**Geometry Unit – Using Formulas**

**Sketch Book Requirements**

Make a sketch book of all the 2D and 3D shapes we will study. Along with the sketch, include the area (2D shapes) and volume (3D shapes) formula for each shape, as well as an example of how to use the formula. Make sure to include how to find the area of irregular figures and surface area of rectangular prisms. You may draw your own figures, or use pictures I will provide for you. **All work must include the correct units of measurement.**

You will be using a blue book for your sketch book. Each page must have the following information on it:

**Page 1 – Perimeter** – This page should include sketches of a parallelogram, a rectangle, and a square and should explain how to find the perimeter of each of these figures. Your figures should have measurements labeled on them, with the perimeter for each figure calculated.

**Page 2 – Circles** – This page should have a sketch of a circle with the radius or diameter measurement labeled. You must include the formulas for the circumference and area of circles, and use the formulas to find the circumference and the area of your circle.

**Page 3 – Area of a Parallelogram** – This page must include the formula for finding area of a parallelogram, as well as a sketch with the measurements labeled. You must find the area of the parallelogram you drew.

**Page 4 – Area of a Triangle** – This page must include the formula for finding area of a triangle, as well as a sketch with the measurements labeled. You must find the area of the triangle you drew.

**Page 5 – Area of a Trapezoid** - This page must include the formula for finding area of a trapezoid, as well as a sketch with the measurements labeled. You must find the area of the trapezoid you drew.

**Page 6 – Area of Irregular Figures** – This page must include a basic description of how to find the area of an irregular figure. You must find the area of both of the irregular figures I will provide for you.

**Page 7 – Volumes of Rectangular Prisms, Triangular Prisms and Cylinders** – This page must include the formulas for finding the volume of a rectangular prism, a triangular prism and a cylinder. You must include a sketch of each figure with the measurements labeled, and you must find the volume of each figure using the formulas.

**Page 8 – Surface Area of Rectangular Prisms** – This page must include the formula for finding the surface area of a rectangular prism. You must also include a sketch of a rectangular prism with the measurements included, and use the formula to find the surface area of the prism you sketched.