WKS –Chem H **Name**_____
Introduction to Pressure **Date**_____ **Period**_____

Read Textbook, *10-2 Pressure*, pg. 308-312.

1) Define Pressure. What two properties can we change to change pressure?

2) What causes pressure in a container of a gas?

3) What causes atmospheric pressure?

4) What units are used to express pressure measurements?

5) What are standard conditions for gas measurements?

6) Convert the following pressures to pressure in standard atmospheres:
Equivalents: 1 atm = 760 mm Hg = 760 torr = 101.325 kPa

   a) 151.98 kPa

   b) 456 torr

   c) 912 mm Hg

7) a) What is atmospheric pressure?

   b) Why does the atmosphere exert pressure?

   c) What is the value of atmospheric pressure at sea level, in newtons per square centimeter?
   Definition: 1 Pa = 1 N/m^2

8) What is the device used to measure atmospheric pressure? What must be true about the weight of the liquid inside the device? Why does the height of the liquid not depend on the diameter of the tube?

9) If the atmosphere can support a column of mercury 760 mm high at sea level, what height (in mm) of each of the following could be supported, given the relative density values cited? $D_{Hg} = 13.6$ g/mL
**To exert the same weight, a less dense liquid would need to be higher than a more dense liquid.

   a) Water, whose density is 1.00 g/mL.

   b) A hypothetical liquid with a density 1.40 times that of mercury.