First Grade: Module 5

DUVAL Math Parent Tips

DUVAL COUNTY PUBLIC SCHOOLS

Identifying, Composing, and Partitioning Shapes

In Module 5, students will revisit their kindergarten work with geometric shapes. They will sort, analyze, compare and create two– and three– dimensional shapes, and put them together to create new shapes. They will also, as in their work with number bonds and addition and subtraction, examine the part-whole relationship through this new geometric lens.

What Came Before this Module: In Module 4, students studied, organized, and added and subtracted numbers with 40. Students used the symbols <, >, and = to compare numbers.

What Comes After this Module: All of first-grade learning comes together in this unit in which students will work with place value, addition, and subtraction within 100, as well as continue work with money and coins.

First Grade, Module 5

Special points of interest:

- ✓Words to Know
- ✓Attributes of Shapes
- ✓Part-Whole Relationships with Composite Shapes
- ✓Mathematical Practices
- ✓Zearn! Want to help your child with DUVAL Math?

Words to Know

Attribute: any characteristic of a shape, including properties and other defining characteristics, e.g., straight sides, and non-defining characteristics

Fourth: 1 out of 4 equal parts

Half: 1 out of 2 equal parts

Time Terms: Half Hour, Hour, Minute, O'clock

Three-Dimensional Shapes:

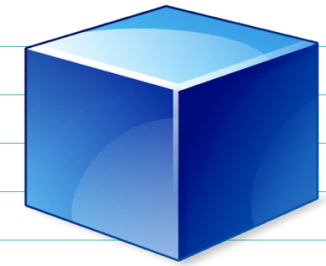
Cone, Cube, Cylinder, Rectangular Prism, Sphere

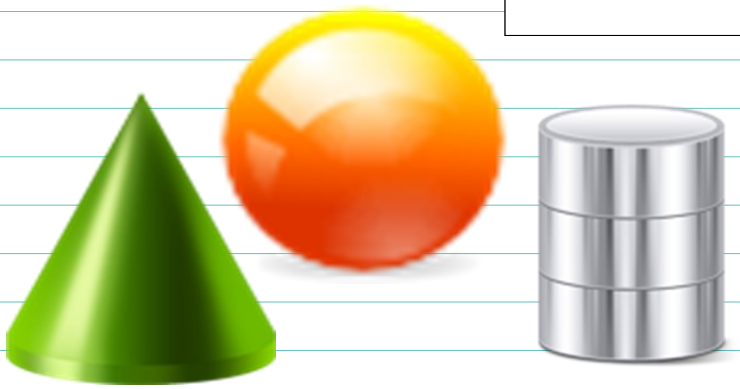
Two-Dimensional Shapes:

Circle, Square, Rectangle, Half-circle, Quarter-circle, Triangle

Hexagon: flat figure enclosed by six straight sides

Rhombus: flat figure enclosed by four straight sides of the same length where two pairs of opposite sides are parallel.





Questions?

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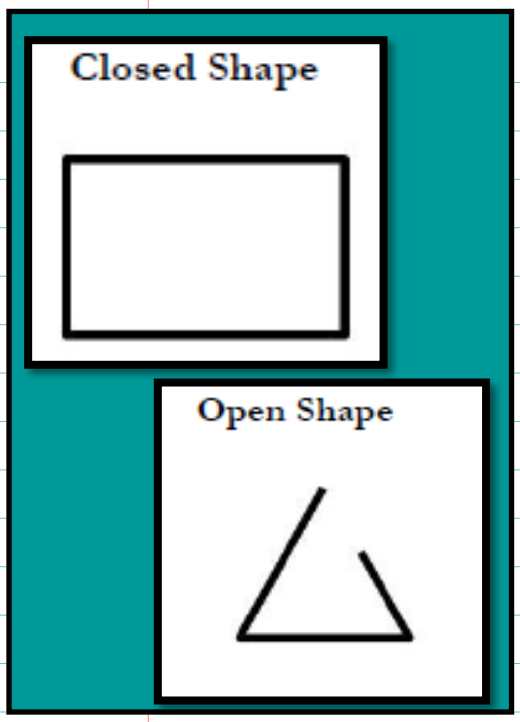
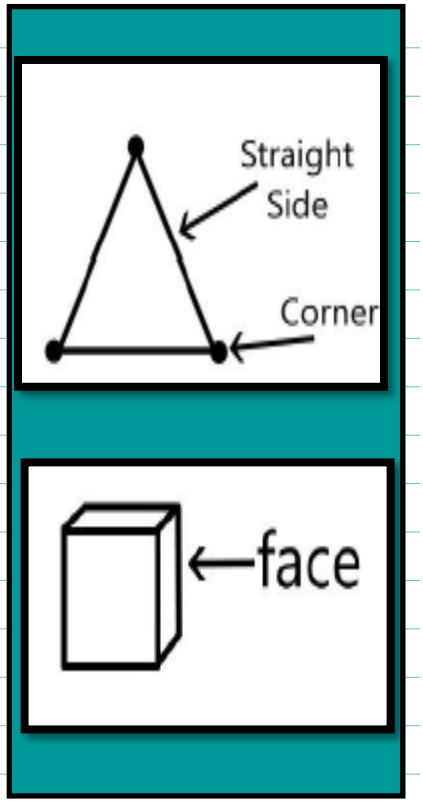
Attributes of Shapes



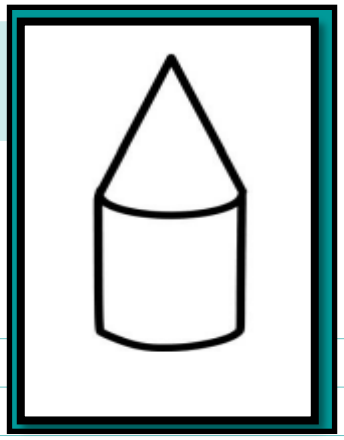
2-dimensional shapes		
Trapezoid	4 straight sides and 4 corners Sides are not the same length	
Square	Is a type of rectangle and a type of rhombus	
Hexagon	6 sides and 6 corners	
Rhombus	4 straight sides of equal length and 4 corners	
Triangle	3 straight sides and 3 corners	

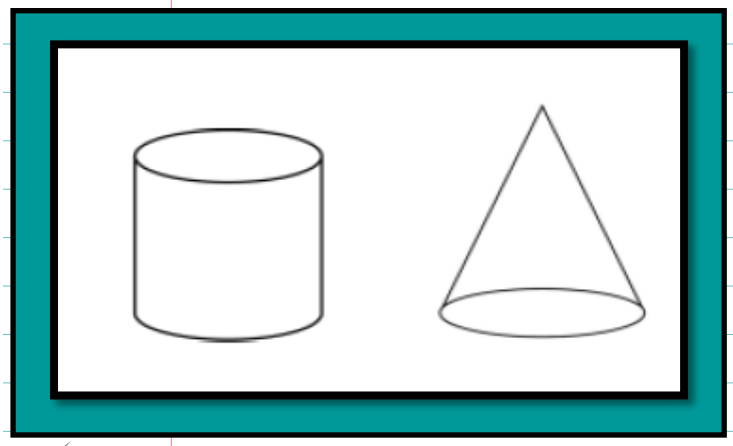
3-dimensional shapes		
Cube	3-dimensional shape with 6 square faces	
Sphere	3-dimensional shape with no flat faces	
Cylinder	3-dimensional shape with 2 circles or oval faces that are the same size	
Cone	3-dimensional shape with only one circle or oval face and one point	
Rectangular Prism	3-dimensional shape with 6 rectangle faces	

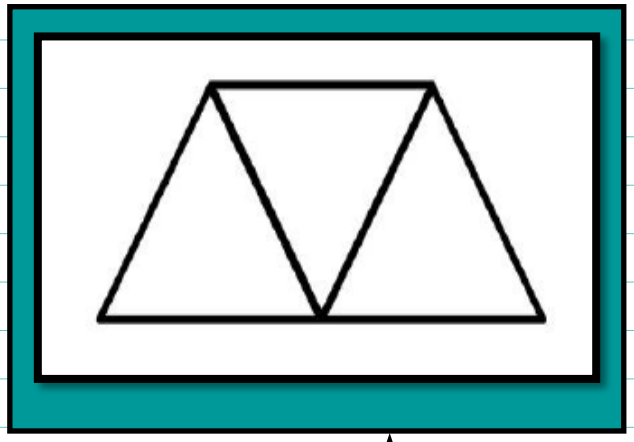


Part-Whole Relationships with Composite Shapes

Students will use more than one shape to create another shape. For example, Use 3 triangles to make 1 trapezoid. They will also recognize 3-demisional shapes and use them to build new structures. For example, students will take a cone and a cylinder and build a new structure with the two shapes.

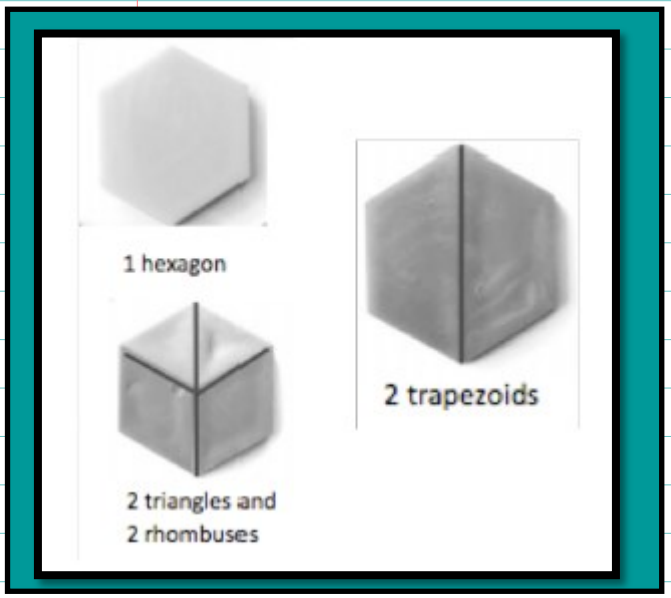


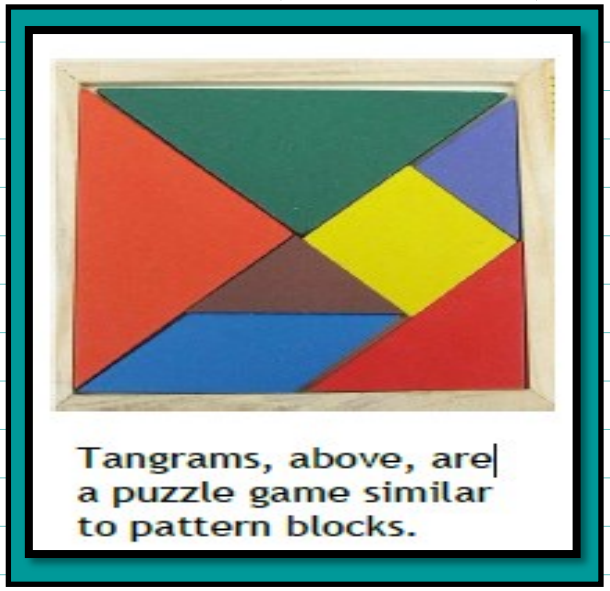




Students will use patter blocks to compose shapes. They will learn the proper names of all the pattern block shapes: triangle, square, rhombus, hexagon, and trapezoid, (though some pattern blocks sets do not include trapezoids). Students will also use the blocks to discuss equal parts, for example students can compose a hexagon out of several different pattern blocks.

Spotlight on Mathematics





Standards for Mathematical Practice

Mathematical Practices Addressed in this Module:

MP.1 **Make sense of problems and persevere in solving them.** Although some students thrive on the visual–spatial perspective of geometric concepts, it can be quite challenging for others. Throughout the module, students will be encouraged to continue working toward success when trying to arrange shapes to create specific composite shapes and when recomposing the pieces into different shapes. For some students, sorting shapes into groups without using the common shape names can also create challenges through which they must persevere. This will take place as students distinguish shapes from among variants, palpable distractors, and difficult distractors in Topic A.

MP.6 **Attend to precision.** Students will use clear definitions with peers as they define attributes. For example, while working with a partner, students describe a composite figure by explaining surfaces, sides, and corners so that their partners can create the same composite shape without seeing a visual representation. Students appropriately name parts of a whole using terms such as *halves, fourths,* and *quarters*.

MP.7 **Look for and make use of structure.** Students identify attributes in order to classify shapes such as triangles and cylinders. Students recognize that attributes such as the number of sides, surfaces, etc., are defining attributes, whereas color, size, and orientation are not. Students use their understanding of the partitioning of a circle to tell time.

1. Go to www.zearn.org
2. Create a login.
3. Click on Courses.
4. There is a drop-down menu on the left. Click on the grade and the Mission. Mission is being used in place of Module. Example: Grade 3 Mission 4 is the same as Grade 3 Module 4.
5. Scroll to find a particular lesson.
6. Now you can click on one of the choices offered for that lesson. What is offered varies from lesson to lesson. These are some of the choices the lessons may offer.

- **Math Chat/Learning Lab/Z-Quad:** could have a warm-up followed by a video or just a lesson video
- **Tower:** Practice Problems
- **Bonus:** Extra Problems
- **Sprints:** Sprints presented in lesson are available for student to take online.
- **Multiply Mania:** Multiplication Facts

Zearn!

Additional Practice aligned with DUVAL Math!

http://www.zearn.org