

Pressure

Name _____

Definitions:

- A **force** is something that causes a body to move, like a push or a pull. It has a magnitude and a direction. Its units are pounds (lbs) in the English system or Newtons (N) in the metric system.
- **Pressure** is the amount of force acting on an area: $P = \frac{F}{A}$

Lab:

Stretch a sheet of paper between two hands, and hold. Press the force sensor against the top of the middle of the paper, increasing the force until the paper tears. Record the maximum measured force from the Lego NXT on the table below.

Change to the smaller area on a new sheet of paper, and repeat the process above with the smaller area on the force sensor. Record the force needed to break the paper.

Hypothesis:

Area	Radius (cm)	Area (cm ²)	Force (N)	Pressure = Force/Area
(none)				
Large	1.0 cm			
Small	0.5 cm			

Question:

What was one possible source of error in the experiment?