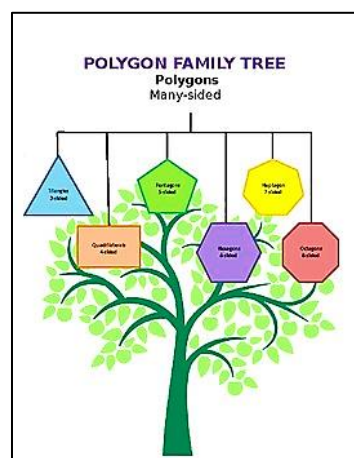


Two-Dimensional Polygon Family Tree

Theme: Two-Dimensional Figures

Curriculum Area: Math

Students will learn which two-dimensional shapes are like one another in terms of the polygon family. Not only that, but how each shape has similar attributes and can be subcategorized underneath another shape. An example of this is that “all rectangles have four right angles and squares are rectangles, so all squares have four right angles.” This shows that a rectangle has similar attributes as a square in terms of angles, and they both are four-sided figures. This allows students to classify two-dimensional figures based on their properties and distinguish them when asked for perimeter, area, etc., when asked in the future. Now that we know a little more about how two-dimensional shapes can be interconnected, let’s get started with the activity.



Ages of Children: 5th Grade (9-11 years of age)

Materials Needed:

- Colored Pencils
- Pencil/Eraser
- White Printer Paper (8x11)
- Ruler

Developmental Objectives/Domains: By participating in this activity, children will:

1. Learn to distinguish the different attributes that the polygon family consist of based on all the shapes that are included in the tree.
2. Develop a clear view that some shapes are under subcategories of the main shape.
3. Understand that some of the two-dimensional shapes are like one another based on sides, angles, etc.
4. Enhance cognitive development by allowing students to explore the different attributes that each two-dimensional shape share and have as an individual shape.

Procedure:

1. Review some of the main categories of two-dimensional polygon figures.
2. Go into the subcategories.
3. Next go through the main categories and describe what each shapes attributes are and how some of them are related.
4. [Link to example of Polygon Family Tree.](#)
5. As a class review the Polygon Family Tree and what we can learn from it.

References:

- <https://www.cde.ca.gov/be/st/ss/documents/ccssmathstandardaug2013.pdf>
- <https://ecdn.teacherspayteachers.com/thumbitem/Polygon-Family-Tree-4487303-1564920601/original-4487303-1.jpg>