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

**Bowling with Friction**

Observe and analyze the different boxes as they slide down the inclined plane.



*Note: Five buttons drop a box of different materials onto the inclined plane.*

As your teacher plays the game, fill in the table below with your observations.

| **Material** | **Distance Traveled**  **(Short, medium or long?)** | **Speed while sliding down the plane**  **(Slow, moderate or fast?)** | **Did the box hit the pins?**  **(Yes or no?)** |
| --- | --- | --- | --- |
| Material A |  |  |  |
| Material B |  |  |  |
| Material C |  |  |  |
| Material D |  |  |  |
| Material E |  |  |  |

**Answer the following questions based on your responses on the table above.**

1. Rank the materials in order of increasing roughness based on your observations.

|  |
| --- |

1. What conclusion can be drawn regarding the impact of surface roughness on the frictional force?

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| --- |