### SCIENCE LEADER GUIDE

Palm Sunday to Easter Sunday

(Luke 19:28-40; 22:14-23:56; 24:1-12)

### Age-Level Overview

	Open the Bible	Activate Faith
Lower Elementary		
<b>WORKSHOP FOCUS:</b> God can make a bad thing good. <b>TOP THIS!:</b> Kids see colors by making	SPARK RESOURCES: Spark Story Bibles SUPPLIES: Paper (gray, white, and black), kid-safe scissors	<b>SPARK RESOURCES:</b> None <b>SUPPLIES:</b> Small paper plates, pencils, rulers, black markers or crayons, paper,
and spinning a black and white top.		tape
Upper Elementary		
<b>WORKSHOP FOCUS:</b> Jesus died to clean away our sins.	<b>SPARK RESOURCES:</b> Spark Bibles, Spark Bible Stickers	SPARK RESOURCES: None SUPPLIES: Newspaper or magazine ads
<b>COMING CLEAN:</b> Kids learn about variables as they test various stain cleaners.	SUPPLIES: None	for detergents and stain removers, white cotton cloth, scissors, whiteboard or chart paper, marker, staining agent (mustard, red juice or food color, grass, dirt, markers, etc.), plastic butter tubs, water, soaps/ detergents/stain removers, measuring spoons, forks, aluminum pie tins, paper towels
All Kids		
<b>WORKSHOP FOCUS:</b> Celebrate Jesus' arrival!	<b>SPARK RESOURCES:</b> Spark Story Bibles, Spark Bibles, Spark Bible Stickers	SPARK RESOURCES: None SUPPLIES: Paper, scissors, aluminum
<b>JOYFUL NOISE:</b> Kids experiment with making different kinds of noises to celebrate.	SUPPLIES: None	foil, glue, flashlight, large mirror, other types of paper (construction, tissue, wrapping—optional)



Looking for additional Spark content to further engage kids? Visit www.wearesparkhouse.org to learn more about these options for purchase.

- The Director CD-Rom contains Activity Pages, Coloring Pages, Family Pages, Large Group Openings, and two additional in-class activities for each lesson.
- A Sparkhouse Digital annual subscription gives you access to all content contained in the Director CD-Rom and the Spark Leader Guides, plus administrative tools and other extras.

# Palm Sunday to Easter Sunday

(Luke 19:28-40; 22:14-23:56; 24:1-12)

Workshop Focus: God can make a bad thing good.

SCIENCE

LEADER GUIDE

Keep these tips in mind as you welcome kids to the workshop and explore the story together.

- Each week, remember to welcome kids to the rotation. Keep in mind that for some kids it may be the first time they are visiting your workshop!
- If kids have heard the story several times during previous weeks, read it again! Kids learn through repetition, and every workshop will explore the Bible story in a slightly different way.
- Remember that the Shepherds are there to support you as they accompany kids each week.

## Open the Bible (10 minutes)

### Palm Sunday to Easter Sunday Storytelling

Set Up: Cut a 2-inch (5 cm) circle out of the gray paper.

#### **Activity Instructions**

Welcome to Spark Science. I'm glad you're here. Let's do a quick color quiz. What color is this paper? Hold up sheet of white paper. (white) What color is this? Hold up black paper. (black) And what color is this circle? (gray) Here comes a tricky part, is this gray circle light or dark? Answers will vary. Watch what happens when the gray circle is in front of the white paper. (It looks dark.) What happens when I put the same gray circle in front of the black paper? (It looks light.) Isn't it strange that the same thing can be different depending on how you look at it?

Pass out Spark Story Bibles. As we read today's stories, be listening for the words dark and light. The first story is about Palm Sunday. Open your Spark Story Bibles to page 454 and let's get started. Also read The Day Jesus Died (page 476) and The Empty Tomb (page 482).

Spark Resources Spark Story Bibles

#### Supplies

Gray paper White paper Black paper Kid-safe Scissors When did we hear the word dark? (In the story about Jesus dying, the sky was dark.) When did we hear the word light? (In the story about the empty tomb, the sky was light.) Do you think it was a good thing or a bad thing that Jesus died? Answers will vary.

We may feel very sad that people hurt Jesus and put him to death, but that is how he saved us from our sins. So his death was a bad thing that happened for a very good reason. This is a bit like our gray circle which looked both light and dark.

## Activate Faith (25 minutes)

### Top This!

Activity Instructions

When we started, you told me which paper was white and which paper was black. But just like God can make a bad thing good, you can turn black and white into other colors.

- Give each kid a pencil, a ruler, and one paper plate. On this plate, use the ruler to draw a line across the middle to divide our plate into two halves.
   Demonstrate. Don't worry if the kids' plates don't have exactly equal halves.
- 2. Color one half black. Distribute black markers.
- Put that plate to the side for a minute. Distribute a second plate to each kid.
   We're going to divide this plate into four equal parts by drawing a cross through the middle. Demonstrate and assist as necessary.
- 4. Your plate has four parts. Color only one part black.
- Put that plate with the other. We're going to make one more plate. Distribute a third plate to each kid. We're going to divide this plate into eight parts by drawing a stick star through the middle. Demonstrate and assist as necessary.
- 6. On this third plate, color every other piece black. So you should have black, white, black, white, black, etc.
- 7. The place where your lines cross is the middle. Push the pencil through the center of one plate at a time. Help as necessary.
- 8. To make sure the plates don't slip off the pencil, we're going a wrap a piece of tape about 1 inch (2.5 cm) above the pencil point. Demonstrate and distribute tape.
- 9. Put a piece of paper at your feet. Distribute paper. This is so our pencils don't make any marks on the floor. Pick one plate to put on the pencil. Put the

#### Spark Resources

None

#### Supplies

Small paper plates, 3 per kid Pencils Rulers Black markers or crayons Paper Tape **pencil point on the paper. Hold on to the eraser part and give it a spin.** It may take a few tries to get the tops spinning. If they seem too wobbly, move the piece of tape a bit lower. **Look down at the plate as it is twirling. What do you notice?** (colors appear)

- 10. After you watch one plate spinning, put a different plate on your pencil and spin it again. Is there any difference in what happens? Accept all answers.
- 11. Now place the last plate on the pencil and spin it again. Is there any difference in what happens? Accept all answers.
- 12. They can continue to spin different plates as long as time allows.

## Send (5 minutes)

### Wrap Up

Remind the Shepherds to distribute the Family Pages for this story if the kids haven't already received it, and come together for Wrap Up.

Gather kids in a circle. Wow! That was great! We saw how black and white can spin into colors! And in the middle of one plate is a cross, and in the middle of another plate is a star. These are all great reminders of our stories today. Jesus died on a cross on a very dark day. But three days later, the angel in his tomb shone bright like a star. Dark and light, black and white. They seem like opposites, but when you put them together, you can get the whole colorful story.

### Prayer Time

Dear God,

When we are having a bad time, help us find our tops. When we see the cross and star, and create colors by spinning them, we'll remember how you made a bad thing good, and we'll know that things can get better. Amen. **Spark Resources** Family Pages



# Palm Sunday to Easter Sunday

(Luke 19:28-40; 22:14-23:56; 24:1-12)

Workshop Focus: Jesus died to clean away our sins.

SCIENCE

LEADER GUIDE

Keep these tips in mind as you welcome kids to the workshop and explore the story together.

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- If kids have heard the story several times during previous weeks, read it again! Kids learn through repetition, and every workshop will explore the Bible story in a slightly different way.
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## Open the Bible (10 minutes)

### Palm Sunday to Easter Sunday Storytelling

#### **Activity Instructions**

Welcome to Spark Science! I'm glad you're here. Tell me about the time you got the dirtiest. Accept kids' stories. How did your parents or your caretakers react to your dirtiness? Answers will vary. How hard was it to clean up? Answers will vary. Did the dirt create any permanent stains? (My clothes never looked the same again.)

Pass out Spark Bibles. Today's story deals with a different kind of stain and cleaning process. As we read today's stories, listen for words or phrases that make you think of dark and dirty or clean and bright. Mark these places with your Spark stickers and we'll share them after we're done. Let's get started by opening our Spark Bibles to Luke 19:28 (page 1159). Also read Luke 22:14-23:56 (page 1163) and Luke 24:1-12 (page 1167).

Where did you see or hear something that made you think of dark or dirty? (Answers will vary—most likely in the death of Jesus.) Where did you see or hear something that made you think of clean or bright? (Answers will vary—most likely in the story of Palm Sunday or the resurrection.) The stories never say the word stain, so what is the stain I mentioned before we started reading? (sin) How was that stain removed? (by Jesus' death on the cross)

Spark Resources Spark Bibles Spark Bible Stickers

Upper Elementary

### Coming Clean

**Set Up:** Cut the cloth into 6-inch (15 cm) squares, 2 per kid. Draw a table on the white board or chart paper to list variables and outcomes.

Variables	Kid 1	Kid 2	Kid 3	Kid 4
Type of stain	Mud			
Water temperature	Warm			
Type of cleaner	Liquid soap			
Application method	In the water			
Amount of cleaner	1: 1 tsp (5 ml) 2: 2 tsp (10 ml)			
Time of wash cycle	3 minutes			
Results				

#### **Activity Instructions**

Have you ever seen or heard a commercial or ad like this one (show ad) for a stain remover? What do those ads say? (They are the best thing for getting out tough stains. They work on everything.)

Have you ever heard people talk about the stain of sin? Answers will vary. What does that mean? (It means you aren't clean; you have done something wrong.) We believe that Jesus died on the cross to clean away the stain of all of our sins, to make us clean again.

We know that Jesus was the only person who could remove the stain of *all* our sins. Is there only one thing that can remove *all* other stains? Let's find out.

 Distribute two swatches of cloth to each kid. The one thing that will stay constant in all our tests is the use of cotton cloth. Everything else is a variable. What does variable mean? (It means something can change or be different.) That's right, variables are things that you can change. What are some things we can change in this experiment?

List their responses on the chart paper or whiteboard as they respond. It's okay if they come up with other possibilities or not include all the ones listed here. (the type of stain, water temperature, type of soap, whether you put the soap on the stain or in the water, etc.)

 One thing that can change is what caused the stain. I have several common items that often stain our clothes. Pick one item you want to use to stain *both* of your swatches. Be sure to really rub it in. This is best done over/in the aluminum pans.

#### Spark Resources None

#### Supplies

Newspaper or magazine ads for detergents and stain removers White cotton cloth (an old sheet works well) Scissors Whiteboard or chart paper Marker Staining agent (mustard, red juice or food color, grass, dirt, markers, etc.) Plastic butter tubs Water Variety of soaps/detergents and stain removers Measuring spoons Forks, 1 per kid Aluminum pie tins Paper towels

- 3. Each of you will get a plastic butter tub and fork to use as your washing machine. You'll fill the tub about half full with water, add the soap, and use the fork as the agitator—what you use to swirl the fabric around. Before you get the rest of the materials, you need to decide one variable from our list on the board that you want to test. For example, you might want to test the amount of cleaner that is used. So your water temperature, type of cleaner, and the length of time you wash your swatch has to be the same for both tests. But one swatch will be washed with more cleaner than the other swatch.
- 4. When you are done washing a swatch of cloth, squeeze out most of the water and lay it flat in an aluminum pan. Assist kids as needed.
- 5. Let's check our results. Compare your two swatches. Look at the swatches washed by other people. Let's record the results on the board. Is there any one variable that seemed to have a greater effect on getting out stains? Answers will vary.

## Send (5 minutes)

### Wrap Up

Remind the Shepherds to distribute the Family Pages for this story if the kids haven't already received it, and come together for Wrap Up.

Today we tested several different variables in cleaning stains out of cotton cloth. All of us will come across many different variables in our lives that could cause us to stain our souls with sin. We are all human, which means we are not perfect. The wonderful news is that Jesus' death was the ultimate sin stain remover. So when it's time to come clean, all we need to do is connect with Jesus. **Spark Resources** Family Pages



Supplies None

### Prayer Time

Dear God,

Thank you for sending us Jesus. We try our best to keep from sinning and keep our souls clean, but it helps us to know that we can always turn to Jesus, the ultimate sin stain remover, to come clean when we have faltered. Amen.

### Palm Sunday to Easter Sunday (Luke 19:28-40; 22:14-23:56; 24:1-12)

All Kids

Workshop Focus: Celebrate Jesus' arrival.

SCIENCE

LEADER GUIDE

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## Open the Bible (10 minutes)

### Palm Sunday to Easter Sunday Storytelling

#### **Activity Instructions**

Welcome to Spark Science! I'm glad you're here. How many of you came here in a car? Did you wave to anyone on the street as you went by? Why not? Can you think of a time when you might wave to people along the street? (*if I knew them, if I was in a parade*) People often ride in very slow moving cars or trucks when they are in parades. I want you to think about parades as we read today's stories. Pass out Spark Story Bibles to the younger kids and Spark Bibles to the older kids. For the first one, in your Spark Bibles, look for Luke chapter 19, verse 28 (page 1159). In your Spark Story Bibles, turn to the story of Palm Sunday, found on page 454. Also read:

Spark Bible: Luke 22:14–23: 56 (page 1163) and Luke 24:1-12 (page 1167); Spark Story Bible: The Day Jesus Died (page 476) and The Empty Tomb (page 482).

When Jesus was going into town, did he know what was going to happen next? (yes, I think so) Would you be celebrating if you knew that someone was going to put you to death soon? (No!) Do you suppose Jesus let people celebrate because he knew his death on the cross would be a very good thing for them? (maybe)

#### Spark Resources

Spark Story Bibles Spark Bibles Spark Bible Stickers

## Activate Faith (25 minutes)

### Joyful Noise

**Set Up:** Cut the foil into very small pieces. Cut the paper so that each kid will have:

- a 2" x 6" (5 cm x 15 cm) rectangle
- a 6" (15 cm) square
- a 1/8" x 6" (.25 cm x 15 cm) strip
- Make a sample noisemaker.

#### **Activity Instructions**

Noises played an important role in several places in today's stories. The first story said when Jesus entered the city, people lined the path, waved palm fronds, and shouted to him. What would the palm fronds do? (*They're like big* fans. They'd cool the air. They'd provide shade and wind.) They would move the air! And moving air is what sound is all about. We're going to move some air in some unexpected ways today, making a joyful noise to celebrate Jesus coming into our lives. Our first noisemaker will help us see the moving air.

- 1. Distribute the rectangles. Demonstrate the folding and cutting while the kids do the project. **Fold this paper in half so that it looks shorter.**
- 2. Glue a few pieces of foil to each side.
- 3. Distribute scissors. Carefully cut a small *V* shape in the middle of the folded edge.
- 4. Bend up the bottom edges just a bit to have a place to hold onto.
- 5. Hold the two edges close together but loosely over your lips and blow. You may have to adjust your paper a few times before you get a noise.
- 6. Note: this part works best in a dark area. **One at a time, do this in front of the flashlight. The light will bounce off the foil pieces and reflect on the walls** (or mirror).
- 7. You made noises by making the paper vibrate, or move. There are other ways to make the paper move. Let's try another one.
- 8. Some of you may already know a bit about sound. Tell me, do smaller things usually make (make your voice high pitched), a higher pitched sound, or (make your voice low pitcher) a lower pitched sound? Here's a hint, think about flies and mosquitoes. Which one makes a higher pitched buzz? (mosquito) Which is smaller? (mosquito) Distribute thin strips of paper. Let's see if we're right.
- 9. Stretch this piece so that it lies along the outside edge of one thumb. Press your other thumb against it. You want the paper to be tight. Demonstrate so kids see how to do it. There should be a little space below your thumb knuckles where you can see the paper strip. Put your lips in front of that space and blow. What a noise! Did it sound higher or lower? (higher)

Spark Resources None

#### Supplies

Paper Scissors Aluminum foil Glue Flashlight or other light source Large mirror Other types of paper (construction, tissue, wrapping—optional)

- 10. Using the knowledge we have gained so far, what type of noise do you think we'll get from this piece of paper? Hold up large square. (lower)
- 11. Actually, it's going to be a different sound all together. Instead of blowing on this piece of paper to make it move, we're going to fold it. Distribute square pieces of paper.
- 12. Turn your paper so it looks like a diamond. Take the bottom point up to the top point so you have a triangle that opens at the top. Rub your hand along the edge to make a sharp crease. Again, demonstrate while kids are folding.
- 13. Pick up the left point and fold it over to the right point. Crease the new edge.
- 14. This next fold is the trickiest. Pick up just the top part, it will be two layers of paper, on the right point. Fold it over to the left so the edge goes a little bit past the left point, making a fin. Make a sharp crease.
- 15. Flip the paper over and fold the other side to match.
- 16. Hold the two fin pieces with the thumb and forefinger on one hand. Snap your hand and wrist down quickly. The paper will make a loud "pop." Fold the piece back in and do it again. How loud can you make it?
- 17. We have made three different sounds using one type of paper. What could you change about the paper to change the sounds it makes? (the size we use, how thick it is, how hard I blow it) If time and materials permit, encourage kids to experiment with alternatives and share their results.

## Send (5 minutes)

### Wrap Up

Remind the Shepherds to distribute the Family Pages for this story if the kids haven't already received it, and come together for Wrap Up.

Back at the beginning, we talked about parades and how the people welcomed Jesus to town with an unplanned parade. During parades, we often hear loud whistles, shrieks, and pops, just like the noisemakers we made today. These can be our way of welcoming Jesus into our lives. Get ready to sound your favorite noisemaker during our final prayer.

### Prayer Time

Dear God, the whistles, shrieks, and pops we create are one way we can tell the world how we welcome you into our lives. You have given us many reasons to celebrate with joyful noise. Have kids sound their noisemakers. We thank you for everything, especially the gift of Jesus. Amen.

Spark Resources Family Pages

