

ACTIVITY # 12..1 KINETIC MOLECULAR THEORY Date due: _____

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Part I. Explain briefly the following terms :

1. Caloric theory

2. Kinetic theory

3. Brownian Motion

4. Diffusion

5. Temperature

Part II. State the theories of the following scientist about Heat.

1. Benjamin Thompson

2. James Joule

Part III. Matter can exist in three phases. Complete the table below with correct descriptions.

	Solid	Liquid	Gas
Movement			
Attractive forces			
Arrangement of particles			
Shape			
Volume			
compressible			

Part IV. Temperature Scales

1. Complete the table below with correct information

	Celsius scale	Fahrenheit scale	Kelvin Scale
Freezing point of water			
Boiling point of water			
Average Human body temperature			
Absolute temperature			
Symbol of Unit			

2. Convert the following into Celsius scale

A. 86°F = _____ $^{\circ}\text{C}$

C. 34 K = _____ $^{\circ}\text{C}$

B. 25°F = _____ $^{\circ}\text{C}$

D. 90 K = _____ $^{\circ}\text{C}$

3. Convert the following into Fahrenheit scale.

A. 86°C = _____ $^{\circ}\text{F}$

C. 334 K = _____ $^{\circ}\text{F}$

B. 125°C = _____ $^{\circ}\text{F}$

D. 290 K = _____ $^{\circ}\text{F}$

4. Convert the following into Kelvin Scale

A. 50°F = _____ K

C. 37°C = _____ K

B. 100°F = _____ K

D. 120°C = _____ K