



Subject: Science/ Physics

Title: Pressure Worksheet

Name:

Grade-Section: 7- .....CS

Fill the spaces to win a tic tac toe game:

What causes liquid pressure?

The forces between the liquid particles and the sides of the container

Calculate the area that an elephant stands on if you knew his weight was 56000N and the pressure it exerts is 0.8 N/m<sup>2</sup>.

$$A = \frac{F}{P} = \frac{56000}{0.8}$$

$$A = 70,000 \text{ m}^2$$

Describe the relationship between force and pressure?

They are directly proportional. ( If force increase the pressure increases)

Describe the relationship between depth and pressure?

They are directly proportional. (If depth increases the pressure increases)

What is the rule we use to calculate pressure in solids?

$$P = \frac{\text{force}}{\text{area}}$$

Calculate the pressure exerted by a car that weighs 14000N and has an area of 70 cm<sup>2</sup>.

$$P = \frac{F}{A} = \frac{14000}{70}$$

$$P = 200 \text{ N/cm}^2$$

Describe the relationship between volume and pressure?

They are inversely proportional. (If volume increases the pressure decreases)

Describe the relationship between area and pressure?

They are inversely proportional. (If area increases the pressure decreases)

What causes gas pressure?

The collisions of the gas particles and the edges of the container