

# The Amazing Race!

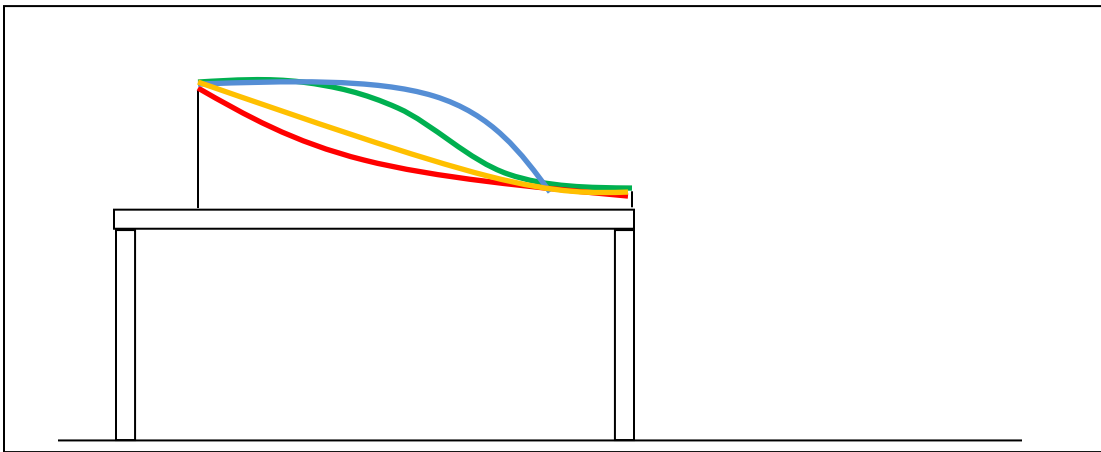
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Name: \_\_\_\_\_ Date: \_\_\_\_\_

## The Energy Track [ POE (Predict – Observe – Explain) Demonstration ]

**The Apparatus:** Roll a steel ball (from rest) down four different track profiles and record the distance the ball lands from the table. The distance represents the speed.

**R** = Red, **B** = Blue, **G** = Green, **Y** = Yellow



**Qualitative Determination of Launch Speed:** Since all balls leave the table at the same height the horizontal distance at which they land will be a proxy for its horizontal velocity leaving the ramp.

### Prediction:

Which ramp profile will cause the ball to have the fastest speed? The slowest speed? Explain your predictions. Place in order of fastest to slowest.

### Observation:

Record your observations after silently observing the demonstration.

### Explanation:

Write a brief explanation of your observations.