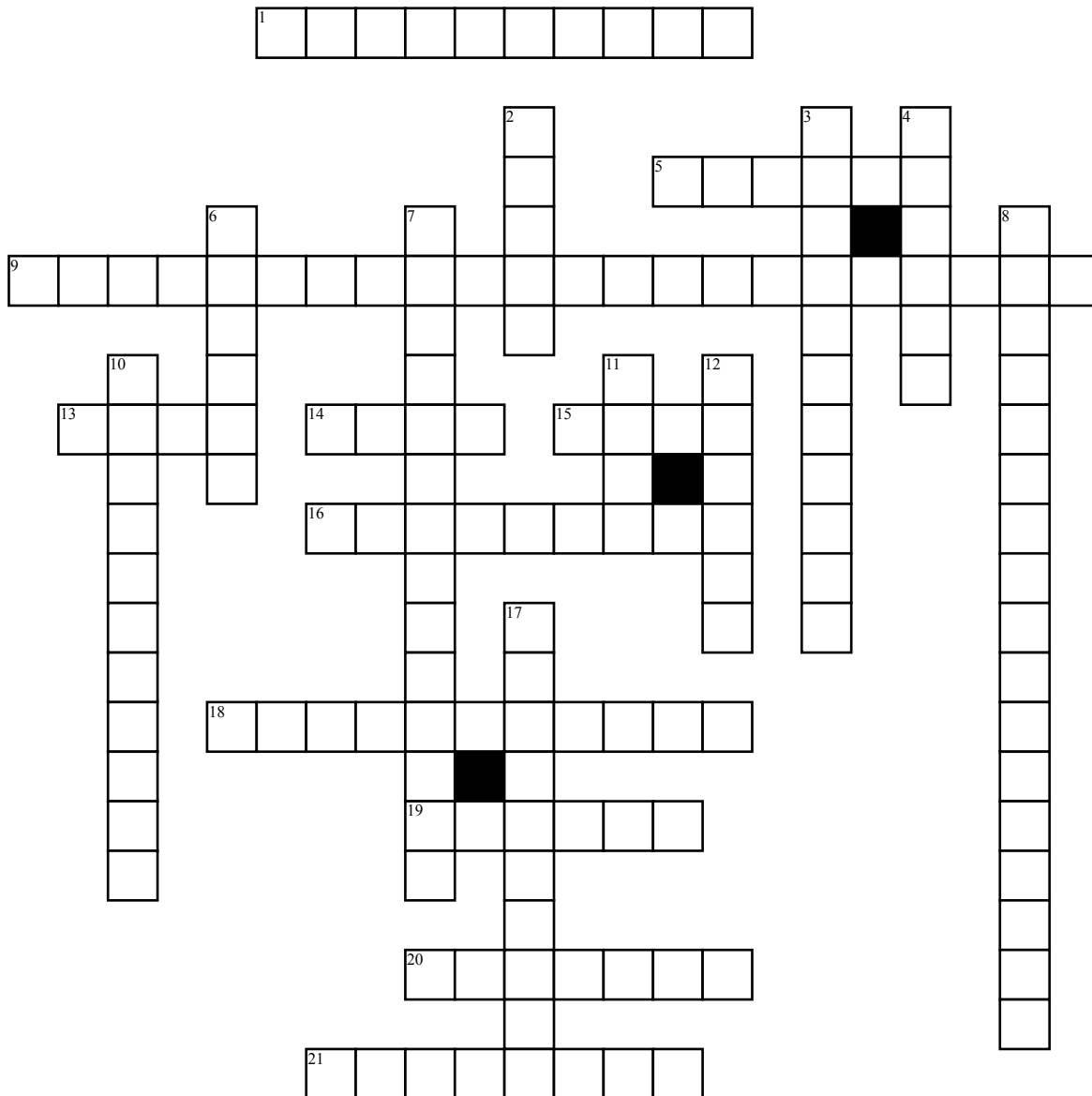# Geometry Crossword: Volume

Across

1. Used to measure volume and tells the number of cubes of a given size that will fill a three-dimensional figure. It is equal to the volume of a cube, which is 1 unit tall, 1 unit wide and 1 unit long.

5. The amount of space that a three-dimensional figure contains. It is expressed in cubic units.

9. A figure that encloses a part of space. Like any object in the real world.

13. A three-dimensional figure with curved surfaces, a circular base and one vertex. Not to be confused with Conical surface.

14. The intersection of faces of a three-dimensional figure. In a polyhedron or more generally a polytope, an edge is a line segment where two faces meet.

15. The flat surface of a three-dimensional figure. A cube has 6 of these.

16. Having the same size and the same shape. Equal.

18. A side of a three-dimensional figure. Any face or surface that is not a base.

19. A three-dimensional figure with no faces, bases, edges, or vertices. All of its points are the same distance from a given point called the center.

20. A solid figure that has a polygon for a base and triangles for sides. It is named for the shape of its base.

21. A three-dimensional figure with all curved surfaces, two circular bases and no vertices. Like prisms, the volume is found by multiplying the area of one end of the cylinder (base) by its height.

Down

2. A three-dimensional figure that has two parallel and congruent bases in the shape of polygons and at least three lateral faces shaped like rectangles. The shape of the bases tells the name of this figure.

3. The sum of the areas of all the surfaces (faces) of a three-dimensional figure. The total area of the surface of a three-dimensional object.

4. The shortest distance from the base of a parallelogram to its opposite side. Vertical distance from the top of an object or figure to its base.

6. The point where the edges of a three-dimensional figure intersect.

7. Two hexagon as bases. Six faces join the bases together.

8. A square base with four triangular faces. Faces add to one common vertex.

10. A three dimensional figure. It can hold things.

11. The faces on the top and bottom of a three-dimensional figure.

12. The given point from which all points on a sphere are the same distance. The point within a regular polygon equally distant from the vertices.

17. All faces are flat. There are no curves.