

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Course: \_\_\_\_\_ Professor: \_\_\_\_\_

## F5a Prelab: Pressure and Volume



Read the lab instructions before answering the questions.

1. Yves is trying to measure the pressure acting on a square platform. He has placed a mass of 20 kg on the disk and he measures the length of one side of the square as 15 cm. What is the pressure Yves should measure?

(Hint: To calculate the area of the square platform, first convert the side ( $l$ ) to meters and then use the following equation  $A = l^2$ )

2. Yves repeats the previous experiment but this time uses a circular platform. He uses the same mass as the previous trial and measures the diameter of the platform as 15 cm. What is the pressure Yves should measure?

(Hint: To calculate the area of the circular platform, first convert the diameter ( $d$ ) to meters, second calculate the radius and then use the following equation  $A = \pi r^2$ )