

SCIENCE STATION

STATION FOCUS

Elijah, a prophet of God, trusted God even when all things seemed impossible things seemed impossible. We can trust God too, and have hope.

SCRIPTURES

1 Kings 17:1-16; 19:8-13

Psalm 46:10; Proverbs 3:5-6 (GNT)

STATION OBJECTIVES

Children will

- * hear the story of the prophet Elijah;
- * learn a definition of the term *prophet* and be able to locate stories about the prophet Elijah in the books of 1 and 2 Kings;
- * hear examples of how Elijah trusted God and discover ways they can trust God in their lives;
- * learn about some of the unlikely ways God cared for and provided for Elijah and recognize and be able to discuss ways God cares for and provides for them;
- * discover ways that Elijah heard and talked to God and talk about ways they can listen for God and talk to God in their lives.

STATION SETUP

Make a paper banner large enough for each group to add their own thoughts throughout the unit. Write “Prophets Speak the Truth About God” across the top of the banner paper. Under the heading write “I’m a servant of the living Lord, the God of Israel. (1 Kings 17:1, CEV).” Then, write “Elijah, the Prophet” to indicate that these are Elijah’s words.

Resources

pages 3–8

Supplies

large piece of banner
paper
markers
masking tape or
adhesive putty

Use tape or adhesive putty to hang the banner on the wall where children can easily reach it.

As children enter each week, invite the children to add their own truths about God to the wall hanging.

Photocopy the Main Idea, Objectives, Bible References, Bible Story, Bible Background, Check Your Facts, About the Children, and Shepherd Tips for each leader and shepherd (pages 3–8).

Resources

Bible
Bible concordance
book of quotations or
www.brainyquote.com

Note

Resources and websites are constantly changing. Check www.powerxpress.com for updates that may help you in planning.

Resources

The DK Illustrated Family Bible
Bible dictionary
Bible concordance

SCIENCE

WANT TO DO MORE?

Use a Bible and Bible concordance to find statements from other prophets, such as Isaiah or Jeremiah. Add some of these verses to the banner. Include the name of each prophet.

Search a book of quotations or www.brainyquote.com for quotes about God from more contemporary prophets such as Mother Theresa or Martin Luther King, Jr. Add these proclamations to the banner.

SAFETY CHECK

- The church should be a place of security—a place where children can count on things and people being reliable.
- Shepherds should know the whereabouts of every child in the shepherd's group, and they should know where to reach parents in case of an emergency.
- Make sure children use equipment in a safe manner. Invite extra adult help, if needed, for the number of children in this station.

BIBLE STORY (5–10 minutes)

Read “King Ahab and Elijah” from pages 158–159 in *The DK Illustrated Family Bible*. Read the notes included at the end and on either side of the story. (**Note:** If this book is unavailable to you, tell about the conflict between Elijah and King Ahab in your own words.)

For Younger Children

Invite the children to look at and read as they can the notes included with the illustrations of the story.

Ask: How did Elijah serve God and tell people about God? How did God take care of Elijah?

For Older Children

Have the children use a Bible dictionary and a concordance to look up the word *ravens*. Then have them look up the references to ravens in their Bibles.

Ask: Why was it unusual for God to use ravens to feed Elijah?

Have the children work in small groups to review the conflict between King Ahab and Elijah.

Ask: What two women in the story were from Sidon? Which woman helped Elijah? Why would it have been unusual for someone in Sidon to help a prophet of God? What did God give the widow in return for helping Elijah?

Trust in the Lord with all your heart. Never rely on what you think you know. Remember the Lord in everything you do, and he will show you the right way. (Proverbs 3:5-6, GNT)

ACTIVITY OPTIONS

Choose from the suggested activities as your time and the children's interests allow.

For All Ages

Playing With Sound

Prepare

Invite an audiologist to talk to the children about how the ear works. If possible, have the audiologist bring a portable audiometer and demonstrate how to do a simple hearing screening for the children.

Borrow or purchase a model or poster of the ear so the children can see the inside of the ear and how the parts of the ear work.

Use the following experiments with sound to help the children practice listening carefully as they learn more about hearing and sound.

Option: Set up the different sound experiments as learning centers so that the children can move from experiment to experiment.

With the Children

1. Where Is the Sound?

Divide the children into pairs. Let each pair choose a child to be the first listener. Blindfold the listener and have the listener sit in a chair.

Give the other child a small glass jar filled half way with pebbles or coins. Have this child stand behind the listener and shake the jar at different places. Ask the listener to guess whether the sound is coming from the left or the right.

Stop after doing this several times, and have the pairs switch roles.

Ask: Was it hard for you to know where the sound came from? How could you tell where the sound came from? How many times did you get it right? Is it harder or easier to listen when you are focused on other things? Why? What does this experiment tell us about listening to God?

Resources

guest speaker, an audiologist

Supplies

plastic model or poster of the inside of an ear (available at educational or medical supply stores)
supplies listed for each experiment

Supplies

chairs
blindfolds
small glass jars
small pebbles or coins

Supplies

2-liter plastic bottle
(rinsed and dried)
heavy-duty scissors
sturdy plastic bag
rubber band
candle
matches or lighter

2. Watch Sound Move**Prepare**

Cut the bottom out of a plastic bottle.

Cut a circle out of a plastic bag approximately seven to eight inches in diameter, large enough to fit easily over the bottom of the bottle.

Stretch the plastic tightly over the bottom of the precut bottle.

Secure the plastic in place with a rubber band. Then give each child a chance to hear sound travel through the bottle.

With the Children

Place the open top of the bottle near, but not right next to, the ear of each child.

Caution: Medium level noises right next to a child's ear can damage hearing.

Tap **lightly** on the plastic. Ask the child to describe what was heard.

Say: With nothing but the sound you just heard, we can blow out the flame of this candle.

Have an adult light the candle. **Note:** Always have an adult light the candle, and never leave children unattended around a flame.

Hold the bottle on its side next to the candle with its open top located two to three inches to the side of the flame. Sharply tap the plastic on the other end of the bottle. Watch what happens to the flame.

Ask: What caused the flame to go out?

Explain: When fingers tap the plastic, the air particles on the other side of the plastic vibrate and create sound. As these particles vibrate, they cause other air particles around them to vibrate as well. The sound waves and the vibrating particles travel through the bottle, causing the air around the flame to move enough to blow out the flame of the candle. When we hear, the moving air particles cause the eardrum inside our ear to vibrate. We hear those vibrations as sound.

3. Focus on the Sound

Give the child a watch or clock. Instruct the child to put the watch or clock next to one ear and then move it away until the ticking can no longer be heard.

Give the child a cardboard tube to hold between the watch and the ear. Place the watch against the end of the tube. Ask the child to describe what is heard.

Ask: What do you hear? Why can you hear the watch better through the tube?

Supplies

watches or clocks
that tick
cardboard tubes

Explain: The sound of the watch causes the air particles to vibrate, carrying the sound waves through the air. When the watch is held further away in mid-air, the vibrating particles spread out in all directions and by the time the vibrations reach your ear, they are too small for you to hear. When you hold the watch at the same distance up against the tube, the vibrating particles are trapped in the tube, and the energy of the sound wave remains more focused, allowing you to hear the watch.

Ask: How did the tube help focus the sound of the watch? What can help us to focus on God's direction for our lives?

4. What Do You Hear?

Prepare

Cover a table with a long tablecloth or piece of fabric big enough to go all the way to the floor on all sides of the table. Place blindfolds under the table for children to wear if they wish.

With the Children

Have the children, one or two at a time, crawl under the table and be quiet and still. Instruct the children to concentrate on the sounds they hear. Tell them to close their eyes, or they may use the blindfolds if they wish.

After a minute or two, have the children come out from under the table. Ask them to write down the sounds they heard.

Option: If weather permits, do this activity outdoors.

Ask: How many different sounds did you hear? Did you hear a sound you never noticed before? Did closing or covering your eyes help you to hear more sounds?

5. Stethoscope Sounds

Let the children take turns using the stethoscope to listen to their hearts and stomachs. Then ask the children to describe the sounds they hear.

Note: If several children use the same stethoscope, clean the ear pieces with rubbing alcohol and facial tissue between each use.

Let the children listen to other objects. Place the stethoscope against an orange and squeeze slightly. What do you hear? Take the stethoscope outside and listen to the dirt or a tree. What do you hear?

Divide the orange for the children to eat as you talk with them about what they heard.

Ask: Did you hear any sounds you had never heard before? What are some of the sounds around us all the time that we don't hear? Do you think Elijah would have heard God on the mountain if he had been paying attention only to the big noises? How can listening to the small sounds of God's creation help us to think about God more?

Supplies

table
long tablecloth or
piece of fabric
paper
pencils
(optional: blindfolds)

Supplies

stethoscope
rubbing alcohol
facial tissues
(optional: orange)

Resources

"Facts About Ravens" (page 72)

Supplies

bag of whole cranberries or other red edible berries
 popped popcorn
 an apple
 a kiwi
 an orange
 sharp knife
 heavy-duty cotton thread
 strong needles
 bowls
 heavy string or cord
 (optional: bag of whole peanuts in their shells)
 (optional: cups, water)

Talk Tip

How did the ravens give food to Elijah?
 How can we give food to the birds?

For All Ages

For the Birds: Honoring the Ravens

Prepare

This activity will allow the children to care for birds as the birds cared for Elijah.

Option: Coordinate this activity with *Ravens*, a film in the Video Station.

Prepare the ingredients for bird snacks.

- Cut all the fruit in $\frac{1}{4}$ inch slices.
- Thread several strong needles with 12- to 15-inch lengths of heavy-duty cotton thread. Tie a knot about three inches from the end.
- Cut heavy string or cord in several 8–10 inch lengths.
- Place the berries, popcorn, nuts, and fruits in bowls on the work area.

With the Children

Read "Facts About Ravens" (page 72) to the children.

Say: Just as the ravens cared for a man of God, we as the people of God can care for the birds.

Make Bird Snacks

Demonstrate how to thread the fruit and popcorn. Then let the children thread their own garlands. Help them add fruit and popcorn until four inches of thread remain. Tie a second knot. Then tie the two ends of the garland together.

Let the children snack on fruits and popcorn as they work. If you wish, serve water with the snack.

Hang the fruit slices and garlands in trees outside.

Option: Peanuts in the shells can also be threaded through the middle section of the shell. Do not use these if you have any children with peanut allergies. Touching or smelling peanuts can set off allergic reactions in some children.

For Older Children

Caring for Others in Famine and Drought

Prepare

This activity is in two parts.

- (1) Children will take part in an experiment to learn about the realities of world hunger; and
- (2) Children will learn how they can help through a CROP WALK. CROP WALKS, fundraising events sponsored by Church World Service, raise money to fight world hunger. Encourage the children to fight world hunger by recruiting and sponsoring groups from their church to take part in an already existing CROP WALK in your area. If there is not a CROP WALK planned in your area, children can help organize and begin a CROP WALK of their own with the help of the local CWS office. Contact Church World Service in your area to get information about CROP WALKS. To contact Church World Service and find the CWS Office in your area, visit www.churchworldservice.org or call 1-888-297-2767 (1-888-CWS-CROP).

Option: Contact Church World Service about borrowing their video *CROP WALK: You Can Make a Difference*. Information is available on the website or through the toll-free number.

With the Children

1. Learn About World Hunger

Have the children create three groups to represent different parts of the world's population.

Group A: Have the children use a calculator to figure how much 17 percent of their class would be. (Multiply the number of children by .17. If the number ends with .6 or more, round up. If the number ends in .5 or below, round down.) Have that number of children go to one side of the room.

Group B: Have the children calculate 25 percent of the class. (Divide the total number of children by 4. If the number ends with .6 or more, round up. If the number ends in .5 or below, round down.) Have that number of children stand in the middle of the room.

Group C: The remaining children make up the remaining 57–58 percent of the class. Have Group C go to the opposite side of the room from Group A.

Resources

(optional: *CROP WALK: You Can Make a Difference* video)

Supplies

calculator
small candy pieces
bowls
globe
TV and video player

Talk Tip

How could people distribute food around the world more fairly? Remember the story of Elijah and the widow. Because the woman shared the little she had, they had more than enough food to live on.

Say: Group A represents the 17 percent of the world's population with the highest income. These people live mostly in places like the United States, Canada, Western Europe, Japan, Australia, and Great Britain. People in this group have clean drinking water, more than enough to eat, and good doctors and medicines. On average, people in this group live to be about 76 years old.

Group B represents the middle-income countries of the world. This group includes 25 percent of the world's population. Most of these people live in Eastern Europe, Russia, Mexico, Thailand, and the Philippines, as well as parts of China and India. Many people in this group do not have enough to eat. While most of this group has clean drinking water, they don't always have clean water in their homes and often have to haul clean water back to where they live. On average, people in this group live to be about 63 years old.

Group C represents the majority of the world's population, the poorest. People in this group live all around the world, especially in places such as Haiti, Guatemala, Ethiopia, South Africa, Sudan, Bangladesh, and parts of India and China. These people earn \$600 or less per year and go without food on a regular basis. Access to clean drinking water is rare, and many people get sick from drinking unclean water. There are very few doctors and very little medicine for people who get sick. Most people do not live to the age of 60.

Let the children use the globe to locate some of the countries represented by their groups.

Give each group a bowl for their food, and put candies in each bowl.

- **Group A:** Put 50 small candies in the bowl for each person.
- **Group B:** Put 7 small candies in the bowl for each person.
- **Group C:** Put 1 small candy in the bowl for every three people.

Instruct the children to wait until you tell them to eat their candy.

Ask: Group A, how does it feel to have so much candy when the other groups have so little?

Group C, how does it feel to not have candy for everyone?

Is the way that I have handed out the candies fair or unfair?

Why? What would make it fair?

Say: The candy in your bowls illustrates how the food in the world is distributed today. Most people do not even have enough food to have two or more meals each day.

Ask: What are some of the other things that people from Group C don't have? What are some reasons why so many people in the world have so little? What can we do to help?

Help the children decide how to share their candy in a more fair way and let them enjoy eating it.

2. CROP WALK

Use written materials or the video obtained from Church World Service to introduce CROP WALKS to the children.

Have the children design posters to advertise the CROP WALK in your area and a sign up sheet to recruit people to participate in a local CROP WALK. (These posters and sign up sheets are also an option in the Computer Station. Coordinate with that leader.)

Have the children plan a way to present information about the CROP WALK in worship or in adult classes.

Option: Instead of Church World Service, support a local charity or food pantry that works to fight hunger.

CLOSING (5 minutes)

Gather the children in a circle.

Say: Let's close with a "stillness prayer." Let's practice the way you will need to breathe. Take a deep breath in, hold it, and then let it out.

Repeat this breathing exercise several times, helping the children to breathe very slowly.

Close With Prayer: Guide the children as they say this modified version of Psalm 46:10 as a breath prayer.

Say: Breathe in. As you breathe out, say: "Be still."
 Breathe in. As you breathe out, say: "and know."
 Breathe in. As you breathe out, say: "that God."
 Breathe in. As you breathe out, say: "is God."

Repeat the prayer two or three times.

Facts About Ravens

by Suzann Wade

Ravens, large black birds, are the largest member of the crow family. Ravens are considered by many to be the most intelligent species of bird. Scientists have found that ravens use complex thought and reasoning to find food. Ravens are cunning and even use trickery and thievery to get food from larger birds and animals.

Ravens are known to be very playful, often times acting more like a puppy than a bird. They are very relational. They live in large communities as young birds and appear to learn hunting and scavenging techniques from one another. Ravens can learn to interact with humans on almost the same level as a pet dog or cat. Pet ravens have even been known to comfort a crying child.

There are eight different species of ravens in Israel, and they are commonly seen throughout the land. For God's people in Bible times, the raven was considered to be unclean because ravens are scavenger birds. They are called scavengers because they will eat just about anything. Ravens often eat the decaying bodies of animals. For this reason, ravens are connected with death in many cultures. Since ravens were among the animals considered unclean among the Hebrew people, people were expected to avoid contact with ravens.

In the story of Elijah, God used these cunning scavenger birds to provide take-out food to Elijah. Twice a day, the ravens dropped in on Elijah, delivering meat and bread. While there, the ravens probably had the chance to find much needed water for themselves at the Cherith Creek where Elijah was staying.

For the Hebrew community, this arrangement with the ravens would have been unheard of. After all, what kind of food could a raven bring for a man of God to eat? However, God used the ravens to make the impossible possible, feeding Elijah in the middle of the wilderness, in the middle of a drought, with no source of food around for miles.

The story of the ravens reminds us of the Bible verse:

Trust in the Lord with all your heart. Never rely on what you think you know. Remember the Lord in everything you do, and he will show you the right way.

Proverbs 3:5-6 (GNT)