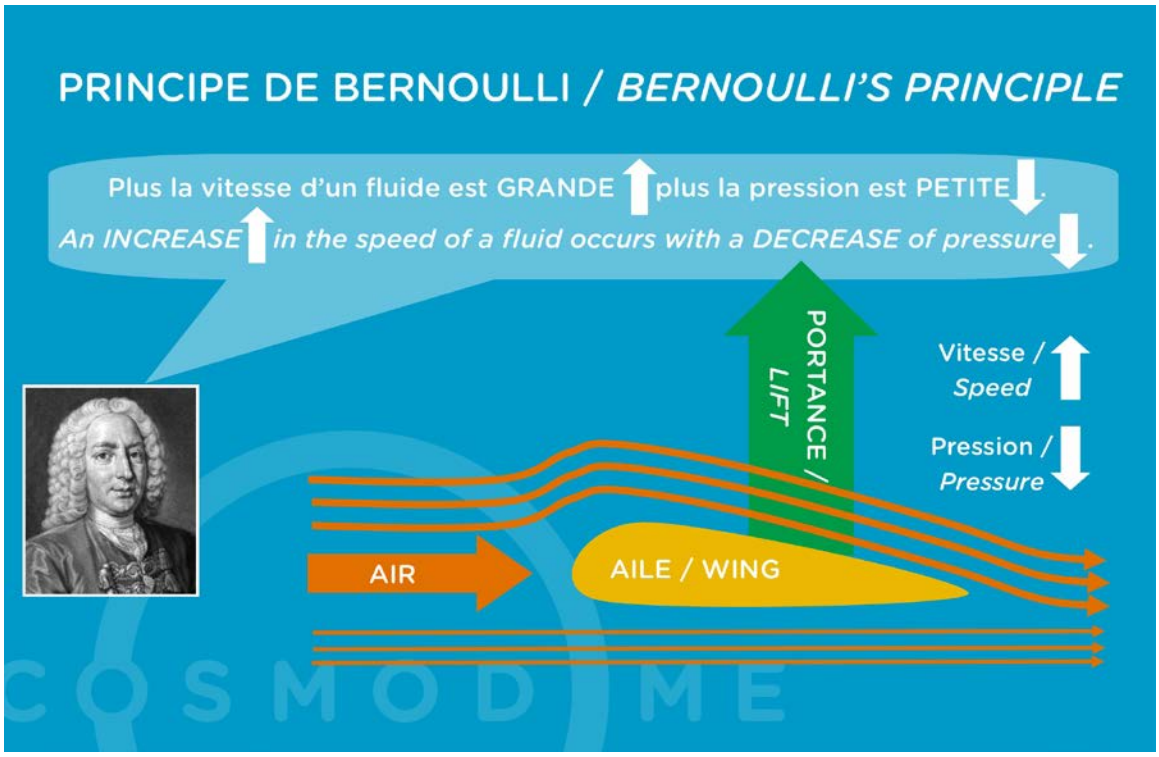
UNDER (AIR) PRESSURE: BERNOULLI'S PRINCIPLE

PARTICIPANT HANDOUT

TEAM NAME: _____



Credit: Le principe de Bernoulli (available in French)
http://www.alloprof.qc.ca/BV/pages/s1130.aspx#Principe%20de%20Bernoulli

MISSION INSTRUCTIONS

1. Using the scientific method, perform the five experiments below.
2. At the end of each experiment, share your reflections on the observations you made.

THE SCIENTIFIC METHOD

Questioning: What do you want to find out? What do you want to observe?

Hypothesize: Make a prediction as to what you think will happen during this experiment.

Experimentation: Perform your experiment.

Observation: See what happens.

Conclusion: Record your results. Was your hypothesis correct?

Experiment 1: Sheet of Paper in the Wind

- Place a sheet of paper flat, in front of you, and blow over the sheet with the straw (horizontally).

Experiment 2: Ball Behaviour in a Jet Stream

- Connect a hair dryer without a nozzle and switch it on.
- Point the jet stream up and place a ping-pong ball in the centre of the stream.

Experiment 3: Distance Between Two Aluminum Cans

- Place two empty cans 2 cm away from each other.
- Blow with a straw between the two cans.

Experiment 4: Balloons in Love

- Hang two inflated balloons 5 to 10 cm apart from each other using string and a support rod.
- Use a straw to blow air between the two balloons.

Experiment 5: Roll, Toilet Paper, Roll!

- Insert a full roll of toilet paper on a stick.
- Have two group members hold the stick at either end.
- Turn on the hair dryer with the nozzle on, and point the stream horizontally at the top of the roll of toilet paper.

Experiment	Hypothesis	Observations	Explanations
Sheet of Paper in the Wind			
Ball Behaviour in a Jet Stream			
Distance Between Two Aluminum Cans			
Balloons in Love			
Roll, Toilet Paper, Roll!			