

Temperature and the Kinetic Theory Activity

This activity consists of several demonstrations and asks you to make observations and given explanations based on what you know about the structure of solids, liquids, and gases and the effect of temperature. Also, you should apply the kinetic theory of matter where applicable. Some of the demonstrations you can do at home, some you may have already done, some will be done by the teacher, and some must be performed by you in the classroom.

No.	Description of Activity	Observations	Explanation
1	ball and ring		
2	bimetallic strip		
3	Hang a weight on a spring and then remove the weight.		
4	A drop of ink is put in a beaker of water at the start of class. The water is not stirred.		
5	Account for the shape of an inflated balloon.		
6	Observe salt crystals under a microscope.		

No.	Description of Activity	Observations	Explanation
7	Account for the fact that a solid rubber ball bounces.		
8	Pick up one end of a ruler 30 cm above the table. Now scoop up some water from a pan. Compare and explain the difference.		
9	Warm the air around the flask of figure 1 by holding your hands around it.		
10	A flask is filled with water and placed on a ring stand and heated as in Figure 2. The observations are given. Provide the explanations.	a) When the heating begins the water level goes down. b) As the heating continues, the water level rises. c) When the heat is removed, the water level falls.	

Activity #4 is an example of _____. Give some other examples of this and explain how it can be useful.

Figure 1

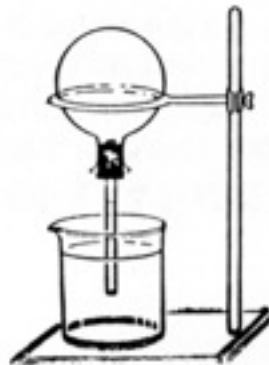


Figure 2

