# Lab # 6
## Rutherford's Experiment

Purpose:  To determine the shape of an unknown object by completing a blind study.

Hypothesis:  If I roll the marbles under the board, and plot where they bounce back from the unknown shape, then I should be able to estimate the shape of the item hidden under the board.

Materials:  Beaker of marbles, board, paper, pencil

Procedure:
1. Roll marbles under board
2. Plot where you think marbles hit before bouncing back
3. DO NOT look under the board as that will result in an immediate fail.
4. Connect the dots on the paper to determine shape of hidden pattern.

Data:  Draw to pictures: your model of unknown pattern, and the actual shape of pattern once board it turned upright.

Conclusion:  Where you able to determine the shape of the unknown pattern by using a blind study method of finding contact points of marble hitting the pattern?

- How would you make conclusion more accurate?
- Would multiple tests help narrow the design of the pattern more efficiently?