

Walk Around Keego Harbor
Social Studies & Math
Grades 1 - 3

OBJECTIVES:

ISTE National Educational Technology Standards for Students

Prior to completion of Grade 2, students will:

- Use a variety of media and technology resources for directed and independent learning activities. (*Basic operations and concepts, Technology productivity tools*)
- Work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom. (*Social, ethical and human issues*)
- Create developmentally appropriate multimedia products with support from teachers, family members, or student partners. (*Technology productivity tools*)

Michigan Technology Standards

Content Standard 2: All students will use technologies to input, retrieve, organize, manipulate, evaluate, and communicate information.

Benchmark 1 (Communication): Input and retrieve information from a technological system (including the practice of word processing skills).

Benchmark 2 (Retrieve / Manipulate / Communicate): Process information retrieved electronically.

Content Standard 3: All students will apply appropriate technologies to critical thinking, creative expression, and decision making.

Benchmark 2 (Creative Expression): Use a variety of technologies to express ideas (voice, data, video, graphics, etc.).

Michigan Social Studies Standards

Content Standard 2.1: All students will describe, compare, and explain the locations and characteristics of places, cultures, and settlements. (*People, Places and Cultures*)

Benchmark 1: Describe the human characteristics of places and explain some basic causes for those characteristics.

Benchmark 2: Describe the natural characteristics of places and explain some basic causes for those characteristics.

Content Standard 5.1: All students will acquire information from books, maps, newspapers, data sets and other sources, organize and present the information in

maps, graphs, charts and timelines, interpret the meaning and significance of information, and use a variety of electronic technologies to assist in accessing and managing information. (Information Processing)

Benchmark 2: Acquire information from observation of the local environment.

Benchmark 3: Organize information to make and interpret simple maps of their local surroundings and simple graphs and tables of social data drawn from their experience.

Content Standard 5.2: All students will conduct investigations by formulating a clear statement of a question, gathering and organizing information from a variety of sources, analyzing and interpreting information, formulating and testing hypotheses, reporting results both orally and in writing, and making use of appropriate technology. (Conducting Investigations)

Benchmark 2: Gather and analyze information in order to answer the question posed.

Michigan Math Standards

Content Standard 2.1: Students develop spatial sense, use shape as an analytic and descriptive tool, identify characteristics and define shapes, identify properties and describe relationships among shapes. (Shapes and Shape Relationships)

Benchmark 1: Recognize and name familiar shapes in one, two and three dimensions such as lines, rectangles and spheres and informally discuss the shape of a graph.

Benchmark 3: Compare, sort and classify familiar shapes

Content Standard 2.2: Students identify locations of objects, identify location relative to other objects, and describe the effects of transformations (e.g., sliding, flipping, turning, enlarging, reducing) on an object. (Position)

Benchmark 2: Locate and describe objects in terms of their orientation, direction and relative position, including up, down, front, back, N-, S-, E-, W-, flipped, turned, translated; recognize symmetrical objects and identify their lines of symmetry.

MOTIVATION:

What student interests provide the basis for this lesson?

The students have been learning about different shapes, as well as learning about their community, and the people and places that reside there. A book titled, *Twizzlers: Shapes and Patterns* helped the students to begin realizing that shapes are all around us. What better way to experience the community that they live in by having the students look for various shapes: on houses, buildings, signs—this will help the students come to know their neighborhood, as well as to look beyond the obvious signs and structures to see what help create those signs and structures.

How do you engage students in this activity?

To engage the students, first have them use Twizzlers (licorice) sticks to help make the different shapes as the teacher reads the book. Then, while out on the walk around the community, give the students a clipboard, a pencil and a piece of paper which they use to make tally marks to help them keep count of what shapes they see and how many they see. Encourage the students to look for interesting shapes and the places they can be seen so that the adults can help the students take pictures. After the walk, put the pictures into a PowerPoint presentation and revisit them. What shapes can be found in the picture? How many shapes can be? Can we count them?

MATERIALS:

- Smart Board / white board, projector, laptop
- book *Twizzlers: Shapes and Patterns* (Pallotta, Jerry & Bolster, Rob. 2002)
- 4 bags of Twizzlers—about 5 Twizzlers per student
- Microsoft PowerPoint (with pictures already loaded into a slide show)
- construction paper
- digital camera / digital video camera

PROCEDURE:

1. The purpose of this lesson is to prepare the students for the walk around the community. The students will learn about shapes: what they look like, how can they be described. They will also get to make their own shapes using Twizzlers. review with the students the Shape Walk taken around the school neighborhood. The students will trace the shapes they find and count them.

In classroom:

2. Have the students find a seat on the rug in front of the Smart Board, remembering to leave enough room for people to walk between the students and the Smart Board. Tell them that we will be taking a walk around the community. As well as looking for different places and things, such as City Hall and the Dairy Queen, the students will look for shapes: where are they and how many do you see during our walk?
3. Begin by asking the students some questions. “What are shapes? What do they look like?” Write down some of the responses on the Smart Board (or a clean white board). Here, ask the students to come up and draw the shapes on the white board. Next, ask “What shapes do you think we’ll see on our walk? Where do you think we will see these shapes? How many shapes do you think we will see during our walk?”
4. Have the students return to their seats. Ask the Friend of the Day to pass out construction paper to each student—this will be his or her work space. Then, pass out 5 Twizzlers to each student. Tell them that they cannot eat the Twizzlers until the end of the story—they need to use them to make shapes. When the book starts talking about shapes, have the students make the shapes that are described. First a triangle, then a circle, then a square, an oval, a rectangle.

5. Once the book is finished, and the students are done making shapes out of their candy, they may eat the licorice. Remind them that these are some of the shapes they will see on their walk.

On walk through community:

6. When going on the walk, encourage the students to keep their eyes open for shapes in different places. The teachers will help the students look for shapes. The adult chaperones and teachers will hold the digital cameras since the students will be holding their papers to record the shapes they see and how many. The students may take pictures. The adults need to help them, if they have not used a digital camera before. Take pictures of different shapes found within the community. Arrows on the road. Trapezoids as roofs. Rectangles and circles as signs. Also encourage the students to record how many shapes they see using tally marks.
7. After school, the day of the walk, organize the pictures into a PowerPoint presentation. They can be organized by shapes, by place; however you would like. Make a number of slides that can be used to look for shapes.

In the classroom:

8. Set up the projector so that the PowerPoint presentation can be projected on the Smart Board or a white board.
9. Before starting the slide show, ask the students to name some shapes they remember seeing when on the walk around the neighborhood. Tell them that we will revisit the Walk Around Keego Harbor by looking at pictures taken during the walk. The students will look for shapes within the picture and will trace the shapes and count how many they can find.
10. Project each slide, and have a different student come up and trace the shapes that they can find in the picture. Encourage the students to look for different shapes. Although the slide may be focused on circles, see if the students can find any triangles or squares. Count how many shapes are found and record the number either using base 10 block shapes, tally marks, or even money (as a way to show different ways that numbers can be represented). Make sure to save what the students have done, by either taking a picture with a camera, or by pushing the "Print Screen" button on the keyboard. This takes a picture of the screen. Then open up Microsoft Word, and insert the picture onto a blank page.
11. After going through all the slides, add up all the shapes that were found within the pictures. Talk about how shapes help to make up different things found within our community.
12. Close the activity by having the students return to their seats and take out their journal. They should write about some of the shapes that they found, where they found shapes, and how many shapes they found while we were revisiting our Shape Walk.
13. Throughout the week, encourage the students to look for more shapes when they venture out into the community with their families, and also when they are putting together their picture books of shapes found in the neighborhood.

TOOLS AND RESOURCES:

(Include all Web sites and specific software)

- TTI Laptop
- Smart Board and projector
- Microsoft PowerPoint and Word
- Digital cameras and 3 ½' floppy disks

ASSESSMENT of LEARNING:

- Can the students talk about what shapes are? Can they describe what they look like? Can they give examples of shapes?
- Can the students give predictions about where they will see the shapes? Can they predict what shapes they will see on the walk? Can they predict how many of each shape they might see?
- Can the students tell where they found shapes? Can they tell how many shapes they found total? How many of each shape did they find?
- What were some of the places they found in the community? Who are the people that work there? What do they do?

CREDIT (INCLUDING CONTACT INFORMATION):

REFLECTION:

This lesson was fun to do with the students. They really enjoy getting to use the Smart Board and the magic markers that come with it. They also liked being able to use the Twizzlers to make shapes, and then being allowed to eat them. They commented that the walk around the community was fun—they saw lots of things, and found lots of shapes. We probably went through 8-10 floppy disks. They enjoyed being able to revisit the pictures that were taken, and look for shapes within them.

I really think that this lesson was successful, especially since so many students wanted a chance to come up and trace shapes that they could find in the pictures. Of course we didn't find all the shapes, but we used that idea to tell the students that shapes make up many things found in the community. Shapes are the building blocks of the community. Everything from squares and rectangles made by buildings, to circles and ovals that make up traffic lights and tires on the cars.

This type of lesson helps the students to not only look at the surface, but to really look hard at things to find the surprises hidden within. Young children take so many things for granted that often times they cannot focus on what helps to make up things.