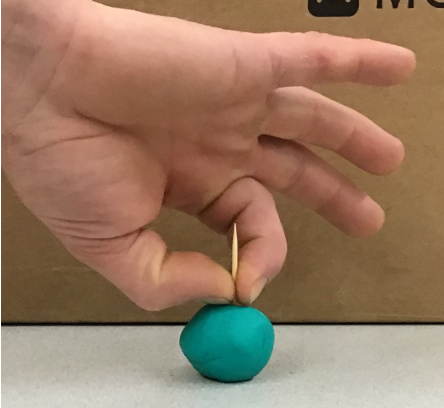
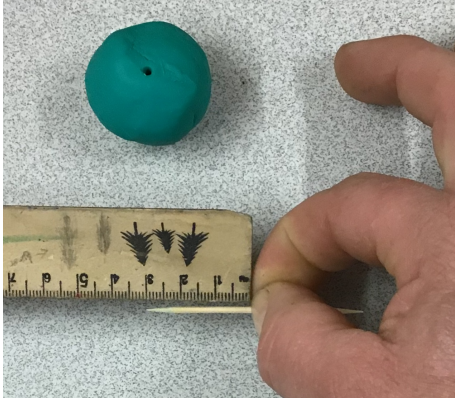


## IQWST PS2 - Activity 2.2: Investigating what determines the amount of kinetic energy.

### Investigation 1 – Does speed affect the Kinetic Energy of an object?

1. Roll the clay into a ball. Place it on a paper towel on the table.
2. Measure the thickness of the clay as shown below-

a) Carefully insert a toothpick in the top of clay down to the table. Hold the toothpick with your thumbnail flat against the top of the clay	b) Carefully remove the toothpick and measure from the end of the toothpick to your thumbnail to determine the thickness of the clay
	

3. Hold the hockey puck 30 cm above the center of the clay ball with the flat surface of the puck facing the ball. Drop the puck on the modeling clay from a height of 30 cm above it. Carefully remove the puck, trying not to deform the modeling clay any more. **If the puck did not hit the clay directly or evenly, you need to go back to step 1.**
4. With the toothpick, measure the thickness of the center of the modeling clay (see step 2) and subtract it from the original thickness to find how much it was “squished.” Record the data in your SN.
5. Repeat steps 1 - 4 two more times, so you have three data points for each category.
6. Repeat steps 1-5 above, but this time instead of dropping the puck, push it downward as demonstrated. Your release point should be 30 cm above the table.
7. Complete the CER on SN p22

### Investigation 2 - mass affect Kinetic Energy of an object?

1. Complete the prediction on SN p21.
2. Complete steps 1 - 5 above using two hockey pucks.
3. Complete the CER on SN P23

## Clean-up

1. Clay in container with the damp paper towel on top .
2. Wipe down your table with a damp rag.
3. Tub neatly organized in the middle of your table.
4. Seated and silent.
5. I will dismiss you by table.