

## Lab – Limitations in the Precision of Measurement with Significant Figures

### Materials:

- Red, orange, & yellow card stock rulers
- 3 x 5 index card
- Square wooden block
- Ping Pong Ball
- Lentil

### Instructions:

1. Use each of the instruments to determine:
  - The length, width, perimeter, and area of 3 x 5 card
  - Length of a side, area of a side, volume of a square wooden block
  - Diameter of a lentil
  - Diameter, surface area, volume of a ping pong ball
2. Create a data table that shows how your measurements and calculations changed as you used the different rulers.
3. Answer the following:
  - What trend is seen in your data table? Explain what changes were made as you changed rulers.
  - What do you think the purpose of this lab was? Why did we ask you to do this exercise?