## World Traveler



FOCUS AREA Measurement

ACTVMY TYPE Team Building

MATH COAL
To convert measurements of
length \& volume from word problems

RECOMMENDED
NUMBER
OF STUDENTS
Groups of four with a
maximum of 20 kids
(five groups)
TMME NEADED
60 minutes

## Relay

4th - 6th Grade

## OBJECTIVE

To answer measurement questions to get your tourist dressed for vacation.

## MATERIALS

- World Traveler Relay Worksheet (without answers) and pencils - one per player
- World Traveler Relay Answer Sheet - for facilitator
- Scratch paper
- Three pieces of seasonal clothing for each group
- Calculators - one per group (optional)


## Optional Introduction Activity

Math Can Take You Places DVD, Episode 3:"Amazing Amusement" (Reasonableness)

- TV/DVD Player


## BEFORE YOU START

- Collect a set of three pieces of gear needed for each group's vacation. Try to vary the types of vacations the groups are taking. (For example, one group might need beach wear, one skiing apparel, one clothing for vacation on a ranch, one for a sports camp, etc.) Make sure you have three pieces of gear for each group to put on. For instance, the beachwear group might have some flip-flops, sunglasses and a hat to put on.
- Be sure to mix the groups up according to their ages so that there is an even distribution of the older children mixed with the younger students.
- Note to facilitators: In order to increase students' math thinking skills, you may want to require that they must include the units with their answer. For example, they would give a hypothetical answer as " 9 gallons" instead of just " 9 ".


## HOW TO START

Start by talking about vacations and asking who has been on a vacation. Ask the children where they would like to go on vacation if they could go anywhere. Tell the students that they are going to play a relay game to help them get dressed for vacation.

Optional Introduction Activity: Show the children a clip from the Math Can Take You Places "Amazing Amusement" student video in which Ms. Garcia is talking about the different types of vacations families can take. Ask the children where they would like to go on vacation if they could go anywhere. Tell the children to pretend that they are going to play a relay game to help them get dressed for vacation.

## STEPS

## Step

Separate the students into groups of four. Make sure each group has workspace as well as room to dress their tourist. Allow the groups to choose who goes first as the tourist

## Step 2

The facilitator will choose a random question from the Relay Worksheet, say the corresponding number and read the problem aloud. Be sure to keep track of the questions that are called. Students can then use their worksheets to read the questions more thoroughly.

## Step 3

The groups will calculate the answer. When each group member has written the answer on his or her worksheet, all group members raise their hands for the facilitator to check the answers. The first group that has all members with the correct answer gets to put one piece of clothing onto their tourist.

## Step 4

Continue choosing questions for the groups to answer. The team that fully dresses their tourist first wins the round. If play continues, allow groups to switch out their tourists and exchange the groups' sets of clothes before each round.

## WRAP UP

Gather students in a circle. Tell them that you all are going to work together to tell a story about a tourist. Start the story by saying, "One day, while I was on vacation..." Go around the circle and let each child add a make-believe sentence to the story. The facilitator will end the story after all children have contributed to it.

## OPTIONAL ACTIVITIES

- Let the students extend the activity by writing their own travel-themed measurement questions.
- Allow the children to design postcards or create souvenir t-shirts from a destination of their choosing.
- Ask the kids to use the Internet to research the tourist attractions in a chosen vacation spot. Allow them to share five interesting facts about their vacation destination with the group.
- Invite a travel agent, other travel professional or a parent to speak to the students and offer the group interesting tips on traveling.
- Let students design paper dolls dressed in clothes needed for different tourist attractions.
- At home: Allow the kids to dress themselves with a piece of clothing every time they answer a question correctly.


## SUGGESTED MATH CAN TAKE YOU PLACES CONNECTIONS

From the Math Can Take You Places After School Kit activity "Weigh Too Much" (Measurement) From the Math Can Take You Places Classroom Materials activity "World Traveler Bingo" (Measurement)

## Can Take Vour Places

## Activity Cue Card

- Separate students into four groups, instructing each group to choose a student to be the "tourist."
- Distribute the tourist clothing and the World Traveler Relay Worksheets to each group.
- The facilitator will randomly select a question from the World Traveler Relay Worksheet.
- The first team to have all of their members write the correct answer on their worksheet and raise their hands may put one item of clothing on their tourist.
- The first team to have their tourist completely dressed wins.


## World Traveler Relay Worksheet

I. Pretend you are using a map to help your family drive from your home to Rocket Kid Amusement Park. The scale at the bottom of the map says that one centimeter equals 60 miles. You measure and find that there's a distance of 9 centimeters from your house to the park. How many miles will you have to ride?
2. Race against the other teams to see who can do the following after I say "Go." The first team done gets to add a piece of clothing to their tourist: Have everyone in your group stand up, turn around three times, sit back down and say "Are we there yet?!" "Go!"
3. Your parents rent a car while on vacation in Jamaica. One gallon of gas will let you drive 25 miles. How far can you drive on seven gallons of gas?
4. You are at the airport in Canada and decide to buy your friend a souvenir. If one U.S. dollar equals about I. 25 Canadian dollars, how much Canadian money can you get in exchange for 3 U.S. dollars?
5. While you're lying on the beach in Hawaii, it suddenly begins to pour down rain. The meteorologist said that we should expect 7 centimeters of rain to fall. How many millimeters of rain would that be? (Remember: I centimeter = 10 millimeters)
6. For a snack during a camping trip, campers used I20 crackers to fix peanut butter and jelly snacks for the 30 people there. How many crackers did each person get?
7. A book you're reading on the beach measures 10 inches by 4 inches by 2 inches. What is the volume of the book? (Remember: Length $\times$ Width $\times$ Height $=$ Volume)
8. You and a friend pack a gallon and a half of water on a mountain bike ride. How many quarts of water would that be? (Remember: I gallon $=4$ quarts)
9. You and your family walked the whole time during an 8-hour visit to the Water World Theme Park. How many minutes did you walk? (Remember: I hour $=60$ minutes)
10. This piece of paper is II inches long. Can you think of an item that is about the same length that you would carry on a vacation?
II. Choose one person in your group to represent your team. Each person will stand at the back of the room in a straight line side-by-side. When I say "Go", walk towards me as quickly as possible while making an airplane sound. The first person to touch my hand earns a piece of clothing for their team's tourist. "Go!"

I2. You and your brother decide to stop at Coney Island and get lunch; you both have a Coney Dog for $\$ 5.55$ each, both have a Dr Pepper for $\$ 1.25$ each and you decide you want chips with it for $\$ .50$. What is the total amount of money you and your brother combined spent on lunch?
13. While playing Frisbee with your friends on a field trip, Tommy throws the Frisbee 126 feet! How many yards is that? (Remember: I yard $=3$ feet)
14. After a morning hike through the mountains, you get thirsty and drink half a gallon of sports drink. How many quarts is that? (Remember: I gallon = 4 quarts)
15. While your family is in Paris, France, you decide to walk to the Eiffel Tower. It takes you 720 seconds to walk there from your hotel. How many minutes will your family have to walk? (Remember: I minute $=60$ seconds)
16. Your MP3 player measures 10 centimeters by 8 centimeters by 2 centimeters. What is the volume of your MP3 player? (Remember: Length $\times$ Width $\times$ Height $=$ Volume)
17. Choose one person in your group to represent your team. Each person will stand at the back of the room in a straight line side-by-side. When I say "Go", walk towards me as quickly as possible while making a honking noise like a New York taxi. The first person to touch my hand earns a piece of clothing for their team's tourist. "Go!"
18. When you get to the hotel in Bangkok, Thailand, you see a cake that is 38 centimeters tall! How many millimeters tall is that cake? (Remember: I centimeter $=10$ millimeters)
19. Choose one person in your group to represent your team. Each person will stand at the back of the room in a straight line side-by-side. When I say "Go", walk towards me as quickly as possible while pretending to toss a pizza crust with your hands like they do in Italy. The first person to touch my hand earns a piece of clothing for their team's tourist. "Go!"
20. An Eskimo drinks 4 quarts of coffee a day. If you visit him for a week, how many gallons of coffee will he drink in that week? (Remember: I gallon = 4 quarts)

World Traveler Relay Worksheet

## ANSWER SHEET FOR FACILATATORS

I. Pretend you are using a map to help your family drive from your home to Rocket Kid Amusement Park. The scale at the bottom of the map says that one centimeter equals 60 miles. You measure and find that there's a distance of 9 centimeters from your house to the park. How many miles will you have to ride?
540 miles
2. Race against the other teams to see who can do the following after I say "Go." The first team done gets to add a piece of clothing to their tourist: Have everyone in your group stand up, turn around three times, sit back down and say "Are we there yet?!" "Go!"
3. Your parents rent a car while on vacation in Jamaica. One gallon of gas will let you drive 25 miles. How far can you drive on seven gallons of gas?
175 miles
4. You are at the airport in Canada and decide to buy your friend a souvenir. If one U.S. dollar equals about I. 25 Canadian dollars, how much Canadian money can you get in exchange for 3 U.S. dollars?
\$3.75
5. While you're lying on the beach in Hawaii, it suddenly begins to pour down rain. The meteorologist said that we should expect 7 centimeters of rain to fall. How many millimeters of rain would that be? (Remember: I centimeter $=10$ millimeters)
70 millimeters
6. For a snack during a camping trip, campers used $I 20$ crackers to fix peanut butter and jelly snacks for the 30 people there. How many crackers did each person get?
4 crackers
7. A book you're reading on the beach measures 10 inches by 4 inches by 2 inches. What is the volume of the book? (Remember: Length $\times$ Width $\times$ Height $=$ Volume)
80 inches cubed (inches3)
8. You and a friend pack a gallon and a half of water on a mountain bike ride. How many quarts of water would that be? (Remember: I gallon = 4 quarts)
6 quarts
9. You and your family walked the whole time during an 8 -hour visit to the Water World Theme Park. How many minutes did you walk? (Remember: I hour = 60 minutes) 480 minutes
10. This piece of paper is II inches long. Can you think of an item that is about the same length that you would carry on a vacation? (Let the other groups decide if the answer given is reasonable.)
II. Choose one person in your group to represent your team. Each person will stand at the back of the room in a straight line side-by-side. When I say "Go", walk towards me as quickly as possible while making an airplane sound. The first person to touch my hand earns a piece of clothing for their team's tourist. "Go!"
12. You and your brother decide to stop at Coney Island and get lunch; you both have a Coney Dog for $\$ 5.55$ each, both have a Dr Pepper for $\$ 1.25$ each and you decide you want chips with it for $\$ .50$. What is the total amount of money you and your brother combined spent on lunch? \$14.10
13. While playing Frisbee with your friends on a field trip,Tommy throws the Frisbee 126 feet! How many yards is that? (Remember: I yard = 3 feet) 42 yards
14. After a morning hike through the mountains, you get thirsty and drink half a gallon of sports drink. How many quarts is that? (Remember: I gallon $=4$ quarts) 2 quarts
15. While your family is in Paris, France, you decide to walk to the Eiffel Tower. It takes you 720 seconds to walk there from your hotel. How many minutes will your family have to walk? (Remember: I minute $=60$ seconds)
12 minutes
16. Your MP3 player measures 10 centimeters by 8 centimeters by 2 centimeters. What is the volume of your MP3 player? (Remember: Length $\times$ Width $\times$ Height $=$ Volume) 160 centimeters cubed (centimeters3)
17. Choose one person in your group to represent your team. Each person will stand at the back of the room in a straight line side-by-side. When I say "Go", walk towards me as quickly as possible while making a honking noise like a New York taxi. The first person to touch my hand earns a piece of clothing for their team's tourist. "Go!"
18. When you get to the hotel in Bangkok, Thailand, you see a cake that is 38 centimeters tall! How many millimeters tall is that cake? (Remember: I centimeter = 10 millimeters) 380 millimeters
19. Choose one person in your group to represent your team. Each person will stand at the back of the room in a straight line side-by-side. When I say "Go", walk towards me as quickly as possible while making pretending to toss a pizza crust with your hands like they do in Italy. The first person to touch my hand earns a piece of clothing for their team's tourist. "Go!"
20. An Eskimo drinks 4 quarts of coffee a day. If you visit him for a week, how many gallons of coffee will he drink in that week? (Remember: I gallon $=4$ quarts)
7 gallons

