

ANSWERS

THE THREE STATES OF MATTER

Review page 16 of your text book and complete the chart:

Physical States	Solid	Liquid	Gas or Vapour
1.) Examples	various	various	various
2.) Shape	definite	indefinite	indefinite
3.) Volume	definite	definite	indefinite

Qualitative or Quantitative?

- (Q) L
- (Q) N
- (Q) N
- (Q) L
- (Q) L
- (Q) L
- (Q) N
- (Q) N
- (Q) N

1. The orange had a very sour taste.
2. The density of water is 1.0 g/mL.
3. Water boils at 100 °C.
4. The colour of the car was metallic blue.
5. The perfume had a flowery odour.
6. Water and glass are both transparent.
7. Salt dissolves into water but pepper is insoluble.
8. On a hardness scale of 1 to 10, diamonds would score 10.
9. The mass of the diamond was 15.9 g.
10. The average grade nine student is 1.61 m tall.

Physical or Chemical Property?

- (P) C
- (P) P
- (P) P
- (P) P
- (P) C
- (P) C
- (P) C
- (P) P

1. Methane reacts with oxygen to produce carbon dioxide.
2. Diamonds sparkle when placed under bright lights.
3. Sugar dissolves when placed into water.
4. Aluminum is pressed into thin sheets to produce foil.
5. Bubbles of gas are produced when acid is dropped onto a piece of magnesium.
6. Metals will rust when exposed to moisture and oxygen.
7. Helium balloons will float on top of air.
8. A pane of glass is broken into small pieces.