift.

ASSESSMENT ANCHORS ADDRESSED

- S4.A.2.2** Identify appropriate instruments for a specific task and describe the information the instrument can provide.
- S4.C.1.1** Describe observable physical properties of matter.
- S4.C.3.1** Identify and describe different types of force and motion and the effect of the interaction between force and motion.
- S4.A.3.3** Identify and make observations about patterns that regularly occur and reoccur in nature.
- S4.D.1.2** Identify the types and uses of Earth's resources.

PURPOSE

Students will study Bernoulli's principal in action while making wing models, sprayers, and experimenting with funnels and ping pong balls.

MATERIALS

For the class:

2 strips of paper (1" x 8 ½") (1 per student)

12 ping pong balls

Hairdryer*

24 cups

3 straw halves

*Teacher provides items marked with **

For the teacher:

1 vial with lid

1 10ml syringe

1 #6 rubber stopper with hole