

# TEMPERATURE AND ITS MEASUREMENT

Name \_\_\_\_\_

Temperature (which measures average kinetic energy of the molecules) can be measured using three common scales: Celsius, Kelvin and Fahrenheit. We use the following formulas to convert from one scale to another. Celsius is the scale most desirable for laboratory work. Kelvin represents the absolute scale. Fahrenheit is the old English scale which is never used in lab.

$^{\circ}\text{C} = \text{K} - 273$	$\text{K} = ^{\circ}\text{C} + 273$
$^{\circ}\text{F} = \frac{9}{5}^{\circ}\text{C} + 32$	$^{\circ}\text{C} = \frac{5}{9}(\text{F} - 32)$

Complete the following chart. All measurements are good to 1° C or better.

	$^{\circ}\text{C}$	K	$^{\circ}\text{F}$
1	0° C		
2			212° F
3		450 K	
4			98.6° F
5	-273° C		
6		294 K	
7			77° F
8		225 K	
9	-40° C		