

## Introducing polygons

### Reading and Discussion

Today we are going to meet the polygons. What is a **polygon**?

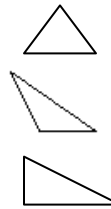
The word **polygon** is made up of two Greek words:

- **poly**, meaning many;
- **gonia**, meaning angle.

A polygon is a **closed figure** with a number of angles, but because it is a closed figure, a polygon must have more than 2 angles.

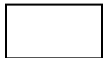
The first polygon we are going to meet is a 3-angled figure, or a **triangle**. Here are some special triangles you may know already which are named for their angles.

- An **acute** triangle has all three angles less than  $90^\circ$
- An **obtuse** triangle has one angle greater than  $90^\circ$
- A **right** triangle has one angle exactly  $90^\circ$



**Tri** means 3. All polygons are named for the number of angles they have. Unfortunately the names are all Greek so it isn't that easy to remember them!

Here is a **quadrilateral**. **Quad** means 4. This quadrilateral is a **rectangle**, which means that all its angles are right angles.



A **square** has 4 right angles as well, but it also has 4 equal sides.



Other members of the quadrilateral family are the **parallelogram** whose opposite sides are parallel. It looks like a slanted rectangle.



A **rhombus** has four equal sides and looks like a slanted square.



I wonder if you would be able to recognize the rest of the polygons? Here are some of their names:

- **pentagon** (pent = 5);
- **hexagon** (hex = 6);
- **octagon** (oct = 8)

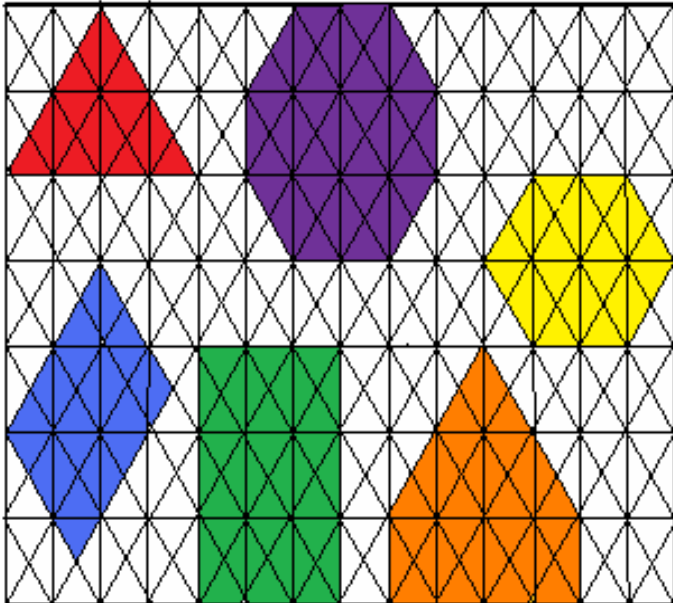
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## Activities

### Activity A: Name the shapes

Do you think you could recognize the polygons we have been talking about?  
Here are some of them, see if you can name them.



**Red =**

**Blue =**

**Yellow =**

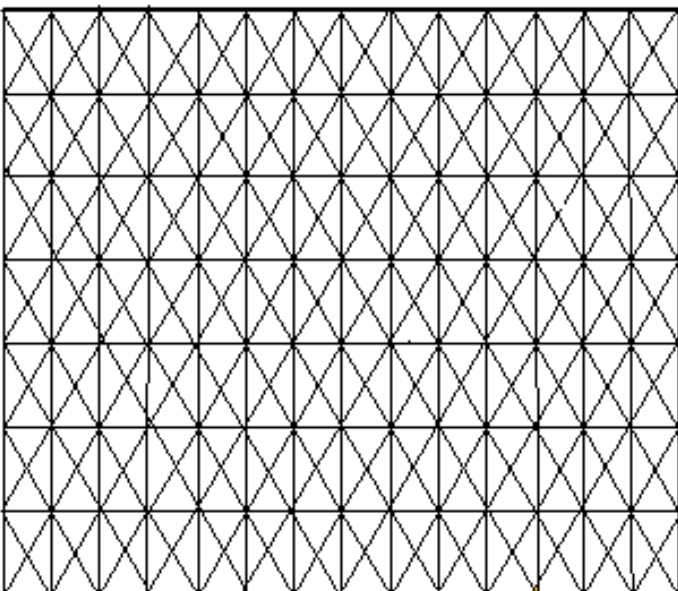
**Orange =**

**Green =**

**Purple =**

### Activity B: Draw your own polygons.

Now choose three of the polygons to draw and color on the grid below. Can you add a right angled triangle and a rhombus?



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## Answer Key

### Activity A

**Red = an acute triangle**

**Blue = a parallelogram**

**Yellow = a hexagon**

**Orange = a pentagon**

**Green = a rectangle**

**Purple = an octagon**

### Activity B

See the grid under Activity A for the three polygons the children choose to copy. The right triangle and the rhombus are depicted below. They may differ in size.

