

ENGINEERING DESIGN PROCESS

Plastic Baggie Challenge

1. Title of Experiment

2. Hypothesis (How many pencils can I stick through a bag of water without the water draining?)

3. Draw a Picture of your Design (Draw a sketch of what you think will happen when you push pencils through your bag filled with water.)

ENGINEERING DESIGN PROCESS

Plastic Baggie Challenge

4. Data Collection/Observations (Draw a picture of what your bag looks like with all of the pencils through it.)

5. Results (Record how many pencils you were able to stick through your bag.)

6. Analysis/Answer Questions

How did your results compare to your hypothesis?

Water's chemical formula is H_2O . What does the H stand for? What does the O stand for?

The plastic bag that you used is made up of a polymer called LDPE. Do you think companies use LDPE in plastic baggies because it is flexible or not flexible? How did this experiment help support your answer?