

“Scientists Are Thinkers”

Question/Problem: What do we want to find out?

Will more air inside a ball make it bounce higher?

Hypothesis: What do we think we will find out? Make a prediction.

More air in a ball will cause it to bounce higher.

Materials: List what you will need to test the hypothesis

1. Kickball or basketball
2. Measuring Tape

Procedures/Steps: State step by step what you are going to do.....specifically

1. Fill a ball with 10 pumps of air
2. Drop the ball from a height of 5 feet
3. Measure the height the ball bounces to after being dropped
4. Do the same procedure for a ball with 15 pumps of air, 20 pumps of air, and 25 pumps of air (these numbers may be too small and have to be adjusted)

Observe and Record Data: List, picture, chart, graph

Ball Pumps	Height Bounced (inches)
Not filled	
Half Filled	
Completely Filled	

Analysis/Results: What does the data tell us?

Based on the data, the more pumps we put into the ball, the higher it bounced.

Conclusion: What did I learn? What does it make me want to learn next?

A ball with more air will bounce higher.

In the next experiment we could change the height from which the ball is dropped and see if the change in height is the same