

Name: _____ Date: _____

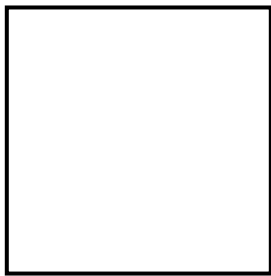
For the following exercises use the following:

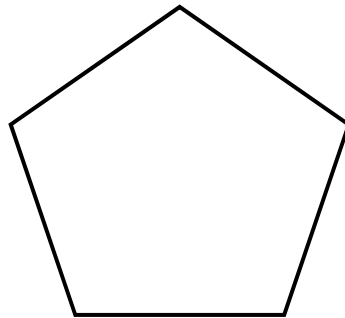
Steel Balls

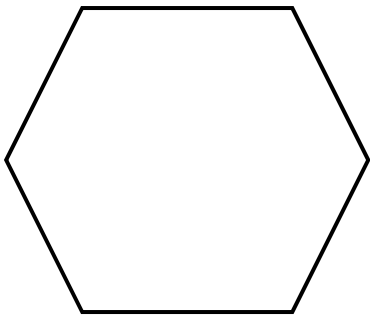
Magnetic Rods

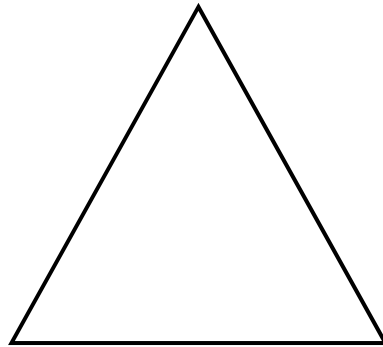
Strength of Shapes

Using the steel balls and rods build the following shapes. First, name the shapes on the lines provided below each one. Next, test the strength of each shape by pressing inward on any single steel ball. If the ball moves easily, find a way to make the shape stronger by adding one or more additional rods or balls and then draw your final product next to the original.









After building all of these shapes, which one do you think is the strongest? _____

3-D Shapes

Now take some time to build the following three dimensional shapes and draw them below their name:

Cube

Pyramid (tetrahedron)

Which one of these two 3-dimensional shapes is the strongest? _____

Once you have built the two shapes above and have established which is the strongest try to build a structure that can hold the weight of a book. Draw a picture of your model below: