

Which of the following is **NOT** an assumption for the kinetic molecular theory?

- ☐ These particles are in constant, random motion
- ☐ All matter is composed of tiny particles (atoms, molecules, and ions)
- ☐ The particles collide with other and with the walls of any container in which they are held
- ☐ The amount of energy that the particle lose from these collisions is relatively high and therefor counted

Bernoulli examined the relationship between _____ ?



- ☐ Fluid temperature and its pressure
- ☐ Fluid flow and its pressure
- ☐ Fluid temperature and its kinetic energy
- ☐ Fluid pressure and its potential energy

What does the upward arrow in the diagram below represent?

☐

Buoyant force

☐

Pressure

☐

Weight

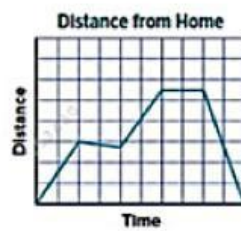
☐

Gravitational force

Which of the following figures is an example of **plasma state**?

☐☐☐☐

A girl takes her dog for a 10- minute walk, as shown in the following graph, what does the distance on the y-axis represents?

☐

The constant

☐

The control

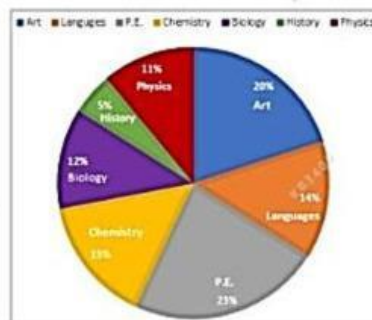
☐

The dependent variable

☐

The independent variable

The pie chart below shows the percentage of students according to their favorite school subject, what is the percentage of students who like to study science subjects (chemistry, biology, and physics) all together?

☐

23%

☐

20%

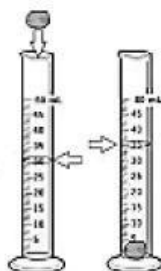
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38%

☐

43%

Using the following diagram, what is the density of the rock if its mass is equal to 45.8 g ?



| | |
|-----------------------|-----------|
| <input type="radio"/> | 9.16 g/mL |
| <input type="radio"/> | 1.56 g/mL |
| <input type="radio"/> | 0.83 g/mL |
| <input type="radio"/> | 0.46 g/mL |

Which one of the following is **NOT** considered a base unit in the SI system?

| | |
|-----------------------|---------------------------|
| <input type="radio"/> | Temperature (K) |
| <input type="radio"/> | Volume (cm ³) |
| <input type="radio"/> | Electric current (A) |
| <input type="radio"/> | Intensity of light (cd) |

What is the correct order of the steps in the scientific method to solve a problem?

- ☐ State the problem → Gather information → Form a Hypothesis → Test the Hypothesis → Analyze Data → Draw Conclusions →
→ Hypothesis is supported, or it's not supported
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A weather balloon has a volume of 2.50 L at 101 kPa. As the balloon rises the pressure drops to 95.0 kPa.
What is the new volume of the balloon?



- ☐ 2.66 L
- ☐ 2.35 L
- ☐ 4.11 L
- ☐ 3.83 L