



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 16.04.20

Duration: 40 min

Worksheet 30

Full Marks: 15

FORCE AND PRESSURE/ PRESSURE

Choose the Correct options:

- 1) In physics, pressure is defined as the _____ over a given area.
 - A). Work
 - B). Velocity
 - C). Force
- 2) Finish the formula: Pressure = Force divided by _____
 - A). Time
 - B). Area
 - C). Speed
- 3) What is the standard unit of measure for pressure?
 - A). Joule
 - B). Newton
 - C). Pascal
- 4) Will air pressure be higher on top of a mountain or on the beach?
 - A). Beach
 - B). Mountain
 - C). It's always the same
- 5) What pressure will be exerted by a 10 N box that has equal sides of 1 meter?
 - A). 5 Pa
 - B). 10 Pa
 - C). 20 Pa
- 6) A 40 N block exerts 20 Pa of pressure on a table. What is the area of the block that is touching the table?
 - A). 0.5 meters squared
 - B). 1 meters squared
 - C). 2 meters squared
- 7) A red cube with sides of 3 meters and a blue cube with sides of 2 meters are on a table. They both weigh the same. Which cube exerts more pressure on the table?
 - A). Red cube
 - B). Blue cube
 - C). Both are the same
- 8) Does water pressure increase or decrease the deeper you are?
 - A). Increase
 - B). Decrease
 - C). Stays the same
- 9) What type of tool is used to measure air pressure?
 - A). Aerometer
 - B). Anemometer
 - C). Barometer
- 10) Which of the following is not a unit of measure for pressure?
 - A). Atmosphere
 - B). Joule
 - C). Pascal
- 11) Which would be the least likely to sink into soft ground?
 - A). a loaded lorry with four wheels
 - B). an empty lorry with six wheels
 - C). an empty lorry with four wheels

12) If the pressure exerted on a floor by a box is 200 kPa, find the weight of the box, given that the bottom of the box has a contact area of 20 cm²

- A). 400 N
- B). 3000 N
- C). 600 N

13) A force of 16N acts on an area of 50 cm².What is the pressure in pascal?

- A) 3200 Pa
- B) 4200 Pa
- C) 5200 Pa

14) When area is doubled pressure is _____

- A). Doubled
- B). Is halved
- C). Becomes four times

15) A cube of side 2 m and mass 10 kg is placed on a table. What is the pressure developed by the block on the table.

- A). 2.5 Pa
- B). 40 Pa
- C). 5 Pa