



Name _____ Class _____ Date _____

1 All **hydraulic** equipment requires the use of _____.

A vapor
B friction
C fluid
D light

2 In the diagram below, a layer of **oil** sits on top of a layer of **water**. The explanation for this is _____.

A the density of the oil is less than the density of water
B the density of water is less than the density of oil
C the densities of water and oil are the same
D the densities of both the water and oil are changing

3 **Density** is calculated by dividing the mass of a substance by its _____.

A momentum
B velocity
C acceleration
D volume

$$D = \frac{m}{V}$$

4 If the density of an object is **10 g/cm³** and its mass is **200 g**, then its volume would be which of the following?

A 10 cm³
B 20 cm³
C 30 cm³

$$D = \frac{m}{V}$$


PREVIEW

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6

Surface area

A 500 Pa
B 1000 Pa
C 1500 Pa
D 2000 Pa

7

A top
B bottom
C left side
D right side

9 Imagine a fish swimming in a deep lake. What **two forces** are acting on this fish at the same time?

A buoyant force and gravity
B density and pressure
C buoyant force and volume
D density and volume

10 In the picture below, what statement about air pressure is **correct**?

A it is the same on the top and bottom of the arm
B it is greater on the top side of the arm
C it is greater on the bottom of the arm
D air does not exert pressure



ANSWER KEY

All **hydraulic** equipment requires the use of _____.

- A vapor
- B friction
- C fluid
- D light



(C)

In the diagram below, a layer of **oil** sits on top of a layer of **water**. The explanation for this is _____.

- A the density of the oil is less than the density of water
- B the density of water is less than the density of oil
- C the densities of water and oil are the same
- D the densities of both the water and oil are changing



(a)

Density is calculated by dividing the mass of a substance by its _____.

- A momentum
- B velocity
- C acceleration
- D volume

$$D = \frac{m}{V}$$

(d)

If the density of an object is **10 g/cm³** and its mass is **200 g**, then its volume would be which of the following?

- A 10 cm³
- B 20 cm³
- C 30 cm³
- D 40 cm³

$$D = \frac{m}{V}$$

(b)



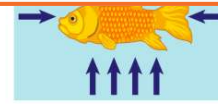
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- A 500 Pa
- B 1000 Pa
- C 1500 Pa
- D 2000 Pa

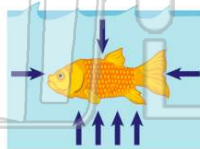


- B bottom
- C left side
- D right side



Imagine a fish swimming in a deep lake. What **two forces** are acting on this fish at the same time?

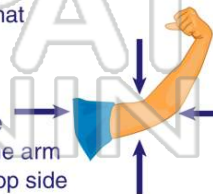
- A buoyant force and gravity
- B density and pressure
- C buoyant force and volume
- D density and volume



(a)

In the picture below, what statement about air pressure is **correct**?

- A it is the same on the top and bottom of the arm
- B it is greater on the top side of the arm
- C it is greater on the bottom of the arm
- D air does not exert pressure



(a)