

Chem HOMEWORK

Unit 10 Intro. Terms & Problems

Name Key Period _____ Date _____

Read 10.1 - 10.2 (pp. 289-292) and define each of the following!

1.) Energy ...

The ability to do work or produce heat

→ work is force applied over distance.

2.) Potential Energy ...

stored energy due to position or composition

3.) Kinetic Energy ...

energy due to motion (already moving)

4.) Temperature ...

measure of the random motion of molecules or atoms

5.) Heat ...

Flow of energy due to a temperature difference.

Temperature Scales (reference 5.7; pp. 135-142) complete this chart!

Scale	m.p. water	b.p. water	Degrees between	Uniqueness	Formula
Fahrenheit	32°F	212°F	180	XXXXXXX	XXXXXXX
Celcius	0°C	100°C	100	XXXXXXX	$\frac{5}{9}(F-32) = ^\circ C$
Kelvin	273 K	373 K	100	No Neg	$^{\circ}C + 273 = K$

Do the following temperature conversions ...

a. 385 K = 112 °C

b. 94.0 °C = 367.0 K ← Note:

c. 48.0 K = -225.0 °C

d. -101 °C = 172 K → Note: true 0

e. 197 K = -76 °C

f. 388 °C = 661 K

