Delaware Recommended Curriculum

This unit has been created as an exemplary model for teachers in (re)design of course curricula. An exemplary model unit has undergone a rigorous peer review and jurying process to ensure alignment to selected Delaware Content Standards.

Unit Title: **Thinking About Maps and Globes**

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Content Area: **Social Studies**

Grade Level: **K**

Summary of Unit

From infancy, young students begin to develop a sense of space. A creeping baby learns the location of objects and the distance between them. A small child begins to develop a mental map inside the home and neighborhood. The mental map includes specific objects or features as well as areas or regions of use.

A key to developing the sense of space and distance is movement of the body. Development of vocabulary to express position and location is linked to the development of more abstract spatial thinking. Many traditional games for students (Simon Says) and toys (doll houses, toy race cars) are designed to help students develop spatial thinking and language.

The use of simple models and diagrams of the classroom and school environment leads to more confident use of maps and globes. The activities in this unit are designed to help students gather, express, and record spatial information in increasingly accurate and meaningful ways. They are designed to be age appropriate, and they will serve as a foundation for continued concept and skill development.

Stage 1 – Desired Results

What students will know, do, and understand

Delaware Content Standards

Geography Standard One K-3a: Students will understand the nature and uses of maps, globes, and other geo-graphics.

CCSS.ELA-Literacy.L.K.1.b
Use frequently occurring nouns and verbs.

CCSS.ELA-Literacy.L.K.5.c
Identify real-life connections between words and their use (e.g., note places at school that are colorful).

CCSS.ELA-Literacy.L.K.6
Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

Big Ideas

- Mental maps
- Spatial thinking

Unit Enduring Understandings

- Distance, size, and position of objects and features in the environment can be learned and become predictable by the development of a mental map or frame of reference. Language, models, maps, and diagrams are ways of representing the world.

Unit Essential Questions

- How can words, models, and graphics help us learn about the world?

Knowledge and Skills

Students will know…

- Basic vocabulary to express and describe spatial relationships.
- How maps, models, diagrams represent information about their surroundings.

Students will be able to…

- Use and interpret positional vocabulary effectively.
- Create and interpret models, diagrams, maps, and globes.

Stage 2 – Assessment Evidence

Evidence that will be collected to determine whether or not Desired Results are achieved

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Transfer Tasks

Click here for Transfer Task 1 – Where is Wally? I Can Use Positional Words

Part One: To show you know what I mean when I use position words, put the Wally sticker in the right place in each picture:

- Picture 1: Under the table (insert drawing of table)
- Picture 2: Inside the box (insert drawing of cardboard box)
- Picture 3: Between the trees (insert drawing of trees)

Part Two: To show you know what position words mean, circle the answer.

- Picture 4: Which word tells where Wally is? – inside, outside, or close to – the house
- Picture 5: Which word tells where Wally is? – behind, in front of, or beside – the house
- Picture 6: Is Wally closer to the tree or the house?
- Picture 7: Wally is walking. Which is farther, the store or the school?

Rubric for Transfer Task 1

2 – This response places all symbols correctly and interprets positional words correctly in at least three out of four attempts.

1 – This response places all symbols correctly. The student correctly interprets two or fewer of the positional words.

Click here for Transfer Task 2 – Using Directions

1. Start at the boats. What direction to the playground? _____
2. Start at the boats. What direction to the bike racks? _____
3. Jerry parked his bike. He walked to the playground. Then, he went to the boats. Draw Jerry's path on the map.

Rubric for Transfer Task 2

2 – This response provides valid directions and traces Jerry's journey on the map in correct sequence.

1 – This response provides valid directions or traces Jerry's journey on the map in correct sequence.

Transfer Task 3 – I Can Make a Model of the Earth

(Note: To be used for assessment evidence, this task should be accomplished in the classroom under teacher supervision and not as a home project.)

Provide the students with these materials:

- A number of objects of different shapes including balls, boxes, flat disks, and cones.
- Paint, crayons, or other suitable medium in a variety of colors.
- Colored tape or string.
- Paper cutouts in shapes of continents.

Tell the students that today they will show that they understand about globes. They will be working independently to make a model of the Earth. Offer students a choice of materials without offering guidance.

- A globe is a model of the Earth. Choose an object that is the same shape as the Earth for your model.
- Pick three colors—one for water, one for land, and one for ice and snow.
- Provide each student with a set of continent cutouts.
- Allow them time to work on the model.
- When students are finished applying colors and positioning continents, assist them in applying tape to show the equator.

Rubric for Transfer Task 3

2 – The student chooses a sphere and applies continents in fairly accurate, relative positions. The student selects colors for land, water, and ice and applies them appropriately. The equator is designated at the largest part of the sphere.

1 – The student selects a sphere and applies colors consistently for land, water, and ice. Continents may be distributed with inaccuracies. Equator may be absent or inaccurately applied.

Student Self-Assessment and Reflection

> When students are required to think about their own learning, to articulate what they understand and what they still need to learn, achievement improves.
>
> – Black and William, 1998; Sternberg, 1996; Young, 2000

How a teacher uses the information from assessments determines whether that assessment is formative or summative. Formative assessments should be used to direct learning and instruction and are not intended to be graded.

The Checks for Understanding at the end of each instructional strategy should be used as formative assessment and may be used as writing prompts or as small-group or whole-class discussion. Students should respond to feedback and be given opportunities to improve their work. The rubrics will help teachers frame that feedback. An interactive notebook or writing log could be used to organize student work and exhibit student growth and reflection.

Stage 3 – Learning Plan

Design learning activities to align with Stage 1 and Stage 2 expectations

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Lesson One – Thinking and Talking About Location with Spatial Vocabulary

Essential Question

- How can words, models, and graphics help us learn about the world?

Instructional Strategies

Location Vocabulary

-
- Location
- Position
- Next to
- Close to
- Beyond
- In front of
- Behind
- To the right of
- To the left of
- Above
- Below
- On top of
- Underneath
- Near
- Nearby
- Far
- Far from
- Distance
- Cardinal direction
- Right
- Left
- Between
- North
- South
- East
- West

Learning Relative Position

People like to talk about where things are located or where they can find things. We want to find an item in a grocery store, a hidden treasure, or a place where we will meet friends. This strategy is about the language we use to tell us where things are.

Note to teacher

Not all of these strategies will be accessible to students right away. Not all students will use all location terms right away. Once these strategies are used, they can be consistently reinforced as students think and talk about location.

Things you will need for this lesson are a stuffed toy or puppet, Red Riding Hood or other suitable story, and flash cards for position words.

Handle an object (e.g., toy kangaroo, globe) in relation to your chair or table and ask students to use location words to describe the positions of the objects. Then, ask students to hold objects above, below, next to, and in front of something else.

Have students line up to use "in front of," "behind," and "between" to describe where they are. Read aloud "Little Red Riding Hood" (or another story) and use location vocabulary (e.g., "What is between the house and the tree?" or "Where is the wolf in relation to the tree?").

Ask where one object is in relation to another object in the room. What is next to the door? What is between the windows? What is to the right of the door?

Conduct a variant of the "Simon Says" game. Have students move to particular places in the classroom or on the playground given particular directions, such as:

- "Simon says move next to the sink."
- "Simon says move far away from the door."
- "Simon says move to the front of the line."
- "Simon says move to the middle of the playground."
- "Simon says line up behind Carmen."
- "Simon says move to the north wall of the classroom."
- "Simon says move to the opposite side of the hall."

Check for Understanding

- Use location flash cards to review location vocabulary (see Handout 1 for copies).
- Informally observe students as they move and speak. Students should become increasingly more accurate and confident in their use of positional language as they practice.

Lesson Two – Representation with Models

Essential Question

- How can words, models, and graphics help us learn about the world?

Vocabulary

Model
Stand-for
eye view
Represent
Symbol
Bird's

Instructional Strategies

Learning Relative Position

Introduction *(For students to talk about in collaborative pairs)*

*What is a symbol? What would be a good symbol for a restaurant, a hospital, a shoe store, or a bookstore? What would be good symbols for objects in our classroom? Is this piece of paper that looks like a door really a door? (No, it is a symbol that represents the door.)

*What is a model? (Something small that represents something larger; a 3-inch high replica of the Statue of Liberty is a model of the much larger, real Statue).

Say, "Imagine that we had a shrinking machine. Can you make a picture of something after it was put into a shrinking machine? Imagine what our classroom would look like after it was put into a shrinking machine and made much smaller!"

Produce a cardboard box of approximately the right shape to represent the classroom. Take care to orient the box to match the classroom (long side to long side). (See description of materials to the right.)

Say, "If I put a symbol of a toy into the model of the classroom, can you use location words to describe where the symbol is in the model? Can you find where the real toy is hidden in our classroom? We can use a model or map to find a treasure, but first we have to know what a model or map is and how to read one."

Materials

Miniatures (models) of Statue of Liberty or Empire State Building or similar features

Symbols for hospital, restaurant, shoe store, or bookstore

Cardboard box or plastic box/tray to represent the classroom (ideally, its rectangular dimensions correspond approximately to the dimensions of the classroom). The box should have a clear symbol already in place (white paper for the real white board or paper symbol replica of windows for the real windows) so that the box can be oriented to the actual classroom. Orient the box by lining up the white paper symbol with the real white board or by lining up the window symbols with the real windows. (Avoid turning the box at odd angles to the room. It is difficult for adults to match up a model with the real world when things are not lined up.)

Pieces of paper (laminated) that replicate classroom features in miniature—green board, carpet, windows, doors.

3D replicas (e.g., model furniture, small dolls, a marble to represent a globe, small block to represent a desk).

1. Place a symbol to indicate an object that is in the corner (or middle) of the actual classroom. Ask students to place a paper symbol or a 3D replica into the corner (or middle) of the model.
2. Place a symbol to represent where a child is standing in the actual classroom. Ask students to place a student symbol in the model and explain why they put it where they did.
3. Have students invent symbols to represent other distinctive features in the room. Students should place symbols and explain the choice of location.

Check for Understanding

Have each student take turns locating relative position. Each student should be able to use a model and a symbol to place objects in the model classroom.

- Find a "treasure" (e.g., star taped under a desk, toy hidden in one of three paper bags)
- Walk a route inside the room
- Give directions to another person

Use a check-off system to record observations that each student:

- Can "read" or "invent" symbols to use in the model
- Can place symbols in approximate relative position
- Can use location vocabulary.

Lesson Three – Representation with Maps

New Vocabulary

Map
View from above
North wall
Bird's eye view
East wall
South wall
West wall
Corner of room
Center or middle
Between (this word can be developmentally difficult)

Essential Question

- How can words, models, and graphics help us learn about the world?

Instructional Strategies

Mapping the School Using a Flat Map and Symbols

Procedure

Display a large (11x17 or larger) classroom base map, plus large symbols for classroom features. Ask students to think about the similarities and differences between this map and the models used in Lesson 2. Explain to a partner some of the similarities and differences.

Materials

- An accurate, flat, base map of the classroom floor plan.
- Paper symbols of furniture and features in the classroom.

Say, "What is a map? (It is flatter than the model that we used earlier.) Do you know what I mean if I say that this map is like this whole room after it was put in a shrinking machine and made much smaller?" Tell the students that today they will make a map of the classroom. Point out that, like a model, the map will use symbols to represent classroom features.

Students may work in small groups with a smaller flat map that represents the classroom. They will select from choices of symbols for prominent features in the room. Windows are shown on the map along with another feature to provide "landmarks" to help orient the map. NOTE: Ideally, the large map and smaller maps SHOULD BE ALIGNED with the room. For example, make sure that the windows on the map are aligned with the windows in the real room. Even adults can get confused if a map is rotated to an odd angle.

Students choose a symbol (the classroom rug, the clock, student desk, teacher desk) and place the symbol in the appropriate place on the classroom map. (Teachers may need to use questions to encourage more accuracy: Is the rug closer to the windows or to the door?)

Have students create symbols to represent particular objects in the classroom, and they accept that their symbol represents a real object.

Students use cardinal directions (N, E, S, W) to describe their location or locations of objects in the classroom.

Students describe where things are relative to each other using "special spatial vocabulary."

Once students have demonstrated how to use and construct a map, the students will map the playground or a courtyard area. The students should view a bird's eye view of the playground. This may be obtained if a high vantage point is available for photography, or

the teacher may access an aerial view of the school from the Delaware Datamil site or Google Earth.

Have students develop appropriate symbols for playground equipment and other important features. It will be important to add compass orientation.

Check for Understanding

Use a check-off system to record observations that each student:

- Can select appropriate symbols and place them in approximate relative position and can denote more accurate placement by using position words.
- Can use position words (near, between, North wall) to describe locations.
- Show where objects are located or use a map to give directions.
- Increased success in "treasure hunts" or in giving directions, or in identifying map symbols that have been "misplaced" and putting them in better positions.

Lesson Four – Representation with Maps

Essential Question

- How can words, models, and graphics help us learn about the world?

Instructional Strategies

Mapping the Hallway and Describing Sequence During a Journey

New vocabulary:

-
- Inside our room
- Outside our room
- Start
- Beginning
- End
- Finish first
- Next
- Last
- Sooner
- Later
- Journey
- Sequence
- North
- South
- East
- West

Materials you will need:

- Hallway maps of different sizes, possibly adapted from the teachers' handbook. (If you use a printout of the hallway map, it is helpful to "orient" it (line it up with the actual layout of rooms).
- Paper symbols for hallway features such as water fountains, exits, etc.
- Footprint symbols to show route taken on the hallway journey.

Procedure

Display the classroom map students constructed in the last lesson and ask, "Does our school have other classrooms? What would a map look like if it showed all the classrooms in our school?"

1. Display the map of the hallway and ask, "Do you know what I mean if I say that this map is like this whole third (second) floor after it was put in a shrinking machine and made much smaller?"
   - Which symbols should we choose to represent our classroom and other classrooms?
   - Where is our classroom? How far is our classroom from other rooms in our school?
   - If we take a journey from our room to _____, what rooms will we pass by along the way?
   - Can we describe how to move from our classroom to other rooms in our school?
   - Can we distinguish between inside and outside or between, near, and far?
2. Display a large map of the hallway. (If you print out the map on paper, the teacher should try to "orient" or line up the map with the actual building layout.) To help students get oriented, point out the hallway and the rooms on both sides of the hallway. Point out the stairs or exits.

3. Explain that we want to see where our classroom is in relation to another room or the stairs. To find this out we can read the map and get information about our hallway.
4. Help the children choose the appropriate symbol for our classroom and place it onto the map.
5. Practice reading the map by finding a science classroom (or find another special room). Describe the color or the symbol of the main office (or another special room).
6. Find a room that is far away from our classroom.
7. Find two rooms that are next to each other.
8. Find two rooms that are across the hallway from each other. What is across from _____?
9. What classroom is west (or east or north or south) of our classroom?
10. Plan a journey to another room. How many rooms will we pass by as we go from our classroom to the other room? If you used room symbols, students could say what symbols we will pass by.
11. *Students arrange symbols or pictures in the right order to represent a journey between places.
12. Where are things that we use often? Where are stairs? Where are our cubbies?
13. Suppose that we want to tell our parents how to find our classroom, or we want to tell a visitor how to find our classroom. If they start at _____, what will we tell them?

Check for Understanding

Use a check-off system to record observations that each student:

- Can use position words (next to, near, between, south side) to describe locations of classrooms.
- Can use sequence words to describe a journey (start or beginning, next, last or end).
- Can describe a sequence of movement along a journey from one room to another room (perhaps by naming a room that a person passes or by counting the number of rooms that a person passes during the journey).

Lesson Five – Using Globes

Essential Question

- How can words, models, and graphics help us learn about the world?

Instructional Strategies – The Globe as a Model of the Earth (4 sessions)

Globe vocabulary:

-
- Equator
- Globe
- Earth
- Land
- Water
- Continent
- Ocean
- North Pole
- South Pole
- North America
- South America
- Africa
- Europe
- Asia
- Australia
- Antarctica

Begin by brainstorming what students already know about the Earth.

Materials

Globes (inflatable, on stand, basketball)

Soft plastic continent pieces for use with 12" diameter globe on stand

World maps, for projection and/ or display showing continents and oceans with and without names. Maps are in color and also in black and white.

Modeling clay

Sticky notes

Masking or painter's tape

Display photographs/images to show the shape of Earth seen from space (NASA image, Google Earth image). Discuss what students see in the photographs/images and encourage them to describe the shape of the globe (circular, round) and the colors (e.g., water vs. land). Review the concept of a model (used earlier with models of the classroom). Ask students what they think a model of the Earth might look like. Display the globe and introduce the globe as a model of the Earth.

Let students handle different types of globes (inflatable, on stand, basketball). Have students identify similarities and differences between the globes, but call attention to what all the globes have in common (they are 3D models of the Earth).

Display a large globe, and work on vocabulary/concepts about water-land, ocean-continent. Ask students to notice colors on the globe. What does blue represent (water)?

Review the idea of symbol—blue represents water. Everything else is land (ground or the part of the Earth that we can stand on). Brainstorm examples of land (e.g., the ground under our school or under our house, a street that we drive on, a park, etc.)

Point to different areas on the globe and have students determine whether the area is water or land. Play the "thumb game," wherein students sit in a circle and pass the globe around the circle. When the globe is in your hands, look at where your right thumb is, and identify whether your thumb is in water or land. This game may require a lot of modeling and

practice for kindergarten, particularly when remembering right vs. left. Later, play this game using ocean and continent.

Point to other types of water (other than oceans, e.g., seas, lakes) on the globe. Ask students to work in teams and find other bodies of water. Bring students together to share team observations, and on a large globe, use sticky notes to label some of the team findings. Have students find other types of land (islands that are smaller than continents).

Display a large globe and point out land areas (continents). Ask students if they can tell which continent they live on (North America) and show the soft plastic piece that the geographers made and labeled with "N." Place the soft plastic piece over North America on the large globe. Explain that people live on different continents and that we will learn the names of the continents.

Use the soft plastic pieces representing the continents and introduce other continents. As a clue, label each continent only with a starting letter (e.g., "S" for South America). Have students compare sizes of continents—Asia is the largest and Australia is the smallest. Consider a song to help students remember the names of continents.

The Continents Song (sung to the tune of "He's Got the Whole World in His Hands")

I've got the whole world in my hands,
I've got the whole world in my hands,
I've got the whole world in my hands,
And I'll name my continents for you.
Europe and Africa are continents
North and South America are continents
Asia and Australia are continents
And at the South Pole is Antarctica.

Review location words along with continents and oceans.

- What ocean is **between** North America and Europe? (Atlantic)
- What continent is **between** the Atlantic Ocean and the Pacific Ocean? (North America)
- What ocean is **next to** (touches) three continents—Africa, Asia, and Australia? (Indian)
- What ocean is **near** the North Pole? (Arctic)
- Which continent is **next to** (touches) Europe? (Asia, here the soft plastic pieces are useful.)
- Which continent is **next to** (touches) North America? (South America)

Point out the North Pole on the globe. Emphasize that both Poles are very cold (have cold winter temperatures all year). Ask students to point to continents that are close to the North Pole (North America, Europe, and Asia). Allow students to put the appropriate soft plastic pieces onto the globe when they identify North America, Europe, and Asia.

Point out the South Pole on the globe. Emphasize that both Poles are very cold (have cold temperatures all year). Ask students to point to a continent that touches the South Pole (Antarctica). Allow students to put the soft plastic piece of Antarctica onto the globe.

Mark the Equator on the globe using tape. Emphasize that areas close to the Equator have warm temperatures all year. Ask students to point to continents that touch the Equator (South America and Africa). Let students put the soft plastic pieces of South America and Africa onto the globe.

Review the new vocabulary word ocean as an extremely large area of water and continent as an extremely large area of land. Use the globe to compare amount of water and amount of land. Is there more water or more land on the Earth? How could we find out? Use the moveable (attachable) continent pieces (made by the geographers) and lay them on top of the water on the globe to show that there is more water than land on the earth.

Project the large world map in color. Ask students to identify continents and oceans on this flat map version of the world. Ask students to explain how the flat map is different from the globe. (Can they see the North and South Poles on the flat map? What happens to Antarctica on the flat map? What happens to the Pacific Ocean on the flat map? How much of the globe can we see without turning it? About half!) Have students create their own spherical model of the earth by making a ball with modeling clay and then flatten the clay to simulate the flat map.

Check for Understanding

Review cardinal directions using continents and the North and South Poles. Focus on the Equator and Poles. Ask such questions as:

- Which continents touch the Equator? (South America, Africa, with Asia near to it)
- Which continents are closest to the North Pole? (North America, Asia, Europe) Which continent is closest to the South Pole? (Antarctica) Be sure to associate Antarctica with the South Pole.
- Is the Equator closer to the North Pole or the South Pole? Where is the Equator? (It is between the North Pole and the South Pole. The Equator is not close to either Pole.)

Lesson Six – Using Globes

Essential Question

- How can words, models, and graphics help us learn about the world?

Materials

Maps and models from previous lessons

Maps of the US, state, and local community

Instructional Strategies

Near and Far: Describing Distance Between Places

Determine ahead of time a number of features around the school that can be "measured" with body-based "tools," such as steps or the outstretched arms of a student.

Near and Far Vocabulary

Distance
Closer
Farther
Arm's-length
Same distance as
More
Fewer

Describe the relative distance of two students who have walked away from a specified starting point (students walk different distances away from a rug; have others describe them as closer, farther, etc.).

Place symbols to represent themselves at varying distances from a landmark on a map or model (students place color symbols and explain why they chose that location).

"Invent" a measure of distance—steps or arm's-lengths and, at an appropriate time, a ruler. Student mastery of this part of the benchmark involves both a concept of distance and an idea of representation/measurement and, therefore, it requires a number of tries using different features such as rooms, hallways, pacing along tables, hand-widths across the desk, and so forth.

Have students measure the width of rooms by standing with outstretched arms. For example, six students with outstretched arms just touching each other can reach all the way across the library, but when you try in the classroom with the same students you cannot reach across the room. So, which room is larger? Similarly, have students compare hallway width to classroom width. Then have the students design and place symbols and explain why they chose that location.

Use a classroom map to find a "treasure" (e.g., star taped under a desk) along with hints to move "closer" to particular objects in the room.

Use maps of the U.S., Delaware, and the local community to extend the idea of relative distance and measurement to a map. Each map has landmarks. Students can describe distance (closer, farther) between particular landmarks. Which city is close to our community? Which is farthest away?

Lesson Seven – Using Globes

Essential Question

- How can words, models, and graphics help us learn about the world?

Instructional Strategies

High and Low – Describing Distance Between Places

Vocabulary

Basic Vocabulary

-
- up, down
- higher, lower
- height
- flat, steep
- mountain, hill, valley
- uphill, downhill

Intermediate Vocabulary

-
- coast, shore
- plains, flatland
- cliff
- landform
- elevation

Advanced Vocabulary

- horizontal
- vertical
- topography

Introduction

Begin my making comparisons.

- Compare heights of students with heights of teachers. Compare heights of different furniture in the classroom. Stack blocks only one high vs. two high or three high. (Activities that follow will compare heights of land.)

Materials

Photos of local hills or high features a delevation map of local area

Photos and elevation map of state topographic regions and the U.S.

Graph paper and linking cubes to represent height

Display photos of a local high feature (e.g., the Great Dune at Cape Henlopen, Iron Hill near Newark) and discuss flat vs. steep, higher vs. lower, going uphill vs. going downhill. Discuss how it feels to climb up steps compared with how it feels to walk down steps.

Ask students whether they think all land looks and feels the same. Reference places around the world they may have heard about or seen on TV. Brainstorm a list of words to describe the ways different places may look (e.g., flat, hilly, dry, rocky, etc.)

Introduce/review the concept that not all land is flat. Read the section about landforms in *My World* (or another book that shows different types of landforms). Using *My World* as well as photographs of different places, introduce different types of landforms (mountain, hill, valley, coast, plains, shore, cliff, flatland).

Display a simple "places" (placename) of the state of Delaware. Then, show an elevation map of Delaware. Discuss with the students how the land throughout the state (and the country and world) is really varied in elevation. Show the PowerPoint that has photos of flat, hilly, and mountainous places in our region.

The students can practice "landform" vocabulary by playing a matching game, matching photographs of landforms to the words that name them. Another option is to arrange the landforms in order by height from lowest (coast) to highest (mountain).

Create models of landforms (hills, mountains, valleys, plains, or flat land) using crumpled newspaper. Discuss what is higher vs. lower on the crumpled paper model.

Show students an elevation map of the area around the school. Find high and low places on the elevation map. Discuss with students how a hill compares with the area around it. What is it like to be on top of the hill?

What is the difference between a hill and a mountain? Which is higher? Display a graph showing the heights of a tall building the students know, of a hill in the area, and of a high mountain. For first graders, students can continue comparisons to other high mountains in the U.S.

Use linking cubes or other blocks to represent the height of Iron Hill. How many of this hill would it take to equal the height of a particular mountain? Use graph paper to translate this model into a graph.

Examine the elevation map of the U.S. Focus students' attention on the Appalachians and the Rocky Mountains. Which area has a higher elevation? How can we tell? Reference the graph and linking cube models created in the previous lesson. Students will work as teams to use clay (or crumpled newspaper) to build a model of one of the mountains. How can they make sure it is the correct height? One idea—they could use the tower of linking cubes created in the previous lesson to measure the height of the mountain. An added challenge could be to create a model of a mountain they have not studied as a class. Another option is to provide students with laminated copies of the elevation maps for them to build on.

Name: _____

Transfer Task 1

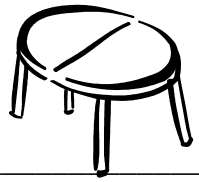
Using Positional Words

Where is Wally?

Put Wally in the right place.

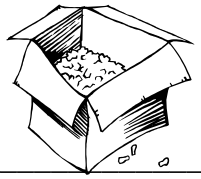
_____

Wally is
under the table.



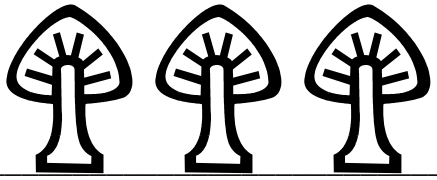
_____

Wally is
inside the box.



_____

Wally is
between the trees.



_____

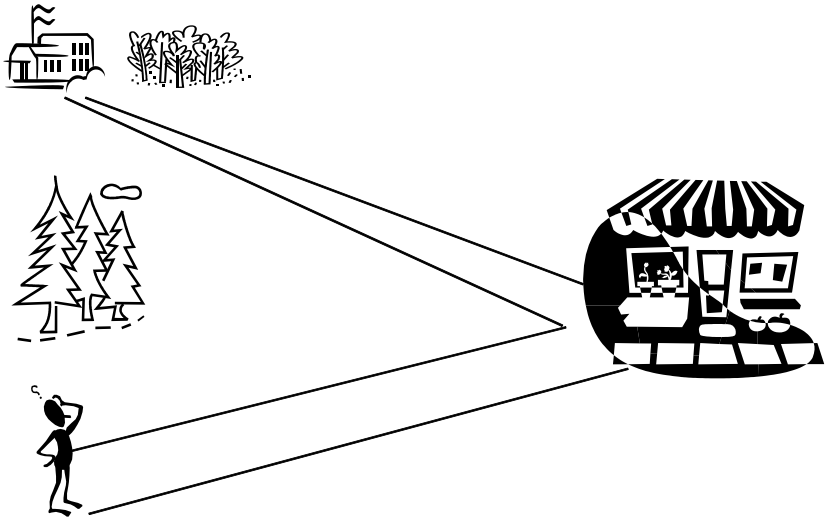
Which word tells where Wally is? Circle the answer.

Wally is **inside** / **outside** the house. / **over**

Wally is **behind** / **in front of** the house. / **beside**

Is Wally **closer** to the tree or the house?

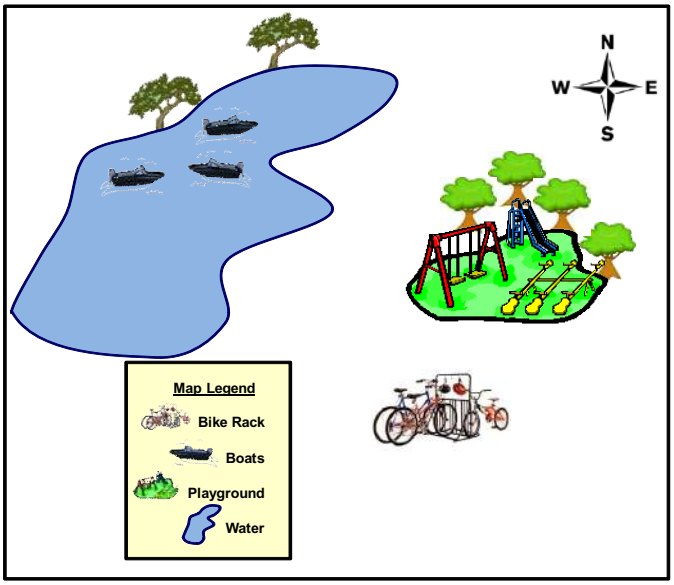
Wally is walking. Which is **farther** the store or the school?



Transfer Task 2

Using Directions to Read a Map

Our Park



Use the map legend and compass rose to answer these questions:

Start at the boats.

1. What direction to the playground?

_____

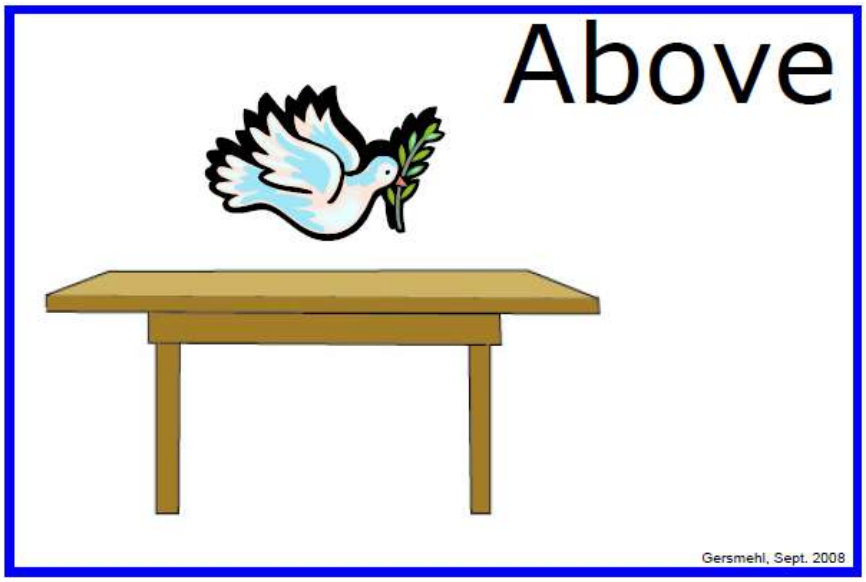
2. What direction to the bike racks?

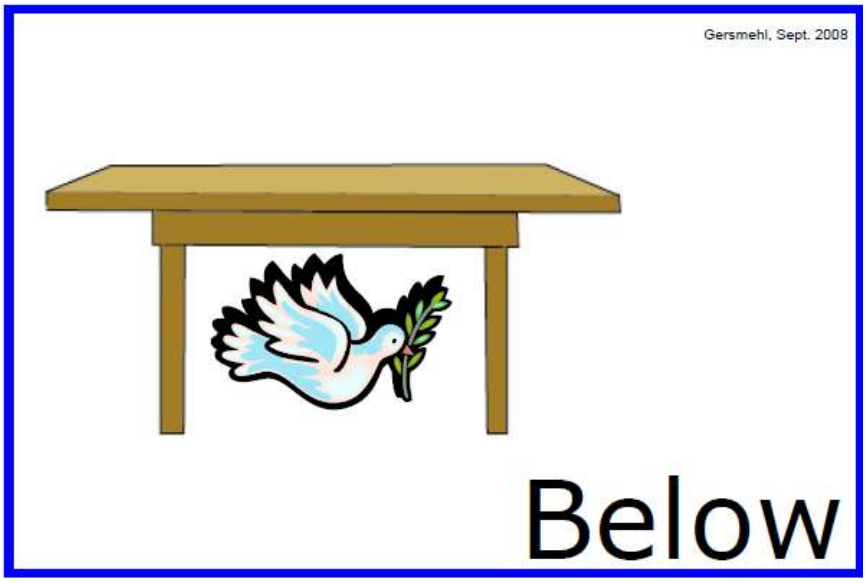
_____

3. Jerry parked his bike.
   He walked to the playground.
   Then he went to the boats.
   Draw Jerry's path on the map.

Handout 1

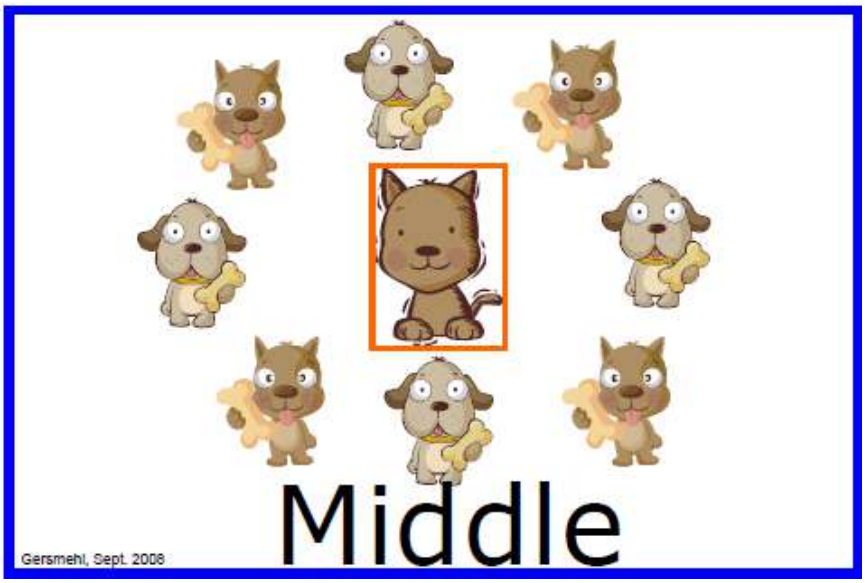
Location Flash Cards





Corner

Gersmehl, Sept. 2006


Middle
Gersmehl, Sept. 2008


On top of
Gersmehl, Sept. 2008


Underneath
Gersmehl, Sept. 2008


On top of
Gersmehl, Sept. 2008

Next to

Gersmehl, Sept. 2008

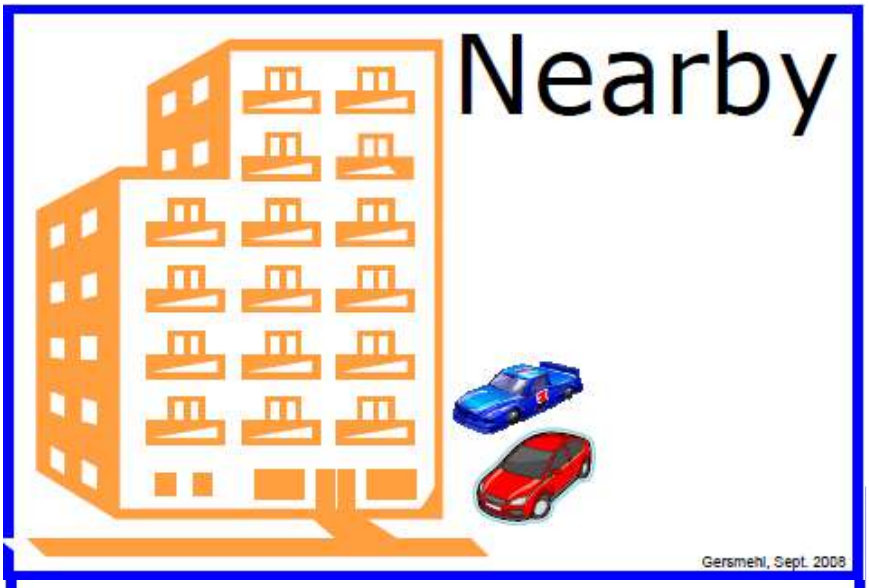
Underneath

Gersmehl, Sept. 2008

Between

Nearby

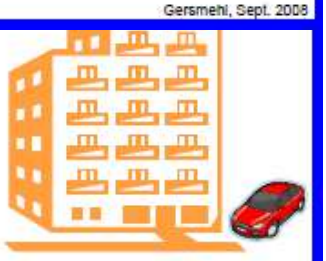
Gersmehl, Sept. 2008


Nearby
Gersmehl, Sept. 2008

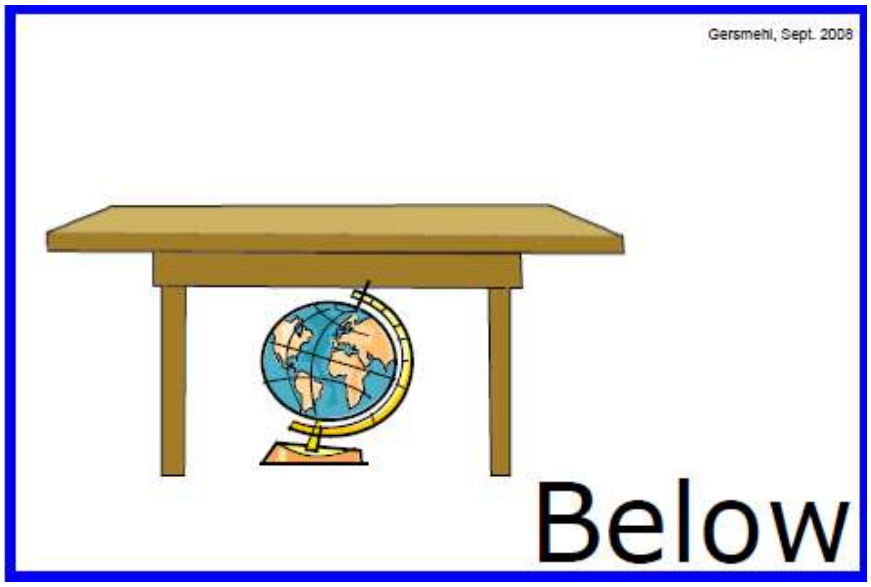

Far Away

On top of

Gersmehl, Sept. 2008



Far Away


Gersmehl, Sept. 2008
Below