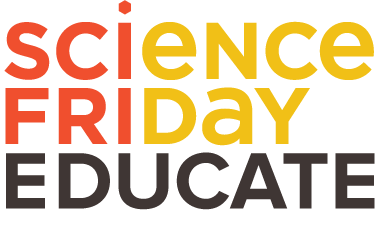
Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Circle One: Pre-test / Post-test

**Slippery Soles: A Lesson In Friction**

**Directions:** Choose the correct answer out of the options provided and write it in the space provided.

1. \_\_\_\_\_\_\_\_\_ This scientific phenomenon can be detected because it often emits heat, it is also responsible for preventing a ladder leaning along a wall from sliding out of place.  
   A) Electricity  
   B) Viscosity  
   C) Coefficient  
   D) Friction  
   E) Gravity
2. \_\_\_\_\_\_\_\_\_ A measure of how easily something moves against another surface like a shoe slips on ice is...  
   A) Natural selection  
   B) The friction coefficient  
   C) The law of thermodynamics  
   D) The theory of relativity
3. \_\_\_\_\_\_\_\_\_According to scientists ice is so slippery because...  
   A) It is a naturally perfectly smooth surface  
   B) Ice is covered with a microscopic layer of water  
   C) Ice melts due to the pressure of being stepped on creating a layer of water that causes you to slip  
   D) of the temperature difference between your shoe or foot and the ice
4. \_\_\_\_\_\_\_\_\_A faster time while measuring how fast your shoe tread design travels down the   
     
   ramp translates to a\_\_\_\_\_\_\_\_\_\_\_\_\_ between your shoe and the ice.  
   A) decrease in friction  
   B) increase in friction  
   C) greater surface area  
   D) smaller surface area  
   
5. \_\_\_\_\_\_\_\_\_An increase in the surface area of a shoe tread \_\_\_\_\_\_ the amount of friction created.  
   A) reduces  
   B) increases  
   C) has no impact on

**Answer Key:**

1) D

2) B

3) B

4) A

5) B