

Geometry Virtual Manipulatives Worksheet

Go to the [National Library of Virtual Manipulatives](#) and use the manipulatives there to answer the questions. The names of the Manipulatives should match the title for each question or questions. Use your own paper, and, if necessary, you can print graph paper for sketches. The Instruction button on the upper right of the menu bar will explain how to use each manipulative. The Activities button is generally left of center on the menu bar.

If the link doesn't work, go to <http://nlvm.usu.edu/en/nav/vlibrary.html> and click on the box for Geometry for 9-12.

Geometry Virtual Manipulatives Worksheet

Geoboard – Circular

How many pegs (outside rim) does it take to make a central angle of 157.5° ?

Geoboard – Coordinate

Select 1 activity. Answer the questions and sketch your results.

Geoboard – Isometric

Sketch your 3 dimensional shape on Isometric Dot Paper (link for printing on lesson plan). See Activities for instructions.

Golden Rectangle

What are the minimum and maximum number of squares removed before you can't see it any more?

Great Circle

What is the distance from São Paulo to Tokyo? Pick two other cities and find their distance from each other.

Pattern Blocks

Do the "Parts as Wholes" activity, then sketch your results.

Platonic Solids

How many faces, vertices and edges does an octahedron have? A dodecahedron?

Pythagorean Theorem

Select and solve either Puzzle 1 or Puzzle 2. Sketch your solution.

Space Blocks

Do the "Constructing Figures with a Given Surface Area" activity. Sketch your best solid.

Tangrams

Choose a puzzle from the "Tangram Puzzles" activity. Sketch your solution.

Tessellations

Sketch your best tessellation. Try to use as many different shapes as possible.

Tight Weave

How much of the rug is Gold at Stage 3?

Transformations

Do activities 1 and 2. How many adjustments did it take to hit the target exactly for each activity?

Turtle Geometry

Select Maze or Rocks (if you hit the NEW button, the pattern will change). Sketch your pattern, walk your turtle through the pattern, then list your turtle's path.