March 13-15, 1997

Where in the World Am I?

Grade Level: First

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Length of Unit: 7 Days

I. ABSTRACT

The overall goal is to provide students with initial map-making activities that will help them to visualize an area. Providing students with the opportunity to explore an area from a bird's-eye view, or spatial perspective, will help them understand that when anything is reduced in size, or flattened, as with maps and globes, some things or features must be omitted or altered.

II. OVERVIEW

Lesson 1: Introduction to Maps and Globes
Lesson 2: Location of Self: Spatial Sense and Bird's Eye View
Lesson 3: Maps and Legends
Lesson 4: Geographic Features and Terms
Lesson 5: Cardinal Directions and Compass Rose
Lesson 6 & 7: Culminating Activities--Create a Model and Map of a Fantasy Place

III. BACKGROUND KNOWLEDGE

Maps and globes are specialized forms of information presented. It is important to remember that maps and globes are abstract devices used in teaching social studies. Young students will need concrete experiences to help them make the transition to the abstract information. Although maps leave out more information than they include, and use symbols to describe the information being perceived, students conclude that maps are important and useful tools.

IV. RESOURCES

Materials
Poster or picture of Earth taken from space
2. Globe
Maps: school, city, state, country, continent, world
4. 1 flat soda-carton type box for each student
1 blue helium type-balloon for each student

Books and Audio-visuals


V. LESSONS

A. Lesson One: Introduction to Maps and Globes

1. Objectives

a. Students will develop an awareness of the earth.

b. Students will construct a model of the earth.

c. Students will observe teacher's demonstration that a flat map is a representation of a globe.

2. Materials

A round blue balloon (the helium-type are the best), one for each student

b. Permanent markers--black and green, one per student

10 x 10 sheet of poster board with small "X" cut in the middle of poster board, one per student

d. Tag board patterns of 7 continents with equator drawn to serve as a tracing guide

Scissors

Large rubber bands (1 per student)

Poster of the Earth from space

Grapefruit

Knife

Globe

Tape

3. Background Information

A globe is a model of the Earth. It is round like the earth. We use a globe to locate and distinguish land masses and water masses. Students need to be given concrete experiences so that they will see that globes and maps are only representations of much larger places. The equator is an imaginary line that divides the northern hemisphere from the southern hemisphere.

4. Procedures/Activities

a. Lead discussion distinguishing land masses from water on earth using Earth from space poster.
b. Give balloons to students to blow up. They should tie a knot in it.

c. Tell the students that the knot is the South Pole.

d. Have students draw a small X at the top of the balloon with marker. Tell the students the X is the North Pole.

e. Let students put rubber bands on balloon around the mid-section. Trace around balloon at the rubber band with marker. When dry remove rubber band.

f. Have students compare their balloon to the globe and discuss Northern Hemisphere & Southern Hemisphere.

g. Discuss the location of the continents using the equator as a guide. Which continents are above the equator? Which are below the equator? Which continents does the equator run through?

h. Using Antarctica tagboard pattern first, let students trace continents onto balloon.

i. Instruct students to slip the knot of the balloon through the X in posterboard. The balloon globe should stand by itself, but if it doesn't or slips through, tape balloon tail underneath posterboard.

j. Have students trace the remaining continents using the equator again as guide for continent placement. Trace continents in this order to make it easier: South America, North America, Africa, Europe, Asia and Australia.

k. Teacher Demonstration:

Use the knife to cut the skin of the grapefruit.

Make two circles to divide the grapefruit into fourths.

Now carefully peel the skin off the grapefruit.

Flatten the peel. This is a representation of what happens when a world map is made.

5. Evaluation

Teacher observation during activities and discussion.

B. Lesson Two: Location of Self: Spatial Sense and Bird's Eye View

1. Objectives

a. Students will locate and name their continent, country, state, community.

b. Students will locate themselves on a map of their school.

c. Students will gain an awareness of global relationship and how they, as individuals, fit into that relationship.

d. Students will become aware of their relationship within a group: family, community, state, country, and continent.

2. Materials

Paper for booklet
Maps - school, city, state, country, continent

Choose 1 set of measuring cups, stacking blocks, Babushka dolls

Globe

3. Background Information

Using manipulative of blocks and/or other materials will help children develop the concept of their place within a place. By using smaller blocks first, students will see a concrete example of how they fit into a much larger place. This helps students understand that most maps assume we are looking down on a certain place. It is very beneficial to do the Bird's-Eye View extension activity with students.

4. Procedures/Activities

a. Introduce lesson activities by demonstrating to students how different objects fit together in graduating size. Use a set of measuring cups, children's blocks that stack, Babushka dolls, mixing bowls, etc.

b. Lead to the understanding that people belong to a large world.

c. Discuss their role in a family.

d. Ask students if they can identify their place in the school: school name, grade, classroom

e. Have a large poster with the terms school, city, state, country, and continent.

f. Using a series of maps, help students understand where they are in relation to the universe. Find where you are on a city map first: next use a state map, then a United States map, and last a map of North America. You may stack these in layers or may layer them on a bulletin board so that students may refer to them later. This will allow visual learners to have a concrete example.

g. You can add extra reference points to your maps, such as important cities within your state, where the students' grandparents live, or where students' were born.

h. Have students make a flip booklet in graduating sizes. Students draw pictures of themselves in the classroom, adding pages for each place of reference, and label.

5. Evaluation

a. Assess students on their oral responses, telling where they live in the universe based on terms on poster mentioned above.

b. Provide a map and/or globe. Assess students by having them point out as many points of reference, using school, city, state, country and continent as possible.

6. Extension Activities

Bird's Eye View Activity

a. Have students draw a picture of their shoe. If the students can see their heel then it is not a "bird's eye view."

b. Let students stand on a ladder (or other playground climbing equipment) and look down on various objects. Help students understand that they do not see the whole object.
C. Lesson Three: Maps and Legends

1. Objectives
   a. Students will explain the use of a legend/map key.
   b. Students will identify map symbols on a legend/map key.
   c. Students will interpret a simple map using a legend/map key.
   d. Students will construct a legend/map key.

2. Materials
   Maps of various areas
   Construction paper
   Writing paper
   Crayons
   Markers
   Glue
   Scissors
   Extension Activity Materials:
   Shoebox
   Milk cartons
   Tape

3. Background Information

   Map: A map is a drawing of all or part of the earth's surface. Maps show specific features from a bird's eye view.

   b. Legend or Map Key: A legend or map key is a chart that shows symbols, colors, or abbreviations used on a map. Some legends/map keys include earth's features such as rivers, lakes, mountains, etc. Others might show major cities, streets, rooms, etc.

   Symbol: A symbol is a printed or written sign used instead of a word to represent a relationship.

   d. Code: A code is a system of signals, symbols, or letters which are given special meanings.

4. Procedures/Activities
   a. Display a simple map of a classroom.

   b. Teacher explains that a map is a drawing of a real place and things. It shows the places from a bird's eye view.

   c. Discuss that all maps are written in some kind of code. The legend/map key helps us read the code. It unlocks the meaning of the symbols on the map by telling us what the symbols stand for.
d. Have students identify a particular set of coded pictures or symbols on the legend/map key and tell what each symbol stands for.

e. Have students create a map of the school playground using their own special symbols to represent each item.

f. Have students discuss their map and legend/map key with the rest of the classroom.

5 Evaluation

Teacher observation during activities and discussion.

6. Extension Activities

*The following activities could be substituted for Activity/Procedure "e" above.

a. Have each student make a shoebox model of one of the rooms in his/her house. Make a legend/map key to represent everything in the room.

b. On a large table, have students map out their neighborhood with butcher paper, masking tape, and various size milk cartons. Use the tape for the streets and the milk cartons for their houses and other buildings. In co-operative groups, students will make a legend/map key.

D. Lesson Four: Geographic Features and Terms

1. Objectives

a. Students will identify geographic features represented on globes or maps.

b. Students will generalize that geographic features are shrunk to fit.

c. Students will define and locate geographic features on maps and globes.

2. Materials

Milk carton-buildings

Green clay for mountains

Blue yarn for rivers

Blue plastic bowls filled with water for lakes

Brown paper bags cut in the shape of peninsulas and islands

Blue butcher paper for oceans

Brown paper bags for land

Optional: Railroad tracks

trees

small plastic boats

black construction paper cut in strips for roads
small plastic cars and trucks

Extension Activity:

Pictures of geographic features: river, lake, mountain, island, beach, bay, or harbor.

Old calendar pictures would be good to use.

3. Background Information

River: a long body of water that flows over land

b. Lake: an inland body of fresh or salt water

Mountain: a high area of land with steep sides and a sharp peak
d. Hill: a raised part of the Earth's surface that is lower than a mountain

Peninsula: an area of land where three sides are surrounded by water

f. Island: a piece of land that is surrounded by water on all sides

Bay: a body of water that extends into the land

h. Beach: a rocky or sandy edge of land along a body of water

i. Cape: a point of land that juts out into a body of water

4. Procedures/Activities

a. Review Bird's Eye View Activity and grapefruit demonstration.

b. Arrange items on a table for a tabletop model. May be used as center activity.
c. Students may stand on chair with the help of an adult to get the bird's eye view.

d. After students have been given the opportunity to observe model, let them brainstorm what the object could represent on earth.

ej. Have student draw a map key of the geographic features.

f. It will be necessary at this time for teacher to define mountains, rivers, lakes, oceans, peninsulas, islands, and bays or bay harbors.

g. Give students the opportunity, after geographic feature definitions, to add these features onto their map key.

5. Evaluation

Teacher can assess student's map key for the inclusion of geographic features.

6. Extension Activities

a. Give each student a geographic feature picture such as mountains, rivers, lakes, peninsula, bay, island. Old calendars are a good resource.

b. Have students place their picture on the floor in front of them.
c. Let students draw how they could depict their geographic feature on a map key.
d. Put 4-5 students in a cooperative group.
e. Students should combine the geographic feature pictures that they have drawn with those of other group members to make a map key.

7. Enrichment Activity
a. Give students the opportunity to explore above model or pictures of places taken from the air.
b. Ask them to analyze model or aerial pictures to find the most suitable place for a city, farm, fishing fleet, or ski resort.

E. Lesson Five: Cardinal Directions and The Compass Rose
1. Objectives
a. Students will locate and follow directions to find North, East, South, and West.
b. Students will identify a compass and a compass rose.

2. Materials:
   - Walt Disney's Educational Media Company Map Skills Series. Map Skills: Directions
   - Filmstrip projector
   - Map
   - Globe
   - Frank Schaffer Poster-Reading a Map
   - Direction Cards
   - Compass
   - Glass pie pan
   - Sewing needles
   - Magnets
   - Styrofoam

3. Background Information
   When reading a map or globe, there are four main directions to help locate places. These directions are North, East, South, and West. On a map or globe, the direction North is represented at the top of the map or the top of a globe. The northern area leads towards the North Pole. On the bottom of the map or globe is the southern direction. This area on a map or globe leads towards the South Pole. Another way to help find directions on a map is to use a compass rose. A compass rose is a picture that shows cardinal directions on a map. A compass is a magnetic needle inside an enclosure that shows directions. The needle points toward the north.
4. Procedures/Activities

a. Begin lesson by showing filmstrip Map Skills: Directions.
b. Discuss filmstrip and compare facts given with students' ideas.
c. Display a map and a globe.
d. Lead discussion to identify a compass rose. Use Frank Schaffer's poster - Reading A Map.
e. Display a compass.
f. Create an actual compass by using glass (or aluminum) pie pan, styrofoam, needle, and a magnet. Fill the pan with water. Place a small cube of Styrofoam in the water. Rub the magnet on the needle, and place the needle through the foam leaving an inch out of the foam. The needle should move to the north direction. Check direction by using an actual compass.
g. Label classroom using cardinal direction cards according to compass reading.

5. Evaluation
Teacher observation

6. Extension Activity

a. Teacher and students play "Simple Simon." Teacher gives directions having the students move in the north, south, east or west direction.

VI. CULMINATING ACTIVITY

Unit Assessment

1. Objective
Students will apply all mapping skills taught in this unit to create a model and a map of model.

2. Materials
Flat boxes/soda carton type
b. Chart or butcher paper
Modeling clay
d. Assorted pieces of construction paper

3. Background Information
It may be helpful to brainstorm with students some ideas they have for their models. Examples could include a zoo, circus, dinosaur park, playground or park. Encourage students to be creative.

4. Procedures/Activities

a. Send note home explaining project and soliciting items that students can use for the construction of their models.
b. Provide students with shallow flat box without a lid to use for model. Flat soda cartons are an example.
c. Provide students with modeling clay to use for geographic features.

d. Set guidelines. The project must include: three different geographic features (mountain, river, hill, bay, peninsula, etc.).

Map

Map Key

Compass Rose

e. Let students create and construct for 2 days.

f. Share the knowledge: Display models for students, parents and visitors to view.

5. Evaluation

Student will be assessed on the contents of model and map.

See Matrix Example

Student Name: 

Model Name: (Fantasy Place).

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Map Key 1 2 3 4 5 6

Compass Rose/Directions 1 2 3 4 5 6

Geographic Features/Terms 1 2 3 4 5 6

Total Score .

Score :
Add points together for each area.

VII. HANDOUTS/STUDENT WORKSHEETS