

Title :Geo Box

Curriculum: Math

Grade Level Span 1-3

Purpose: Students gain knowledge to identify shapes in real world contexts through drawing, building, patterning, sorting and classifying shapes.

Description: Students begin by comparing and contrasting personal attributes. Students will demonstrate an understanding of geometric shapes and their attributes by identifying two and three dimensional shapes in real world contexts.

Activities	Curriculum Standards	NETS for Students
1. The students will learn alike and different attributes through a series of class games. Ex: We are alike and different game where students stand in a circle with a partner and must state how each is alike and different or Name the rule game where student chooses several classmates that share an attribute and the rest of the class guesses the common attribute.	MN State Grad Standards for Primary Math Space, Shape and Measurement	
2. Through the use of textbooks, transparencies, cd-roms, and manipulatives, students will be introduced to the geometric shapes.	1,3,4	1,2,4,6,7
3. Invite outside resource person (architect, artist, builder) to speak about how geometry connects to their jobs.		2
4. Do Shapes and Windsocks activity from Lessonplanspage.com – Directions are: Have construction paper of different colors out for the children. Have a toilet tissue roll for each child. Have students cut out shapes from the construction paper. Have each student pick a color construction paper to cover the tissue roll with by gluing it on the toilet tissue roll. Then have them take their cut out shapes and put them on the tissue roll. The children can count how many hearts, circles, triangles, and squares they used. Punch holes in the top of the toilet tissue roll and tie a string to it. The last thing to do is take colored tissue paper and glue strips onto the bottom of the toilet tissue roll. Let dry and then hang outside for a beautiful		

colorful windsock.		
5. Have students participate in a shape scavenger hunt around the school looking for objects fit geometric shapes.	1,3,4	
6. Students will create geometric shapes using a paint or draw program and orally identify the shapes to the class.	1,3,4	1,2,9
7. Students will participate in a home/school project where they build a 3 dimensional model using everyday household objects. Example: Student valentine mailbox of a boat, train, robots, castles) Teacher should generate a letter to explain the mailbox project. This letter will include types, sizes, and amounts of shapes plus examples of 2 and 3 dimensional objects. The letter will inform students of the need to practice verbalizing an accurate description of their project.	1,3,4	
8. Students will accurately write a paragraph describing the attributes of each geometric shape and then orally present it.		
Optional Extension: A. Choose 3 shapes from the completed project to create a repeated, extended, symmetrical pattern.		
B. Using the 3 shapes, students practice slide, flip, turn of their shapes to predict the results of this process.		

Tools and Resources

(List all Web sites, specific software and hardware needs)

<http://mathforum.org/> (Introduction to geometry for primary students)

www.lessonplanspage.com (Shapes and Windsocks Project:

Hardware/Software

Computer

Printer Overhead Projector

Transparencies

Clarisworks

Paint/Draw Program

Math CD Roms (Example: Tesselmania, Geologo, and others like it)

Assessment

(How will you assess the students' learning? If you have a rubric, record it here. Be as specific as possible)

Teacher created checklist with the following criteria-

Yes/No

_____ Did the student include at least 4 different 2D shapes.

_____ Did the student use at least 4 3D shapes?

_____ Did they orally identify and describe the geometrical attributes of the shapes in their presentation?

_____ Did they identify and describe the geometric attributes of the shapes in their presentation?

Authors (including contact information)

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Personal Account

(Have you taught this lesson sequence before? What are the great learning/experiences you had?)

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