**AP Physics “Toilet Paper” Lab (Cuz you probz have it)**

**Rotational Motion vs Translational Motion**

Equipment List:

2 new rolls of toilet paper (these won’t be wasted)

Marker or Pen

Smart phone with slow motion video

Procedure:

1. Two people, each with a roll of toilet paper. Draw a line across the diameter of one toilet paper roll; this will be the roll that is dropped while holding the end of the paper.
2. At the same height and same time, drop both rolls, while one person videos in slow motion. Remember to hold the end of the roll with the line drawn on it.
3. Hypothesis: Will there be a difference in drop times?
4. Determine if there was a difference in time (video) and if so, how much of a difference?
5. Conclusions: If there was a difference, what would be the explanation? (Think: rotational v translational)