

# Homes Around the World

## A Closer Look at Homes and Communities

Because people live in a wide variety of environments, the homes they build are remarkably diverse. The materials and innovations used in home construction reveal the strengths and concerns of societies around the world. Consequently, students are curious about the homes in which different people live. The *Homes Around the World* Teacher Guide serves to fuel further exploration of homes, communities, and environments. By using this guide, you have an opportunity to tap into high student interest while exposing students to broader social issues.

Participation in these lessons will lead students to make global connections and understand higher-level concepts, such as uses of natural resources and adaptation to environments. Students will become aware of some of the issues involved in building homes and communities. They will realize that they can make a positive difference through their actions.

The lesson plans in this guide are tailored for grades 2–3 and address various subjects, such as science, language arts, mathematics, and social studies. Each lesson plan is designed to stand alone. As such, they do not need to be presented in sequential order. Helpful reproducible worksheets appear at the end of the guide. The book titles referenced in this guide include:

*City Homes*

*Island Homes*

*Homes on the Move*

*Mountain Homes*

*Homes on the Water*

*Village Homes*

As students investigate the topics addressed in the guide and become more aware of the ways different cultures build homes and communities, they will sharpen their critical thinking skills to work towards creative solutions to worldwide problems. We invite you to jump in and ask questions with your class as you have fun learning more about the diversity of home designs.



# National Standards Correlation

Lesson Plan Title	Correlation to National Standards
<p><b>Scaling the Mountain</b></p>	<p><b>Mathematics</b> Students should understand how to measure using nonstandard and standard units.</p> <p><b>Social Studies</b> The learner can estimate distance and calculate scale. The learner can locate and distinguish among varying landforms and geographic features, such as mountains, plateaus, islands, and oceans.</p>
<p><b>My Space</b></p>	<p><b>Social Studies</b> The learner can describe how people create places that reflect ideas, personality, culture, and wants and needs as they design homes, playgrounds, classrooms, and the like. The learner can describe personal connections to place—especially place as associated with immediate surroundings. The learner can distinguish between needs and wants.</p>
<p><b>A Community Story</b></p>	<p><b>Language Arts</b> Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works. Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes. Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).</p>
<p><b>Mapped Out</b></p>	<p><b>Language Arts</b> Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.</p> <p><b>Mathematics</b> Students should find and name locations with simple relationships such as “near to” and in coordinate systems such as maps.</p> <p><b>Social Studies</b> The learner can interpret, use, and distinguish various representations of the earth, such as maps, globes, and photographs.</p>

Lesson Plan Title	Correlation to National Standards
<b>On the Go</b>	<p><b>Language Arts</b> Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.</p> <p><b>Mathematics</b> Students should solve problems that arise in mathematics and in other contexts.</p> <p><b>Science</b> Students should develop understanding about science and technology.</p> <p><b>Social Studies</b> The learner can identify and describe examples in which science and technology have changed the lives of people, such as in homemaking, childcare, work, transportation, and communication.</p>
<b>Keeping Warm, Keeping Cool</b>	<p><b>Science</b> Students should develop an understanding of light, heat, electricity, and magnetism. Students should develop abilities of technological design.</p> <p><b>Social Studies</b> The learner can examine the interaction of human beings and their physical environment, the use of land, building of cities, and ecosystem changes in selected locales and regions.</p>
<b>Home Sweet Home</b>	<p><b>Language Arts</b> Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).</p> <p><b>Social Studies</b> The learner can explore and describe similarities and differences in the ways groups, societies, and cultures address similar human needs and concerns. The learner can describe how people create places that reflect ideas, personality, culture, and wants and needs as they design homes, playgrounds, classrooms, and the like.</p>
<b>Be Prepared</b>	<p><b>Language Arts</b> Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes. Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.</p> <p><b>Science</b> Students should develop understanding of changes in environments.</p>

For state specific educational standards, please visit <http://www.crabtreebooks.com/>.

# Overview and Scope of Lesson Plan Activities

Lesson Plan Title	Subject Areas	Major Concepts
<b>Scaling the Mountain</b>	Math Social Studies	<ul style="list-style-type: none"> <li>• making scale models and drawings</li> <li>• mountains and hills</li> </ul>
<b>My Space</b>	Art Social Studies	<ul style="list-style-type: none"> <li>• home decoration</li> <li>• distinguishing needs and wants</li> </ul>
<b>A Community Story</b>	Language Arts	<ul style="list-style-type: none"> <li>• the writing process</li> <li>• life in different types of communities</li> </ul>
<b>Mapped Out</b>	Art Language Arts Math Social Studies	<ul style="list-style-type: none"> <li>• interpreting and drawing maps</li> </ul>
<b>On the Go</b>	Math Science Social Studies	<ul style="list-style-type: none"> <li>• comparing modes of transportation</li> <li>• technology in transportation</li> </ul>
<b>Keeping Warm, Keeping Cool</b>	Science Social Studies	<ul style="list-style-type: none"> <li>• methods of heating and cooling homes</li> <li>• technological design</li> </ul>
<b>Home Sweet Home</b>	Performing Arts Social Studies	<ul style="list-style-type: none"> <li>• home designs</li> <li>• building materials</li> <li>• the writing process</li> </ul>
<b>Be Prepared</b>	Art Language Arts Science	<ul style="list-style-type: none"> <li>• preparing for severe weather</li> <li>• changes to environments</li> </ul>

# Pacing Chart and Vocabulary

One class period is approximately 40 minutes.

Lesson Plan Title	Pacing	Vocabulary	Assessment
<b>Scaling the Mountain</b>	1 class period	landform scale	Check models and reproducibles for accuracy.
<b>My Space</b>	1–2 class periods	decorate	Evaluate reproducibles for completeness and creativity.
<b>A Community Story</b>	1–2 class periods	community nomadic	Evaluate reproducibles and stories for understanding of major concepts.
<b>Mapped Out</b>	1–2 class periods	map legend village	Evaluate reproducibles and presentations for understanding of major concepts.
<b>On the Go</b>	1–2 class periods	engine transportation	Check reproducibles for accuracy.
<b>Keeping Warm, Keeping Cool</b>	1–2 class periods	circulate radiate	Observe participation during the activity. Evaluate reproducibles and drawings for understanding of major concepts.
<b>Home Sweet Home</b>	1 class period	environment materials	Observe participation during the activity. Evaluate reproducibles and skits for accuracy.
<b>Be Prepared</b>	1–2 class periods	blizzard drought flood hurricane tornado	Evaluate flyers for accuracy and neatness.

# Scaling the Mountain

## A Lesson on Geography and Scale

### Content

Students will reinforce their understanding of measurement and scale. They will then use that knowledge to build scale models of landforms.

### National Standards

The following standards will be addressed in the lesson:

#### Mathematics

Students should understand how to measure using nonstandard and standard units.

#### Social Studies

The learner can estimate distance and calculate scale.

The learner can locate and distinguish among varying landforms and geographic features, such as mountains, plateaus, islands, and oceans.

### Multiple Intelligences

The following intelligences will be activated throughout the lesson:



Bodily-Kinesthetic



Logical-Mathematical



Naturalistic



Visual-Spatial

### Prerequisites

Have students read the books *Mountain Homes* and *Village Homes* before proceeding with the lesson. Review measuring in inches with a ruler.

### Materials

- *Mountain Homes* and *Village Homes* books
- chalkboard and chalk or whiteboard and markers
- wall map of the world
- 12-inch squares of cardboard or foam board (one per group)
- green and blue modeling clay
- rulers (one per group)
- student copies of the *Scaling the Mountain* reproducible

### Instructional Procedure

#### Anticipatory Set

Write the word *scale* on the board. Explain that using scale allows people to make drawings or models of large things in small spaces. Display a wall map of the world. Ask: *Is this map as big as the real world?* (no) Tell students the scale of the map (for example,  $\frac{1}{4}$  inch is equal to 50 miles). Have students take turns measuring the distances between points on the map. In each case, write the student's measurement on the board and calculate the number of miles between the two points.

#### Class Discussion

Write the word *landform* on the board and explain that it is a feature on the earth's surface, such as the shape of the land or a body of water. Hills and mountains are both examples of landforms. Ask students to open *Village Homes* to page 8 and *Mountain Homes* to page 7 and to look at the pictures side by side. Explain that the landform in *Village Homes* is a hill and those in *Mountain Homes* are mountains. Have students compare the landforms. (The hill is rounded and covered with trees. The mountains are pointed and have snow on them.) Ask: *Which is taller, a hill or a mountain?* (A mountain is taller.)

### Objectives

The student will be able to...

- calculate scale
- make scale models and drawings of hills and mountains

## Activity

Divide the class into pairs. Tell students that they will build a scale model of a hill and a mountain. Recreate the following table on the board:

Scale: 1 inch = 1,000 feet			
Landform	Real Height	Model Height	Color
Hill	1,000 feet		green
Mountain	6,000 feet		blue

Ask: *What is the scale for the models?* (1 inch = 1,000 feet) *How tall is the real hill?* (1,000 feet) *How tall will your model be?* (1 inch) *How tall is the real mountain?* (6,000 feet) *How tall will your model be?* (6 inches) Write student responses in the table. Instruct students to use green clay for their models of the hill and blue clay for their models of the mountain. Give each pair a piece of cardboard, modeling clay, and a ruler. Explain that they should hold their rulers straight up and down to measure the model. When students have completed their models, encourage them to compare their results with other groups' models and to make any adjustments necessary. Then, distribute the *Scaling the Mountain* reproducible and have students complete it.

## Accommodations and Extensions

For each pair of students, cut a straw into one- and six-inch sections. Use a small amount of modeling clay to form a base for the hill, and insert the one-inch section of straw. Do the same for the mountain, inserting the six-inch section of straw. Tell students to build the landform to the top of the straw. Have them work together to complete the reproducible.

As an extension, have each student recreate the graph from the reproducible on a wide piece of drawing paper. Ask them to draw hills and mountains of the following heights: 500 feet; 4,500 feet; 1,250 feet; 5,750 feet.

## Closure

Review the heights of the real mountain and hill (1,000 feet; 6,000 feet) and of the model mountain and hill (1 inch, 6 inches). Explain that in both cases the height of the mountain is six times that of the hill. On the board, write *Scale: 1 inch = 1 foot*. Ask: *If you made a scale model of a building that is 20 feet tall, how tall would your model be?* (20 inches) *If you made a scale drawing of a car that is 15 feet long, how long would your drawing be?* (15 inches)

## Assessment

Check models and reproducibles for accuracy.

# My Space

## A Lesson on Decoration

### Content

Students will strengthen their understanding of the role of personality and culture in home decoration. They will then create a drawing or collage of a decorated room.

#### National Standards

The following standards will be addressed in the lesson:

#### Social Studies

The learner can describe how people create places that reflect ideas, personality, culture, and wants and needs as they design homes, playgrounds, classrooms, and the like.

The learner can describe personal connections to place—especially place as associated with immediate surroundings.

The learner can distinguish between needs and wants.

#### Multiple Intelligences

The following intelligences will be activated throughout the lesson:



Logical-Mathematical



Visual-Spatial

### Prerequisites

Have students read the books *Homes on the Water* and *Village Homes* before proceeding with the lesson. Particular attention should be paid to pages 14–15 of each book.

### Materials

- *Homes on the Water* and *Village Homes* books
- chalkboard and chalk or whiteboard and markers
- student copies of the *My Space* reproducible
- markers or colored pencils
- fabric scraps
- magazines
- scissors
- glue sticks

### Instructional Procedure

#### Anticipatory Set

Ask students to name their favorite colors. Ask: *What do you own that is your favorite color?* (a shirt, a blanket, a pencil) Write the word *decorate* on the board. Explain that it means “to add colors and objects to make a place look beautiful.”

#### Class Discussion

Write the words *needs* and *wants* on the board. Tell students that a need is something a person has to have in order to live, such as food. Add that a want is something a person would like to have but can live without, such as a video game. Read the following items aloud and ask students to identify them as needs or wants: jewelry (want), a place to live (need), water (need), a television (want), clothing (need). Explain that people *need* places to live, but they *want* to decorate their homes. Have students turn to pages 14–15 of *Village Homes*. Ask them to describe how the home in Poland is decorated. (Flowers are painted on the walls, ceiling, and furniture. There are designs on the pillows.) Ask how the home in India is decorated. (The walls are painted blue.) Then, have students turn to page 14 of *Homes on the Water* and ask how the houseboat in France is decorated. (There are plants and flowers on the tables and pictures on the wall.)

### Objectives

The student will be able to...

- distinguish between wants and needs
- compare the ways in which people in different cultures decorate their homes
- create a drawing or collage of a decorated room



## Activity

### *Part I: Thinking About Decoration*

Lead a discussion about the ways in which students' homes are decorated. For example, ask students to describe one or two decorative objects in their homes, such as artwork or wallpaper. Invite volunteers to describe rooms or parts of rooms that they have decorated themselves. Ask: *What would your home look like if there were no decoration—no paint, pictures, curtains, carpets, or colorful fabrics?* (It would look plain, simple, or unadorned.)

### *Part II: Decorating a Room*

Distribute the *My Space* reproducible and art supplies. Have students create a drawing or collage of a decorated room. Encourage them to include decorations for the walls, floor, and furniture. When they have finished, have them share their images with the class.

## Accommodations and Extensions

Prepare copies of the reproducible that include the outlines of a room, including furniture, windows with curtains, and picture frames. Have students draw or paste items within those outlines to decorate the room.

As an extension, help students use the Internet to find images of homes in different parts of the world. Ask them to choose one image and write a paragraph describing how the outside or the inside of the home is decorated.

## Closure

Ask: *Do people decorate their homes in the same way or in different ways?* (different ways) *Why?* (People think different things are beautiful.)

## Assessment

Evaluate reproducibles for completeness and creativity.

# A Community Story

## A Lesson on Cities, Villages, and Nomadic Communities

### Content

Students will reinforce their understanding of the characteristics of cities, villages, and nomadic communities. They will then use this knowledge to write a short story.

### National Standards

The following standards will be addressed in the lesson:

#### Language Arts

Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.

Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

### Multiple Intelligences

The following intelligences will be activated throughout the lesson:



Linguistic



Naturalistic

### Prerequisites

Have students read books in the *Homes Around the World* series to familiarize themselves with different kinds of communities and environments. Review the elements of a story with students, including character, setting, and plot.

### Materials

- *Homes Around the World* books
- chalkboard and chalk or whiteboard and markers
- student copies of the *A Community Story* reproducible (one per group)
- writing paper (one per group)

### Instructional Procedure

#### Anticipatory Set

Based on the type of community students live in, ask how they think their lives would be different if they lived in a large city or a very small town. (If I lived in a city, there would be more things to do and I would know more people. If I lived in a small town, I would know everyone and my friends would live close to me.)

#### Class Discussion

Write the word *community* on the board and define it as “a group of people who live together.” Have students turn to page 6 of *Village Homes* and ask a volunteer to read the page aloud. Ask: *Is a village a large or small community?* (a small community) Have them turn to page 6 of *City Homes* and ask a volunteer to read the page aloud. Ask: *Is a city a large or small community?* (a large community) Add that not all groups of people stay in one place. Write the word *nomadic* on the board. Explain that nomadic communities move as the seasons change in order to find food for their animals or for other reasons.

### Objectives

The student will be able to...

- define *community*, *village*, and *nomadic*
- work in small groups to write a story

## Activity

Divide the class into groups of two or three and give each group a copy of the *A Community Story* reproducible. Tell students that they will write a story that takes place in a certain kind of community. Assign one of the following kinds of communities to each of the groups:

- city on an island
- village on a cold island
- village on a warm island
- city on a mountain
- village on a mountain
- nomadic group in a desert
- nomadic group in the Arctic

Help students review pages in the *Homes Around the World* books that describe the kind of community they will write about. Have group members work together to complete the reproducible. Then, distribute one piece of writing paper to each group. Explain that students will write the story together, one sentence at a time: the first student will write the first sentence, the second student will write the second sentence, and so on. Ask them to write a story that is at least nine sentences long. Remind them to use their answers on the *A Community Story* reproducible to help make their stories realistic. When they have finished, ask each group to read its story to the class.

## Accommodations and Extensions

Have students imagine that they live in the community they will write about. Prepare a handout for each group with the following sentence starters: *When I woke up, I saw \_\_\_\_.* *After breakfast, I \_\_\_\_.* *I traveled to school by \_\_\_\_.* *I saw adults working at \_\_\_\_.* *At school I learned \_\_\_\_.* *After school, my friends and I \_\_\_\_.* *The best part about my community is \_\_\_\_.* Guide students to complete the sentences as fully as possible.

As an extension, have each student write his or her own story. Encourage students to include as many sensory and descriptive details as they can.

## Closure

Have students discuss the kinds of communities they would most like to live in and why.

## Assessment

Evaluate reproducibles and stories for understanding of major concepts.

# Mapped Out

## A Lesson on Interpreting and Drawing Maps

### Content

Students will learn about villages and will practice interpreting and drawing maps.

#### National Standards

The following standards will be addressed in the lesson:

##### Language Arts

Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.

##### Mathematics

Students should find and name locations with simple relationships such as “near to” and in coordinate systems such as maps.

##### Social Studies

The learner can interpret, use, and distinguish various representations of the earth, such as maps, globes, and photographs.

#### Multiple Intelligences

The following intelligences will be activated throughout the lesson:



Linguistic



Logical-Mathematical



Visual-Spatial

### Prerequisites

Students should read the book *Village Homes* before proceeding with the lesson. Before class begins, prepare a large, simple map of a neighborhood. Draw red triangles for homes, blue squares for shops, an orange square for a village hall, a purple rectangle for a school, black lines for roads, and blue shapes for bodies of water. Do not label the map's features. Include a legend and a compass rose, copying the layout from the *Mapped Out* reproducible. In addition, create signs for north, east, south, and west and post them in appropriate locations in the classroom.

### Materials

- *Village Homes* books
- poster board
- markers
- student copies of the *Mapped Out* reproducible (one per group)
- crayons or colored pencils
- detailed road map

### Instructional Procedure

#### Anticipatory Set

Point out the directional signs in the classroom. Tell students that Canada (or another country or state) is to the north and ask them to walk toward it. Emphasize that if students continued to travel in that direction, they would eventually reach Canada. Do the same with the Atlantic Ocean to the east, Mexico to the south, and the Pacific Ocean to the west.

#### Class Discussion

Display the prepared map and draw students' attention to the legend. Explain that a map legend shows the symbols used for different features on the map. Ask: *What is the symbol for a shop?* (a blue square) *What is the symbol for a road?* (a black line) Have students identify specific features on the map. Then, point out the compass rose and tell students it shows direction. Ask: *On this map, which way is north?* (up) *Which way is west?* (to the left) Ask students which direction they would need to travel to get from one feature on the map to another. Repeat the question for various features.

### Objectives

The student will be able to...

- interpret a map
- work in small groups to draw a map of a village

## Activity

### *Part I: Drawing Maps*

Have students turn to pages 6–7 of *Village Homes* and ask volunteers to read the pages. Divide the class into pairs. Give each pair a copy of the *Mapped Out* reproducible and a set of crayons or colored pencils. Tell students they will plan a village and draw a map of it. Have the members of each pair take turns copying the symbols from the large map into the legend on the reproducible. Check to make sure they have copied the symbols correctly. Then, list the following items on the board: *10 homes, 3 shops, 1 village hall, 1 school, 1 river, 2 roads*. Have students turn to page 18 of *Village Homes* and ask a volunteer to read the page. Explain that students should plan a village in which all the people have access to water and can easily get to the school, shops, and village hall.

### *Part II: Discussing Maps*

Have each pair present its map to the class. Ask students to describe the village, including which features are near each other and which are far away from each other. Prompt them to explain why they designed the village the way they did. Ask: *In which direction would a person walk to get from the river to the village hall?* (north) *In which direction would students walk to get from their homes to the school?* (south, east)

## Accommodations and Extensions

Prepare copies of the *Mapped Out* reproducible on which the map legend has already been completed. Also, cut symbols for homes, shops, the village hall, and the school from construction paper. Give each pair the correct number of symbols to paste on the map.

As an extension, have students draw a simplified map of a limited area they know well, such as their street or a park they visit often. Help them create a map legend.

## Closure

Display a detailed road map. Ask students how the map is similar to those they drew and how it is different. (They are similar because they use symbols and show roads and water. They are different because the road map shows a larger area and more details.)

## Assessment

Evaluate reproducibles and presentations for understanding of major concepts.

# On the Go

## A Lesson on Transportation

### Content

Students will practice their problem-solving skills while learning about modes of transportation.

#### National Standards

The following standards will be addressed in the lesson:

##### Language Arts

Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

##### Mathematics

Students should solve problems that arise in mathematics and in other contexts.

##### Science

Students should develop understanding about science and technology.

##### Social Studies

The learner can identify and describe examples in which science and technology have changed the lives of people, such as in homemaking, childcare, work, transportation, and communication.

#### Multiple Intelligences

The following intelligences will be activated throughout the lesson:



Linguistic



Logical-Mathematical

### Prerequisites

Have students read books in the *Homes Around the World* series to familiarize themselves with different modes of transportation. Particular attention should be paid to the “Getting Around” section of each book.

### Materials

- *Homes Around the World* books
- chalkboard and chalk or whiteboard and markers
- chart paper
- markers
- student copies of the *On the Go* reproducible

### Instructional Procedure

#### Anticipatory Set

Ask students how they usually get from one place to another. (ride in a car, ride a bike, take a subway) Have them discuss how their lives would be different if they had to rely on animals such as mules and camels for transportation.

#### Class Discussion

Write the word *transportation* on the board and define it as “a way to get from one place to another.” Have students review the “Getting Around” sections in the *Homes Around the World* books. Ask them to list different forms of transportation. (car, airplane, boat, subway, camel) Explain that at one time the main ways to travel over land were by foot or with animals such as horses. A horse could travel 15 miles in an hour. Write the word *engine* on the board, and explain that an engine gives a machine the power to move. Add that an engine is a technology that makes transportation much faster. A car has an engine and can travel 60 miles in an hour, so a car is four times faster than a horse. On the board, write *snowmobile*, *mule*, *airplane*, and *car*. Have students identify which forms have engines. (snowmobile, airplane, car)

### Objectives

The student will be able to...

- understand how the use of engines has changed transportation
- work in a small group to conduct research
- compare modes of transportation

## Activity

### Part I: Comparing Modes of Transportation

Recreate the following table on chart paper:

Transportation	Good Points	Bad Points
car		
train		
camel		
airplane		
dog sled		
motorboat		
subway		
snowmobile		
mule		

Divide the class into groups of two or three. Have each group research one type of transportation using the *Homes Around the World* books as well as a search engine or encyclopedia. You may want to make keyword search suggestions or assist students with these resources. Ask each group to list at least three good points about its type of transportation, such as high speed or ability to travel on poor roads. Also have the group list at least two bad points about it, such as limited speed or the need for rails. If students have difficulty, encourage them to look at photographs and to think about people's needs in getting from one place to another.

### Part II: Choosing the Best Transportation

Distribute the *On the Go* reproducible and ask students to complete it. Have them exchange papers with a partner, compare their answers, and discuss any differences.

## Accommodations and Extensions

Rather than have students conduct research on their own, provide sources of information for them. Have students work in mixed-ability pairs to complete the reproducible.

As an extension, review division and the meaning of *miles per hour* (m.p.h.) with students. Have them calculate the time needed to travel 120 miles on a mule at 3 m.p.h. (40 hours); a dog sled at 12 m.p.h. (10 hours); a train at 60 m.p.h. (2 hours); and an airplane at 480 m.p.h. (15 minutes).

## Closure

Ask students to name forms of transportation that use engines and forms that do not use engines. (car, airplane, snowmobile, motorboat; walking, cow, mule, llama, camel) Have students discuss differences between the two groups. (Engines make transportation faster. Mules and other animals do not need rails or good roads.)

## Assessment

Check reproducibles for accuracy.

# Keeping Warm, Keeping Cool

## A Lesson on Heating and Cooling Homes

### Content

Students will learn about methods of heating and cooling homes. They will then apply this knowledge to develop home heating and cooling designs.

### National Standards

The following standards will be addressed in the lesson:

#### Science

Students should develop an understanding of light, heat, electricity, and magnetism.

Students should develop abilities of technological design.

#### Social Studies

The learner can examine the interaction of human beings and their physical environment, the use of land, building of cities, and ecosystem changes in selected locales and regions.

### Multiple Intelligences

The following intelligences will be activated throughout the lesson:



Logical-Mathematical



Visual-Spatial

### Prerequisites

Students should read the books *City Homes*, *Island Homes*, and *Village Homes* before proceeding with the lesson. Ask students to bring a pair of winter gloves to school. Before class begins, prepare a sheet of drawing paper approximately 3 square feet for each group of three to four students. Tape the sheets to the classroom walls.

### Materials

- *City Homes*, *Island Homes*, and *Village Homes* books
- drawing paper approximately 3 square feet (one per group)
- tape
- 8½" x 11" paper
- paper clips
- chalkboard and chalk or whiteboard and markers
- winter gloves
- student copies of the *Keeping Warm, Keeping Cool* reproducible (one per group)
- markers

### Instructional Procedure

#### Anticipatory Set

Have students turn to page 16 of *Village Homes* and ask a volunteer to read the page. Explain that dark colors soak up light, which would make a house warmer. Ask: *Is it better to wear white or black on a hot, sunny day?* (white) *Why?* (White is cooler because light bounces off of it.)

#### Class Discussion

Have students make a fan by folding a piece of paper accordion-style, securing one end with a paper clip, and opening the folds at the other end. Ask: *Do you feel cooler or hotter when you fan yourself?* (cooler) Explain that the cooling effect is caused by circulating air. Write the word *circulate* on the board and tell students it means “to flow from place to place.” Read page 10 of *Island Homes* and page 16 of *City Homes* with students. Then, have each student put on one winter glove. Read page 17 of *City Homes*. Write the word *radiate* on the board. Explain that heat radiates, or moves out, from a source such as a hot water pipe or electric radiator. Read page 11 of *Island Homes* with students. Ask: *Is one of your hands warmer than the other?* (yes) Point out that the glove, like thick walls, stops air from circulating. The glove traps heat that radiates from the body, so the hand warms up.

### Objectives

The student will be able to...

- define *circulate* and *radiate*
- describe methods of heating and cooling homes
- work in small groups to develop heating and cooling designs



## Activity

Divide the class into groups of three or four and give each group a copy of the *Keeping Warm, Keeping Cool* reproducible. Tell half of the groups to design houses that will stay warm in a cold place and tell the other half to design houses that will stay cool in a hot place. On the board, recreate one set of answer blanks from the reproducible. Tell students you are designing a house to stay cool in a hot place. Model writing *wind catcher* in the “Idea you read about” blank. Ask students to explain how a wind catcher works. (A wind catcher traps wind and moves it into a house to keep the house cool.) Write their response in the “How does it work?” blank. Ask each group to use two ideas they have read about and to develop three of their own ideas. After the groups have completed the reproducible, ask them to draw their designs on the drawing paper.

## Accommodations and Extensions

Have students incorporate two ideas that they read about and only one original idea. Encourage students to refer to the books as they complete the reproducible and their drawings.

As an extension, have students list methods of cooling that require energy use, such as air conditioning, and methods that do not, such as stilts. Ask them to recommend ways people in their own community can cool buildings while minimizing energy use.

## Closure

Have each group explain its design and how each feature works. Encourage students to ask questions of the groups and to discuss similarities and differences in the designs.

## Assessment

Observe participation during the activity. Evaluate reproducibles and drawings for understanding of major concepts.

# Home Sweet Home

## A Lesson on Home Designs

### Content

Students will reinforce their understanding of the materials from which people in different environments build their homes. Students will also practice their language skills by performing a skit.

### National Standards

The following standards will be addressed in the lesson:

#### Language Arts

Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

#### Social Studies

The learner can explore and describe similarities and differences in the ways groups, societies, and cultures address similar human needs and concerns.

The learner can describe how people create places that reflect ideas, personality, culture, and wants and needs as they design homes, playgrounds, classrooms, and the like.

### Multiple Intelligences

The following intelligences will be activated throughout the lesson:



Linguistic



Naturalistic

### Prerequisites

Students should read the books *City Homes*, *Homes on the Move*, and *Village Homes* before proceeding with the lesson. Before class begins, obtain a large cardboard box or cover a table with cloth. Position the box or table in the area of the classroom where students will perform their skits.

### Materials

- *City Homes*, *Homes on the Move*, and *Village Homes* books
- large cardboard box or table covered with cloth
- chalkboard and chalk or whiteboard and markers
- student copies of the *Home Sweet Home* reproducible (1 per group)
- toy microphones or similarly-shaped objects

### Instructional Procedure

#### Anticipatory Set

Ask students why they do not live in igloos. (There is not enough snow here. An igloo is too small for my family.) Ask why people in very cold places do not live in tents. (A tent is not warm enough for them.) Tell students that people design their homes based on what they have and what they need.

#### Class Discussion

Write the word *environment* on the board, and define it as “everything that surrounds a group of people.” Under the word *environment*, list *Arctic*, *mountain*, and *rainforest*. Tell students that *Arctic* refers to the area near the North Pole. Add that a rainforest is a thick forest in a tropical area that receives a great deal of rain. Write the word *material* next to *environment* and define it as “what something is made from.” Explain that people often build their homes from materials in their environment because it is too expensive or not possible to get materials from other places. Under *material*, list the words *stone*, *leaves*, and *snow*. Ask students to match each environment with the material most likely to be used in homes there. (Arctic, snow; mountain, stone; rainforest, leaves)

### Objectives

The student will be able to...

- identify the materials used to build homes in various environments
- describe the needs that influence home designs
- work in small groups to write and perform a skit

## Activity

### *Part I: Researching Homes*

Distribute the *Home Sweet Home* reproducible. Divide the class into groups of three or four. Assign each group one of the following homes to study: cave home, house in Peru, Masai home, apartment building, mud house, tent, Tuareg home, igloo, yurt, Mbuti home. Show students how use the index in the back of each book to find information about the homes, the people who live in them, and the environments in which they are built. Have students research at least two pages and record their findings on the reproducible.

### *Part II: Describing Homes*

Tell students that they will perform a skit about the home they researched. One member of each group will play a news reporter, and the other members will play the homeowners. Explain that the reporter will ask the homeowners questions about their home. Add that the cardboard box or table will represent the home. Model gesturing to it while describing a particular feature. Also, give each group a toy microphone or similarly-shaped object as a prop. Have students write, rehearse, and perform their skits.

## Accommodations and Extensions

Have students work in mixed-ability groups. As they complete the reproducible, review the definitions of *environment* and *materials* with them. Also, encourage each group to write a script for the skit and to read from it during the performance.

As an extension, have students choose a second type of home and compare it with the one they researched. Ask them to list one way the homes are similar and three ways they are different. Then, have them write a sentence or two explaining why they think the houses are different.

## Closure

Ask students which kind of home or environment they would like to live in and why. (I would like to live in an apartment building because there would be a lot of people around. I would like to live in a rainforest because there are many plants and animals there.)

## Assessment

Observe participation during the activity. Evaluate reproducibles and skits for accuracy.

# Be Prepared

## A Lesson on Preparing for Severe Weather

### Content

Students will learn about severe weather and its effects on the environment. They will then apply this knowledge to make flyers informing people how to prepare for severe weather.

### National Standards

The following standards will be addressed in the lesson:

#### Language Arts

Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.

Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

#### Science

Students should develop understanding of changes in environments.

### Multiple Intelligences

The following intelligences will be activated throughout the lesson:



Linguistic



Naturalistic



Visual-Spatial

### Prerequisites

Students should read the book *Homes on the Water* before proceeding with the lesson. Before class begins, gather photographs, news clippings, or videos of the following events or their effects: flood, hurricane, tornado, blizzard, drought.

### Materials

- *Homes on the Water* books
- photographs, news clippings, or videos of severe weather (see above)
- chalkboard and chalk or whiteboard and markers
- student copies of the *Be Prepared* reproducible (one per group)
- drawing paper (one per group)
- markers

### Instructional Procedure

#### Anticipatory Set

Ask students what they do to get ready for a trip or a stay at someone else's home. (I pack my clothes. My family brings food and drinks. I also bring games and books.) Tell them that people can do similar things to get ready for bad weather.

#### Classroom Discussion

List the following events on the board: *flood, hurricane, tornado, blizzard, heat wave*. Tell students that all the events can change the environment. Have them turn to page 16 of *Homes on the Water* and ask a volunteer to read the page. Ask: *How has the flood changed the environment?* (Water covers the land.) Explain that some floods are caused by hurricanes, which are very strong storms with high winds and rain. A tornado is also a high wind, but one that spins very fast in a funnel shape. Add that a blizzard can include strong winds, cold temperatures, and several feet of snow. A heat wave happens when temperatures are hotter than normal for a long period of time. Display a photograph of each event or its effects and ask students how the event has changed the environment. (The flood filled the city with water. The hurricane blew over trees. The tornado destroyed some buildings but not others. The blizzard buried cars and roads in snow. The heat wave made the land dry and cracked.)

### Objectives

The student will be able to...

- describe different types of severe weather and their effects
- list steps people can take to prepare for severe weather
- work in small groups to create an informational flyer

## Activity

Write the word *prepare* on the board and define it as “to get ready.” Explain that people can prepare for bad weather. If they prepare, they will be ready for changes in the environment. Divide the class into groups of two or three. Choose types of severe weather that could affect the local area and assign one to each group. Distribute the *Be Prepared* reproducible. Help students use library or online resources to find information about preparing for those events. Distribute the drawing paper and markers and ask each group to make a flyer telling people how to prepare. Have students include a title, three actions people should take, and a picture. Encourage them to make the flyers clear and neat. Post the flyers in the hallways of the school.

## Accommodations and Extensions

Before students make flyers, discuss the information they have found to ensure that it is accurate and that they understand it. Prepare a flyer template that includes spaces for a title, a picture, and three actions people can take to prepare for the event. Have students fill in the template.

As an extension, ask students to choose one kind of severe weather to research using science books, encyclopedias, or Web sites. Help them find information such as causes of the weather, wind speeds, temperatures, and so on. Have them create posters that include facts and pictures.

## Closure

Ask students what they can do in their homes to prepare for a hurricane or other severe weather. (I can talk to my parents about it. I can find a safe place in the house. I can make sure we have food and water ready.)

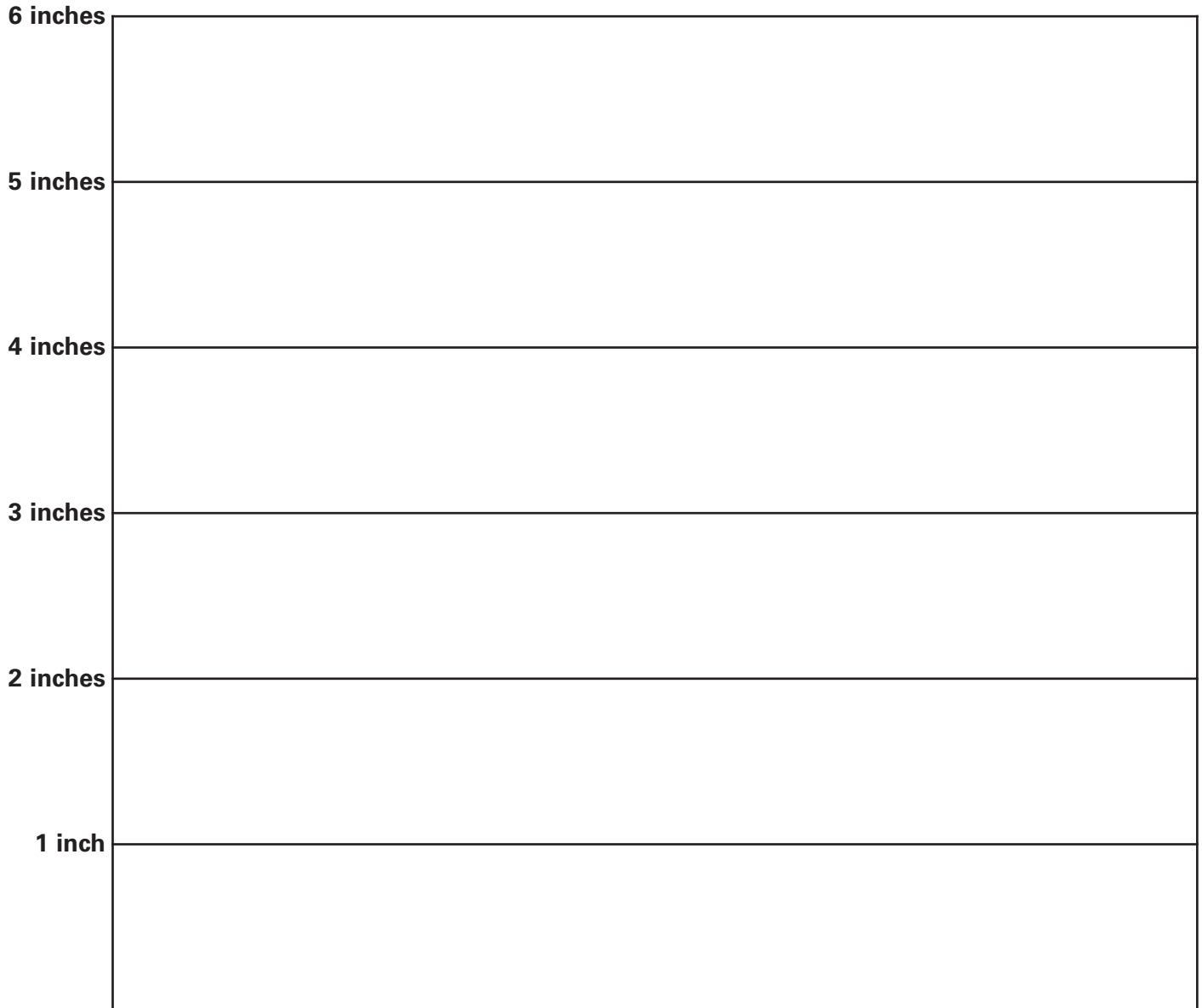
## Assessment

Evaluate flyers for accuracy and neatness.

# Scaling the Mountain

**Directions:** Using the scale below, draw a hill that is 1,000 feet tall and a mountain that is 6,000 feet tall.

**Scale: 1 inch = 1,000 feet**



**Hill**  
**1,000 feet tall**

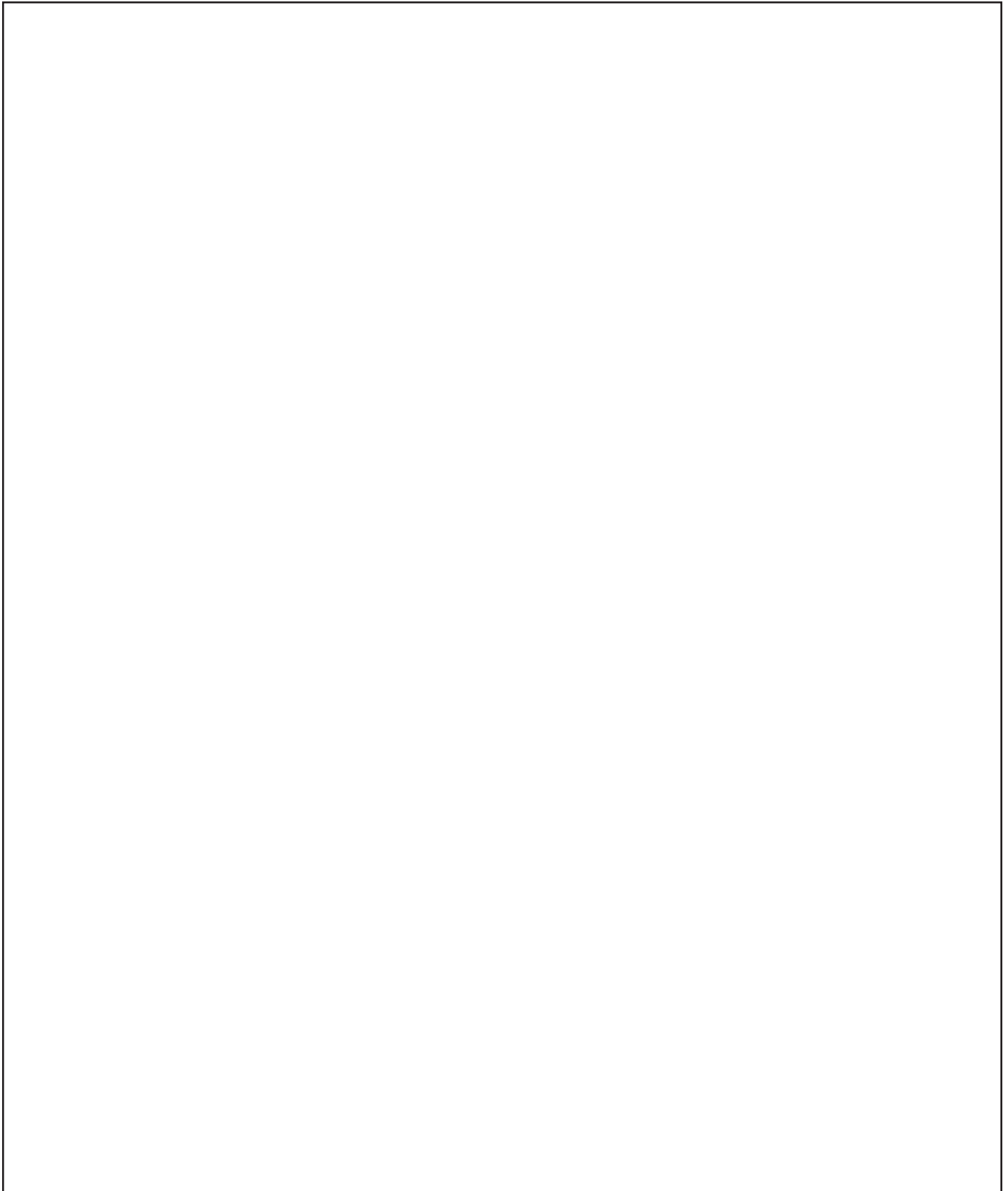
**Mountain**  
**6,000 feet tall**

Name \_\_\_\_\_ Date \_\_\_\_\_

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# My Space

**Directions:** Draw and decorate a room. Be sure to decorate the walls, floor, and furniture.



# A Community Story

**Directions:** Answer the questions below with your group. Then, write a story that takes place in the community.

1. What kind of community will you write about? \_\_\_\_\_

2. Is the community large or small? \_\_\_\_\_

3. What kinds of homes do people live in? \_\_\_\_\_

\_\_\_\_\_

4. What is the weather like? (If you are writing about a city, choose cold or hot weather.) \_\_\_\_\_

\_\_\_\_\_

5. Where do children go to school? \_\_\_\_\_

\_\_\_\_\_

6. What do children do for fun? \_\_\_\_\_

\_\_\_\_\_

7. How do people travel from one place to another? \_\_\_\_\_

\_\_\_\_\_

8. What kinds of work do the adults do? \_\_\_\_\_

\_\_\_\_\_

9. What characters will you include in your story? \_\_\_\_\_




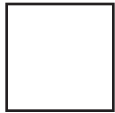
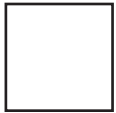
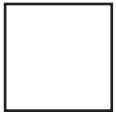
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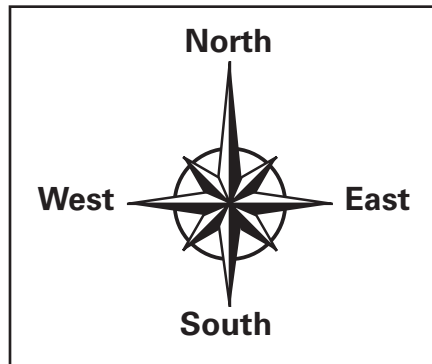


# Mapped Out

**Directions:** Draw a map of a village. Draw 10 homes, 3 shops, a village hall, and a school. Also draw a river and 2 roads. Make sure people in the village can get water easily. Also make sure they can get to the school, shops, and village hall.

**Map Legend**

 home	 village hall	 river
 shop	 school	 road



# On the Go

**Directions:** Read each problem. Write the kind of transportation you would use. Explain why you would use it.

<b>dogsled</b>	<b>car</b>	<b>airplane</b>	<b>motorboat</b>	<b>mule</b>	<b>train</b>	<b>snowmobile</b>
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1. You live in a village with bad roads. You need to take something heavy to the next village.

How would you travel? \_\_\_\_\_ Why? \_\_\_\_\_

\_\_\_\_\_

2. You live in South America. You need to go across the ocean to Africa.

How would you travel? \_\_\_\_\_ Why? \_\_\_\_\_

\_\_\_\_\_

3. There is snow all around you. You need to get somewhere fast.

How would you travel? \_\_\_\_\_ Why? \_\_\_\_\_

\_\_\_\_\_

4. You need to go to the other side of a mountain. There is a road around the mountain. There is also a train tunnel through the mountain.

How would you travel? \_\_\_\_\_ Why? \_\_\_\_\_

\_\_\_\_\_

5. You live near the water on a small island. You want to go to a friend's house. Your friend lives on the same island. Her house is also near the water.

How would you travel? \_\_\_\_\_ Why? \_\_\_\_\_

\_\_\_\_\_

# Keeping Warm, Keeping Cool

**Directions:** Circle the kind of house your group will plan. Talk about ways to keep the house warm or cool. Write two ideas you read about. Then, write three of your group's own ideas. Explain how each idea works.

Which kind of house will your group plan? Circle one.

a house that will **stay warm in a cold place**

a house that will **stay cool in a hot place**

1. Idea you read about: \_\_\_\_\_

How does it work? \_\_\_\_\_

\_\_\_\_\_

2. Idea you read about: \_\_\_\_\_

How does it work? \_\_\_\_\_

\_\_\_\_\_

3. Your group's idea: \_\_\_\_\_

How does it work? \_\_\_\_\_

\_\_\_\_\_

4. Your group's idea: \_\_\_\_\_

How does it work? \_\_\_\_\_

\_\_\_\_\_

5. Your group's idea: \_\_\_\_\_

How does it work? \_\_\_\_\_

\_\_\_\_\_

On a large piece of paper, draw a house that includes all your ideas.

# Home Sweet Home

**Directions:** Answer the questions to help you write your skit.

Kind of home your skit will be about: \_\_\_\_\_

1. Who lives in this kind of home? \_\_\_\_\_  
\_\_\_\_\_

2. What environment is the home built in? \_\_\_\_\_  
\_\_\_\_\_

3. What material(s) is the home made from? \_\_\_\_\_  
\_\_\_\_\_

4. Does the home move? If so, how? \_\_\_\_\_  
\_\_\_\_\_

5. List two reasons people build this kind of home:

a. \_\_\_\_\_  
\_\_\_\_\_

b. \_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_

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# Be Prepared

**Directions:** Find ways people can prepare for bad weather. Write what you learn below. Then, make a flyer that tells people how to prepare. Include a title, three things people should do, and a picture.

Type of weather: \_\_\_\_\_

What can happen in this kind of weather? \_\_\_\_\_

\_\_\_\_\_

Title for your flyer: \_\_\_\_\_

List three things people should do to prepare:

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

3. \_\_\_\_\_

\_\_\_\_\_

What picture will you draw on your flyer? \_\_\_\_\_

\_\_\_\_\_