WOW! Theme 3

Contents:

Big Ideas in This Theme Mini-Poster

Activities in This Theme:

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♦ Where Did This Come From? From Producer to Consumer
♦ Portfolio – Putting It All Together

Family Connections Letter
ACTIVITY:

Traveling Teddy

Materials:
- “Big Ideas Mini-Poster”
- Map (local, state, United States or world)
- Newsprint or other large paper
- Marker
- Masking tape
- Small teddy bear or other small stuffed animal
- Paper
- Pencils
- Small backpack
- Small notebook
- Disposable camera (optional)
- Crayons or markers
- Mailing box
- Children’s individual portfolios

Time:
40–60 minutes (for steps 1–3). This activity will require a number of weeks as you arrange contacts and the teddy bear travels to different locations. Plan discussion time each time the bear returns to your group with new information. Allow an additional 40 minutes to wrap up the activity when the bear returns for the final time.

Procedure:

Before the meeting:
Based on your group’s needs and interests, decide before the meeting whether you’ll focus this activity at the local, state, national or global level.

During the meeting:
1. Tape a map (local, state, United States or world) to the wall. Introduce the topic by telling your group that people have many of the same jobs or occupations all over the country and around the world. These jobs may have similarities and differences because of geography, climate, culture or available resources. Ask the children to list occupations or jobs that they think can be found in most countries. (Some examples are farmers, though the livestock they raise or the crops they grow depends on their location; teachers, who may teach different subjects in different settings and in different languages; storekeepers; government workers, although the type of government for which they work may differ; journalists; scientists; builders or construction workers; artists and health care workers.) Record the children’s answers on newsprint and display it where everyone can see it.

2. Ask the children to choose one job from the list and think about the ways that job is similar for everyone who has it, even in different parts of the country or world. For example, if the children choose "nurse," they may note that nurses take care of sick people, give shots and take people’s temperature. Record the children’s answers on newsprint and display it where everyone can see it.

3. Next, ask the children to think of ways the job differs around the country or world. Differences in nursing may include the type of building in which
the nurse works, the equipment the nurse uses, the diseases or wounds he or she treats and the medicines available for treatment. Record the children’s answers on newsprint and display it where everyone can see it.

4. Introduce the teddy bear to the children. Explain that you’re going to send the bear with a backpack and a small notebook to a worker in your community to find out about the worker’s job. Help the group decide what job or jobs they would like to send the teddy bear out to investigate.

5. Tell the children that the teddy bear needs a name (such as “Traveling Teddy”). Ask the children to suggest names, and write each one on a sheet of newsprint. Have the children vote or use another (peaceful!) method to agree on a name.

6. Next, have the children brainstorm questions about the person the teddy bear will be visiting at work (sample questions follow). If the children don’t come up with questions related to similarities, differences and connections on their own, suggest some from the following list or others that you’ve thought of.
   - What is your job title?
   - How many years did you go to school?
   - Where did you get your training for this job?
   - What is unique about the place where you work?
   - What school subjects do you use in your job?
   - What do you like best about your job?
   - What other kinds of workers do you work with?
   - How is your job connected to the jobs of people in other parts of the country or world?
   - What types of skills or knowledge do you use in your job?
   - Do you travel for your job? Tell us about what your travel is like.
   - How do you use (computers and technology) in your job? (Insert other skills here, too.)
   - Did you have any other jobs before you began your present career?
   - What skills does your job require that we’re learning in the ____ grade? (Insert your group’s grade level or age here.)
   - How did you learn what you needed to know for your job?

7. Tell the children you’ll need to write a letter that tells the purpose of your bear’s visit to the workplace. Here’s a sample format you might want to use:

   Hello!

   My name is (bear’s name) and I belong to (name of your group or name of your school and grade) in (your location). I’m gathering information for my friends about your job as a (name of job). Please write in my travel journal about your job. My friends have included some questions that they would like you to answer. [If you’ve included a disposable camera, include the following sentence.] They would like to see what you do at work, so please take some pictures of yourself at your job with my camera.

   Please return me to (address) by (date).

   Sincerely,

   Traveling Teddy
8. After you’ve written the letter, have the children sign their names to it. Place the letter and the small notebook in the bear’s backpack. You may wish to include a disposable camera as well.

9. Ask the children how they can help the teddy bear get ready for the trip. Discuss modes of transportation the bear could use. How long will it take to get there? What will the weather be like? They can investigate this information using resource books or the World Wide Web. Have them create an itinerary like the one below and chart the teddy bear’s route on a map. Arrange for the bear to get to its first destination, either in person or by mail.

<table>
<thead>
<tr>
<th>Itinerary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traveler's Name:</strong> Traveling Teddy</td>
</tr>
<tr>
<td><strong>Starting Point:</strong> East Lansing, Michigan</td>
</tr>
<tr>
<td><strong>Destination</strong></td>
</tr>
<tr>
<td>1. Michigan State University campus, East Lansing, Michigan</td>
</tr>
<tr>
<td>2. Marquette, Michigan</td>
</tr>
<tr>
<td>3. Prescott, Arizona</td>
</tr>
<tr>
<td>4. Stockholm, Sweden</td>
</tr>
</tbody>
</table>

**How Far Is It?**
(.URL: http://www.indo.com/distance) – This World Wide Web site will help you find the distance between two places “as the crow flies,” give some information about the locations (population, latitude and longitude), connect you to a map and give travel directions.

**When the teddy bear returns:**
1. When the teddy bear returns from the first visit, review the worker’s answers to the group’s questions. Decide on the bear’s next destination and either deliver or mail it there. Mark the bear’s route on the map. Have the group look over the information the bear has “gathered” each time it returns.

2. When the bear completes its final journey, have the children write group or individual stories or poems about its travels. Compile photos and any other information the bear has gathered. If the children write individual stories, consider compiling the stories in a book. (See “Creating a Job Book” in the Work in My Community theme for book construction ideas.)

**Talking It Over:**
After completing the activity have the children get in a circle and ask them the following questions to complete the experiential learning cycle. You can use the “Big Ideas Mini-Poster” to help them do this.

- What new information did you learn from this activity? What did you learn about travel and about planning a trip?
- Did anything from our bear’s travels surprise you?
- In what ways was being a **name of job** similar in different locations?
- In what ways was being a **name of job** different in different locations?
- Can you think of other jobs where workers are connected to or affected by people in other states or countries? For example: a distributor who provides food to a supermarket is affected when there is a drought or
flood in the area from which he or she buys supplies, people who sell cars are affected when factory workers in other states go on strike and car production stops, and teachers are affected when the government passes a law to fund a new reading program.

- How could you learn more about another kind of job? There are many ways to learn more about jobs – the activities in the other WOW! themes offer many ideas. You can talk to people, read books and search for information on the World Wide Web.

- Why might you want to know about jobs in other parts of the country or world? Emphasize interdependence – whatever happens in one part of the world may affect other people. In addition, jobs in the future may involve traveling. Even if a worker doesn’t travel himself or herself, work-related information travels around the world by phone, mail, computer and fax, so he or she may be connected this way.

How to Simplify:

- Send your bear to fewer locations or to local locations only.

- If time or resources are limited or the mail to a country your group is interested in is unreliable, send your bear on a “virtual fact-finding mission” via the Internet. You can still send the bear “out” to contact individual workers to find out about their jobs, but the contact could be limited to email.

How to Extend:

- Send your bear to more locations, including to other states and countries.

- If your bear will be going to another country, tell the children that international travelers need passports to enter most countries. Prepare a passport for your bear.

- Request more specific information from contact people about similarities, differences and connections they have to other parts of the country and the world.

- Instead of a written letter, send a video message with the bear. Record members of your group describing the project and asking questions. In your video message, ask the worker to send you a video in return. (If your bear is traveling to a foreign country, you may have to have the video converted to a format that will work in that country’s video machines.)

- Arrange for your job contacts to continue to communicate with the children by letter or email.

- Publish stories in your school or 4-H newsletter or let the local news media know about your bear’s travels. Many television stations and newspapers have a reporter assigned to cover education-related stories.

- Investigate the job of being a student. Have each child write to a child in another state or country. Children could include information about responsibilities at home and school. When you get the responses, compare similarities and differences related to the job of student.

- Have the children write or tell about a country they may travel to in their future career and what they think it would be like.

- Have the children brainstorm a list of travel industry-related jobs that are necessary for world travel. For example, a travel agent is someone who makes arrangements for trips. What are some jobs related to the transportation industry? Invite someone in the travel or transportation industry to speak to your group.
ACTIVITY:
On the Trail of Trail Mix:
Trace a Product Around the World

Materials:
- “Big Ideas Mini-Poster”
- Index cards
- Marker
- Large world map
- Masking tape
- Map handout (one per child)
- “Product Information” sheet
- Trail mix ingredients: peanuts, raisins, chocolate candies such as M&Ms or Reese’s Pieces, dried banana chips
- Large mixing bowl
- Measuring cups
- Mixing spoon
- Adhesive labels
- Permanent markers or crayons
- Small plastic bags
- Children’s individual portfolios

Time:
45–60 minutes

Helper’s Note: This activity uses food preparation as a fun, hands-on way to learn about some of the jobs people do and how what people do connects them to others. Food preparation is not intended to be the focus of this activity. The trail mix recipe was chosen because it is simple, safe and easy to prepare in a variety of settings. Because most children are familiar with foods as consumer goods, this activity uses food as the vehicle to help them begin to understand the more abstract concept of interdependence. You may modify this activity to meet the needs and interests of your group by preparing other foods and researching their ingredients, or by focusing on other products entirely.

Procedure:
Before the meeting:
1. Assemble the ingredients and utensils needed to make the trail mix. The amount of each ingredient you’ll need will depend on the size of your group.
2. Create enough “ingredient name tags” on index cards for each of the four ingredients for each child in your group to be either “peanuts,” “raisins,” “chocolate candies” or “banana chips.” If the children can’t read yet, illustrate the name tags.
3. Display the large world map where everyone will be able to see it.

During the meeting:
1. Tell the children they’re going to play a game called “Food Mix-Up.” Have them stand or sit in a circle on the floor. Give each child an “ingredient name tag.” Tell them that when you call an ingredient, everyone with
that name tag should get up and switch places in the circle. (To vary the game, you could call more than one food at a time.) When you call “Food Mix-Up!” everybody switches places. Play until everyone has had a turn to switch places or until the group tires of the game. (This game can also be played like the familiar children’s game “Duck, Duck, Goose!”)

2. Ask the children whether they’ve ever had trail mix. Ask them what was in the trail mix they had. Explain that they’re going to turn raw ingredients (raisins, peanuts, chocolate candies and dried banana chips) into a finished product (trail mix). Tell them that after they’ve made the trail mix, they’re going to try to find out where the ingredients come from and how they get to be trail mix. They’ll also be investigating the kinds of jobs involved in producing the ingredients and what happens to each ingredient along the way to the consumer.

3. Explain that each ingredient in trail mix comes from a different location. Give the children maps so they can follow along as you talk about each ingredient.

4. Ask the following questions to help the children think about how people are involved in each step of converting raw commodities to consumer goods at the local grocery store. Some of the answers to questions about the commodities are answered in the “Product Information” sheet.

- Where are we on this map? Have the children mark the location on their maps.
- Does anybody know where ____ are grown? Indicate the location on the big map and help the children locate it on their maps.
- Why does/do ____ grow there? What conditions (climate) does/ do ____ need to grow? Depending on your children's abilities, you could have them illustrate the plant and its growing conditions.

- How are people involved in harvesting ____? What type of equipment do the workers use to harvest ____?
- What happens after ____ is harvested? How is it processed? Where does it go? How does it get there? Who is involved in the processing and harvesting?
- How does ____ get to our supermarket? Have the children draw a line to trace the path the product takes to get to the supermarket. Have them illustrate the method(s) of transportation.

5. Help the children follow the steps in the “Trail Mix Recipe” below. Make sure each child has a role in measuring and mixing ingredients. For example, all the children who had raisin name tags can work together to decide how to measure and add the raisins.

**Trail Mix Recipe**

**Ingredients:**
(Vary proportions according to taste)
- 1 cup peanuts
- 1 cup raisins
- ½ cup chocolate candy such as M&Ms or Reese's Pieces
- ½ cup dried banana chips

**Equipment:**
- Large mixing bowl
- Measuring cups
- Mixing spoon
- Small plastic bags

Yield: 3 cups

1. Wash your hands before preparing trail mix.

2. Measure and mix the peanuts, raisins, chocolate candies and dried banana chips in a large mixing bowl. Stir.

3. Use a measuring cup to scoop a serving of trail mix into a small plastic bag. Enjoy a delicious snack!
6. Explain that now that the trail mix has been processed, it must be packaged. Have the group brainstorm and agree on a product name (such as “Terrific Trail Mix”) and create an adhesive label that lists the product name, ingredients and origin. Package enough trail mix for the children to take home small bags to share with family members.

7. Enjoy a trail mix snack!

Talking It Over:
After completing the activity have the children get in a circle and ask them the following questions to complete the experiential learning cycle. You can use the “Big Ideas Mini-Poster” to help them do this.

- What new information did you gain from this activity?
- What other food products can you think of that rely on ingredients from around the world? Examples include pizza, fruit salad, tossed salad and peanut butter sandwiches – you name it!
- What are some jobs connected to the process of producing and distributing a product such as trail mix? The most obvious answers are farmers, truckers, food processing plant workers and grocery store workers. Perhaps less obvious are the scientists who research the best growing methods, educators who teach these methods to farmers, publishers who produce the journals that report the research, engineers who design farm and processing equipment, seed and equipment sales representatives, food package designers, advertising agency employees who design and produce advertising campaigns, office workers at a food processing company’s headquarters – the list goes on and on!
- Did any of your ideas about products, how they’re made and how they’re distributed change? In what way?

How to Simplify:
Simplify the description of the production and distribution processes.

How to Extend:

- In step 4, you can pose the questions to the children and have them investigate the information using resource books and the Internet.
- Draw a diagram showing all the steps in the production and distribution of the raw materials and the final product. Create a “job web” that shows the jobs involved at each step and emphasizes how each is connected in the whole process.
- Write a story about “The Life History of Product.” Compile the stories in an individual or group book (see the “Creating a Job Book” activity in the Work in My Community theme).
- Write a song lyric that describes the production and distribution process. Set the words to music by adapting the tune of a popular song.
- Visit a local factory. Discuss with the company’s representative that you and the children will be interested in learning about the products they produce. Find out where their raw materials come from, how the products are shipped and where they’re distributed. The representative may be able to provide literature or the company may have a Web site with this information. Also try to find out about the different types of jobs that are involved in producing this product. Have the children brainstorm questions they want to ask about the product.
- Produce more trail mix and sell it as a fund-raiser. Set a sales goal. Figure the production costs and project potential sales income. How much will the group need to charge for the finished product to make a profit?
- Have the children decide on another food they’d like to make. List the ingredients. Research the source of the ingredients in resource books, encyclopedias or on the Web and chart the results on a map. For example, all the product information for this activity came from a variety of sources on the Web, starting with basic keyword searches.
- Read the book Here’s the Scoop: Follow an Ice Cream Cone Around the World, by Neale S. Godfrey (Parsippany, NJ: Silver Press, 1996) to the group. This book introduces the idea of raw materials being transformed into products and how all people are connected economically because we get products and materials from around the world. In the book, Penny Bright and the GreenStreet$ Kids go on an adventure with Mr. Possibility, an ingenious owl, in his Zowie-Wowie World Whizzer. They follow the production of an ice cream cone around the world. They travel from a Wisconsin dairy farm to the sugarcane fields of Costa Rica, and then to Madagascar to see where vanilla beans come from. Next, they go to Australia to visit the mint fields and to Brazil to see how cocoa is made. Their final stop is at a factory where all the ingredients come together to be made into ice cream. Now that they know how ice cream is made, they decide to make their own!
**On the Trail of Trail Mix**

**Product Information**

**Peanuts**

Peanuts are grown in many parts of the world, including the southern United States, and in Asia, Africa, Australia, South America and other parts of North America. They grow best in sunny climates with moderate rainfalls.

Peanut farmers in the United States begin to prepare their fields for planting in early spring. The plants grow through the intensely hot, humid summers until they’re ready to harvest in mid- to late fall.

Peanut harvesting machinery such as diggers and combines may be too expensive for one farm to own, so a farmer may hire a commercial harvesting crew or join a cooperative (or co-op) to buy the machinery with a group of farmers in the area.

After the harvest, the farmers haul the peanuts to a buying station or a shelling plant. There, inspectors weigh and grade the peanuts. A buying agent sets a price for the peanuts, and if the farmer agrees with that price, a sale is made. The peanuts then go into dry storage until they’re sold to processors and manufacturers. The peanuts are eventually sold to manufacturers who convert them into food and nonfood products. About half of all peanuts produced in the United States are made into peanut butter and peanut spreads.

![Peanut illustration](image)

**Raisins**

Raisins are really dried grapes. An acre of grapes can produce about 2 tons (4,000 pounds) of raisins. Because they shrink as they dry, it takes about 4½ pounds of grapes to make 1 pound of raisins.

California is the world’s leading raisin producer, accounting for 79 percent of all raisins produced worldwide. Raisins are also produced in Afghanistan, Argentina, Chile, Iran, Mexico and South Africa. To grow well, grapes need fertile soil, plenty of sunshine, a long, hot growing season and lots of water.

Vineyard (grape field) tending and raisin harvesting are year-round, hand labor-intensive processes. During late summer, when the grapes are ripe and at their sweetest, farm workers hand-pick the grape bunches. Most grapes are dried in the sun for two or three weeks, then they’re crated and trucked to a processing plant. Some are picked, then crated and shipped directly to a plant for drying and processing.

At the processing plant, the raisins are inspected with low-tech (by eye) and high-tech (by laser beams and metal detectors) methods. While grapes are tended and harvested by hand, the raisins are packaged by machine. Raisins are packed in many different ways. For example, one large grower cooperative has 30 types of packages printed in 14 different languages. Their packages range in size from ½-ounce miniature cartons to 1,100-pound containers.

![Raisin illustration](image)
Chocolate
Does candy grow on trees? Before you say no, you should know that one important ingredient used to make chocolate — the cocoa bean — does. The trees grow in regions close to the equator where it is warm year-round, though there are chocolate manufacturers around the world! Cacao trees have a continuous growth cycle, with leaves, blossoms and pods on the trees at the same time. This allows cocoa beans to be harvested year-round.

Twenty to sixty cocoa beans grow inside the large pods that sprout from the cacao tree trunk. In most cacao-producing countries, workers use machetes to cut down and split open the pods. When air reaches the beans, they darken and begin to ferment.

The harvested beans are boxed and then transferred to drying bins for five days. The dried beans are sifted, then bagged for shipping. More than 1 million tons of cocoa beans are harvested every year.

Once the beans arrive at the chocolate factory, the production process becomes largely automated. The beans are inspected, cleaned, roasted and milled to produce something called a nonalcoholic chocolate liquor, the base ingredient of most chocolate.

Other tasty ingredients are added to the chocolate liquor, the candy is poured into molds, cooled and packaged. It’s ready for shipment to your local store to satisfy the chocolate lover in you!

Bananas
Did you know that bananas don’t grow on trees? What we often call a banana “tree” actually is the world’s largest herb, and is a member of the lily family. Banana “trees” grow in tropical areas where the weather is sunny and hot, the soil is rich and there’s plenty of water. Bananas for North American markets come from the Central and South American countries of Columbia, Costa Rica, Ecuador, Guatemala, Honduras, Panama, Mexico and Nicaragua. They also grow in Africa and other tropical zones of the world.

Bananas grow inside large buds that grow upward from the roots of the plant. As the bud grows, its petals open, revealing a bunch of bananas called a “hand.” Each hand has about 20 “fingers,” or bananas. Banana farmers bag the growing banana hands to protect the fruit from birds, insects and wind damage. The bags also help speed the bananas’ growth.

Bananas are still green when they’re ready to harvest. One worker cuts the 80-pound stem from the plant with a machete while another holds it. At the packing plant, workers inspect, wash and cut the hands into smaller clusters of bananas.

Next the bananas are labeled and carefully packed in protective shipping boxes, which are loaded into refrigerated containers that will keep the fruit at about 57 degrees Fahrenheit. This relatively low temperature helps keep the bananas from ripening too soon. The containers are then loaded onto ships for the 2- to 8-day trip to the United States.

Once the ship arrives at a U.S. port, its containers are loaded onto trucks that deliver the bananas to local warehouses equipped with ripening rooms. When they’re ripe, the bananas are delivered to local grocery stores.
ACTIVITY:
Where Did This Come From? From Producer to Consumer

Helper's Note: This activity has two options: "Product Pursuit" and "From Seed to Shelf." You can have your group do one or both options to help them understand the concepts. Because most children are familiar with foods as consumer goods, this activity uses food as the vehicle to help them begin to understand the more abstract concept of interdependence. You may modify this activity to meet the needs and interests of your group by researching other foods, or by focusing on other products entirely.

Option 1: Product Pursuit

Materials:
- "Big Ideas Mini-Poster"
- Various food items (see Step 1 in "Before the Meeting")
- Clipboards (optional)
- World map
- Colored stickers
- Newsprint or other large paper
- Marker
- Masking tape
- Paper
- Pencils
- Children's individual portfolios

Time:
Varies, depending on length of field trip

Procedure:
Before the meeting:
1. Look through your cupboards or visit a grocery store to identify and collect a variety of foods. Look for foods that are:
   - Native to your region
   - Not native to your region
   - Fresh
   - Packaged

2. Write down the name of the food and as much information as you can about it, including whether it's fresh or packaged (specify the form of packaging), and the name and address of the producer and distributor (they probably won't be the same). Food labels often provide product information such as the distributor's name and address, but not the food's origin. (A food might not be packaged in the same place it was grown or raised.) Food packages often list toll-free information numbers. The manager of the appropriate grocery department (such as produce, meat, bakery, dairy) may be able to tell you where fresh foods from his or her department came from.

3. Talk with a grocery store manager to arrange a field trip to the store. Tell the manager that the goal of your visit is to help the children:
   - Identify a variety of products and their sources.
Discover what happens to a food from its point of origin to the end product stage.
Understand the interdependence of people as a result of the products they use daily.

Share other information about your group, such as the number of children and their ages, and any expectations you have about the visit. Identify possible dates and times for the visit.

Find out if the store has any limits on the visit length, the number of visitors and their ages. Tell the manager you’ll send a letter confirming the date, the number of children and any other details you’ve agreed on. Make follow-up contacts as necessary.

**Helper’s Note:** For younger children (grades K–2), a guided field trip may be most appropriate. For older children (grades 3–6), be sure that it’s okay for the children to walk through the aisles relatively independently and to examine food products on their scavenger hunt.

**4. Make other field trip plans, including for transportation, meals and adult chaperons (see the “Field Trips” section on page 12 in the WOW! Helper’s Guide).**

5. Notify parents of your plans in writing. Your parent letter (see sample on page 12 of the WOW! Helper’s Guide) should describe what the group will do and include a permission slip.

**During the meeting:**

1. Arrange the food items you collected from your cupboards and the grocery store and display the world map where everyone can see them.

2. Have the children look at the food items you’ve displayed. Ask them how they could find out where these items come from. Ask them to share anything they know about the sources of the products and to read the labels of the packaged foods. Have the children use the colored stickers to mark the sources of the different food items on the map.

3. Prepare the children for the grocery store visit. Discuss any necessary safety information and the guidelines they must follow in the grocery store. Have them prepare a list of questions they’d like to have answered.

Groups of younger children (grades K–2) can take a guided field trip of the grocery store. Pick one of the approaches that follow for your field trip. For example, if you decide on the “Global Go-Getter” approach, the produce manager could show the children different fruits and vegetables and talk about where they came from. The children may be able to see how those items are delivered to the store and where they’re stored before being placed on the shelves. The children may pick specific foods they’re interested in finding out more about. Ask the manager to share a situation that happened at the store that illustrates the idea of interdependence.

Groups of older children (grades 3–6) can do a “Grocery Store Scavenger Hunt.” Before going on the field trip, divide the group into teams. Review the categories that follow or create your own. Have each team look for the types of foods described and write down where the product is from and an any other relevant information. Make sure they know how much time they’ll spend at the grocery store so they can plan how to complete their tasks. After the field trip, have them add stickers to the map to mark the sources of the products they find.

**4. Conduct the field trip.**

5. After the field trip, have each team share the information they gathered with the larger group. Have them take turns adding stickers to the map to mark the sources of the different food products they found. When the groups share their information, have them think about questions such as:

- How many products were “local”?
- How many came from far away?
- Which product had to travel the farthest?
- Why do we get products from so many different locations?
- Why are some foods packaged close to the areas where they’re consumed and other foods travel long distances to the consumer?
- What are some similarities and differences among food products grown in various locations and among the jobs needed to produce them?

**Talking It Over:**

See “Talking It Over” on the far right page.
Option 2: From Seed to Shelf

Materials:
- 19 pieces of 8½- by 11-inch card stock or heavy paper
- 11 index cards
- Marker
- “Background Information” sheet
- Crayons or markers
- Examples of products made with wheat, such as a package of cookies, a box of cereal, a box of pasta and a loaf of bread
- Wheat-based snack food

Helper's Note: If any of the children in your group are allergic to wheat, be sure they don't sample any of the wheat-based foods.

Time:
45 minutes

Procedure:
Before the meeting:
1. Write “How to Get From Seed to Shelf: Wheat” on one piece of card stock. On each of the other 8½- by 11-inch sheets write one of the following steps:
   - Buy seed.
   - Plow soil.
   - Fertilize field.
   - Plant seed.
   - Crops growing.
   - Harvest crops.
   - Take crops to mill.
   - Farmer is paid.
   - Process wheat into flour.
   - Ship flour to factories.
   - Use flour to bake bread.
   - Use flour to make cereals.
   - Use flour to make cookies.
   - Use flour to make pasta.
   - Package products.
   - Ship products to stores.
   - Stock products on store shelves.
   - Consumer (you!) buys the product.

2. Write each of the following “What If . . .” statements on an index card.
   - What if ... There was too much rain?
   - What if ... There was a windstorm?
   - What if ... There was sunny, dry weather?
   - What if ... Machinery needs repair, delays harvest?
   - What if ... There's a good crop with high yield per acre?
   - What if ... Wheat prices are down and wheat has to be stored?
   - What if ... You're the first farmer to the mill and you get a good price for your wheat?
   - What if ... There's not enough flour at the processing plant and production stops?
   - What if ... Workers strike at the processing plant?
   - What if ... Cookies are delivered to the store on schedule?
   - What if ... Cookies are on sale at store and consumers buy more cookies?

3. Review the background information provided on wheat.

During the meeting:
1. Display a package of cookies, a box of cereal, a box of pasta and a loaf of bread. Ask the children what the main ingredient is in each of these products (wheat flour). Ask the children to think about the steps it takes to get the product from the source (wheat) to the shelf (grocery store). Give each child a card that represents one of the steps the wheat takes to get from seed to shelf. There are 18 cards representing the steps in the producer-to-consumer process; adjust by either making duplicates or giving children more than one card, depending on the number in your group. Have the children illustrate their cards to show what happens during that part of the process.

2. Next, ask the children to arrange themselves and the cards in order from wheat seed to store shelf. Have them explain why they're placing the cards in that order. If the children disagree on the correct order, have them share their ideas with the whole group. Facilitate this discussion and prompt them with questions as necessary. Once they agree on the order, tape the title card and the step cards to the wall or place them on the floor. (The correct order appears in step 1 of “Before the Meeting.”)

3. Ask the group to act out each step in the process as you read it. Prompt them as necessary.

4. Now tell the children you're going to describe the whole process again, but this time you'll present them with some challenges. As you're describing the seed-to-shelf process and they're acting it out, use an appropriate “What If . . . ” situation card. For example, when you say, “The wheat is growing in the fields,” you can add “What if ... There is a windstorm that damages the crops!” and the children can act out the windstorm. Then ask them who is affected and how they're affected when a windstorm damages the crops. Prompt them to think about what would happen in each situation.

Helper's Note: Older children may not want to act out the steps in the process. Instead, have them take turns choosing the “What If ...” cards. They may even want to create some situations of their own.

5. Continue playing as long as the children are interested. Celebrate “reaching the shelf” by having a wheat-based snack!
Talking It Over:

After completing the activity have the children get in a circle and ask them the following questions to complete the experiential learning cycle. You can use the “Big Ideas Mini-Poster” to help them do this.

- What kinds of jobs are involved in getting food from the producer to the consumer?
- What new things did you learn?
- Did some things in this activity surprise you? What were they?
- Think back to what you had for dinner last night. Where did some of those foods come from?
- Besides food, what other products do you use that come from other parts of the United States and from around the world and involve lots of people in the production process? For example, clothing, electronic goods (televisions, radios and computers), construction materials, furniture, books and educational materials.
- How can you learn more about where products come from and the jobs connected with them?
- Think about a job you’re interested in or a job a family member has. How does that job connect with other jobs?
- Think about a recent news event. How does this event show how we depend on or are connected to people and the jobs they do in other parts of the country and around the world?

How to Simplify:

- Be sure the field trip is geared to the level of the children in your group.
- Use fewer cards to play the “From Seed to Shelf” game and simplify the explanation of what happens at each step.

How to Extend:

- When you’re on the field trip, have the children record the prices of the foods on their list.

Discuss the factors that contribute to food costs, such as production, transportation, packaging and storage, advertising and sales.

- Read a book with a “producer-to-consumer” theme that either looks at the whole process or one aspect of it, such as Here’s the Scoop: Follow an Ice Cream Cone Around the World, by Neale S. Godfrey (Parsippany, NJ: Silver Press, 1996) or Make Me a Peanut Butter Sandwich and a Glass of Milk, by Ken Robbins (New York: Scholastic, 1992).
- Draw a picture to illustrate the steps in the producer-to-consumer process for wheat.
- Choose another product to investigate, perhaps one that is grown in your region. Research the steps from production to consumption. (The World Wide Web is a good information source for this type of research.)
- Be creative! Have the children write riddles, poems or a play. They can write individual poems or a class poem to tell the story of the producer-to-consumer process. They can create a play complete with scenery and props. Perform the play for younger children or family members.
- Grow your own! Plant some fruits and vegetables as a group or individual project. In what ways is planting your own garden similar to and different from what a farmer does?
- Prepare a food, such as butter, bread or peanut butter, that you usually buy at the store. What “jobs” do you have to do to make this product on your own? What are the advantages and disadvantages of preparing food versus buying it in the store?
- Some foods are delivered to stores often because they have a short shelf life. Try this simple experiment to demonstrate that bread spoils easily. You’ll need two slices of bread, two clear plastic bags and two paper plates. Place one slice of bread in a plastic bag and close it tightly. Place the other slice of bread in a plastic bag, but leave the bag open. Place each bag on a paper plate. Have the children predict what will happen to the bread. Have them look at the two slices each day for a two-week period and record their observations in a log. What happens to the slices? What conclusions can they draw from this experiment?
- Investigate the origins of the clothing you wear. Begin by examining clothing labels. Locate the country of origin on the map and mark it with a sticker. Children can start with examining the labels on their own clothing. They can also do a scavenger hunt through their drawers and closets at home. Challenge the children to see how many different points of origin they can find and discover what jobs are involved in the production, distribution and sale of clothing.

Vocabulary Words:

- Refer to the definitions in the WOW! Helper’s Guide.
- Consumer
- Distributor
- Global
- Interdependence
- Producer
- Product
- Technology

For the Portfolio:

The following are examples of children’s work from this activity. Use these when you complete the “Portfolio – Putting It All Together” activity later in this theme.

- Grocery Store Scavenger Hunt list
- Photo of “From Seed to Shelf” game
Wheat is a form of grass that is grown nearly everywhere people live on our planet. Farmers in the United States grow more wheat than almost any other cereal (grain) crop, and export more wheat than any other cereal crop. Consumers in the United States use more wheat than any other cereal crop. Americans are hooked on wheat!

Farmers grow six general types of wheat in the United States: hard red winter, hard red spring, soft red winter, durum, hard white and soft white wheat. Where each type is grown depends on the area’s rainfall, temperature, soil conditions and tradition. In general, wheat is grown in dry regions that have fairly poor soil. As you might guess from the names of the different wheat types, there are two distinct wheat growing seasons: winter wheat is planted in the fall and harvested in the spring or summer, and spring wheat is planted in the spring and harvested in late summer or early fall.

After a wheat farmer plows a field, it is ready for planting with a machine called, simply, a planter. When the wheat starts to grow, farmers apply a nitrogen fertilizer.

The wheat is harvested with a machine called a combine. The grain head ends up in the hopper and the stalk, or straw, is left in the field. The straw is then baled and can be used for animal bedding, mulch and other applications.

Weather affects wheat yields. Too much or too little rain, or rain at the wrong time in the growing season, can affect the wheat, as can severe winds.

After the wheat is harvested, farmers may store their grain on their own farm or truck it to a grain elevator for sale or storage. If wheat prices are low at harvest time, farmers are more likely to decide to store their grain and wait for prices to rise before selling it. When they do sell their wheat, farmers are paid based on quality and tonnage, or weight.

Most wheat is processed at mills, where it is ground into flour. The flour may be packaged, distributed to stores and sold to consumers, or it may be shipped to commercial bakeries. There it can be made into breads, crackers, pasta, cake mixes, pie crusts, cereal, soups and gravies.

One hundred pounds of wheat yields:
- 72 pounds of flour
- 14 pounds of bran (used in cereals and breads)
- 14 pounds of middlings (used in pet and livestock feed)
- A small amount of wheat germ (some is packaged and sold in stores, some is used by commercial bakeries and some is sold to pharmaceutical companies to be used in medicines)
ACTIVITY:
Portfolio - Putting It All Together

Materials:
- “Big Ideas Mini-Poster”
- Children’s individual portfolios
- Index cards or paper
- Pencils

Time:
30 minutes

Procedure:

1. In the Work Around the World theme, children learn about the similarities, differences and connections they have with work around the world. Review the “Big Ideas” in this theme using the mini-poster. This activity gives children a chance to reflect on what they have accomplished during this theme and any new discoveries they may have made about themselves and their interests. Have the children look through their portfolios to review the projects they did for this theme.

2. Ask the children to look at each item in their portfolio and think about the activities they did. Give them enough time to look through their portfolios. Tell them they’ll have a chance to share their portfolios with others in the group.

3. Review the process for compiling the portfolio:
   - **Collecting** samples of your work that show what you did or what you learned.
   - **Reflecting** on these items. Talk to someone or write your thoughts about what you have learned or done.
   - **Selecting** samples that best represent your work or are the most meaningful to you. Explain why you chose these items.

4. Prompt them to think by asking them questions such as:
   - What did you like about that activity?
   - What would you do differently next time?
   - What did you learn during that project?
   - What else would you like to know?
   - What jobs interest you so far?
   - Are there any jobs that you thought you’d like but that you’ve changed your mind about? If yes, what made you change your mind?
   - How have your views about different jobs changed since we began this theme?
   - Do you see any new future career possibilities for yourself?

Have the children write their responses to one or more of these questions on an index card or sheet of paper that they can include with their portfolios.
5. If you did “Goal Setting – Ready, Set, Know!” as an opening activity, follow up by having the children complete the “Putting It All Together” chart, either individually or as a group. Use the following as a guide to create a chart.

<table>
<thead>
<tr>
<th>What Did We Learn?</th>
<th>How Did We Learn It?</th>
<th>What Do We Still Need or Want to Know?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Ask each child to share his or her portfolio with the group.

**Talking It Over:**

After completing the activity have the children get in a circle and ask them the following questions to complete the experiential learning cycle. You can use the “Big Ideas Mini-Poster” to help them do this.

- What new information did you gain about work around the world?
- Is the career you envision for yourself available in other countries? How is it similar or different?

**How to Simplify:**

- Have each child tell about one activity he or she found interesting during the theme.
- Limit the number of questions asked.
- Have younger children dictate responses or draw pictures instead of writing them.

**How to Extend:**

- Have each child display his or her portfolio to create a “Work Around the World Museum.” Invite family members to attend the exhibition.
- Encourage the children to share their portfolios with family members.
Dear Parent:

Your child is participating in several WOW! (Wild Over Work) activities that are designed to help children learn more about the skills they'll need to succeed in the world of today and in the work world of the future. WOW! activities help build children's awareness of career options and the skills they need to explore these possibilities.

We're currently involved in activities related to the theme of "Work Around the World," in which children are learning about the similarities, differences, and connections they have with work around the world. Some of the big ideas that we're exploring include:

- **People do many jobs around the country and the world.**
- **The jobs people do have many similarities and differences.**
- **People depend on others around the world for products they use.**
- **Things that happen in one part of the country or world may affect lots of other people.**

In each activity, children will make or do something related to the theme. Ask your child to tell you about the WOW! activities or show you something he or she made. Children may keep a portfolio of their work to show what they've done over time. There are many ways you can help your child "extend" what he or she learned in the WOW! "Work Around the World" activities. Here are a few ideas for you to consider:

- **Products, services and information travel from place to place, and so do people.** Use a map to look at various routes you can take when you use different methods of transportation. Give your child opportunities to travel by car, bus, bicycle or on foot. When possible, take other forms of transportation such as trains, subways, airplanes, ferries, and horse and carriage. Involve your child in planning your next trip or vacation -- whether it's around the block or around the world.

- **Walk around your home with your child and look at where different items come from.** Examine the labels of the clothes you wear. Talk about where your food comes from. Take advantage of local opportunities to go to the "source" of products such as farmer's markets, roadside farm stands and pick-your-own farms. Why do bananas come from Central America? Why does milk come from a local dairy? Perhaps your climate is too cold for growing bananas, and the milk will spoil if it travels too far. How did the food and clothing get to your house?

- **Hello! Bom Dia! Ming-gah-boul! Ni-hao-ma!** That's "hello" in English, Portuguese, Ga (a language spoken in Ghana) and Chinese, respectively. Did you know that children are most receptive to learning new languages throughout their elementary school years? Why not learn simple words in other languages? You and your child can learn together how to count to ten and say words like "hello," "goodbye" and "thank you." Look at different alphabets and scripts from various regions. Many libraries have language tapes, books and software -- some especially for children.

- **If you have relatives or friends who are from different countries or have traveled to or lived in other locations, invite them over to talk with your family.** Find out about typical foods and prepare a typical meal served in that country. Many communities have exchange students from other countries who could talk with you about how people live and work in their country.