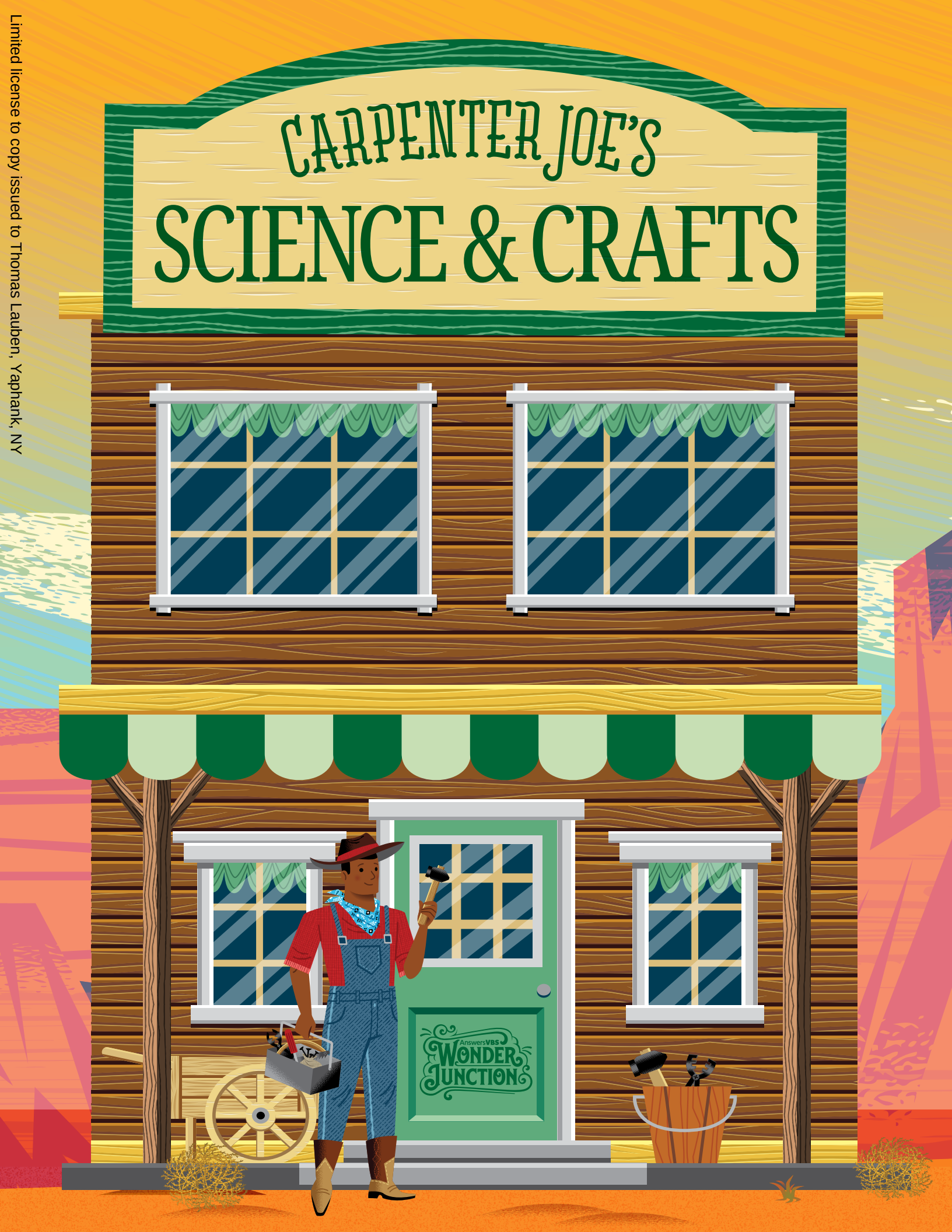

Leading a Child to Christ

"For I am not ashamed of the gospel, for it is the power of God for salvation to everyone who believes." Romans 1:16

VBS presents an ideal opportunity to share the life-changing gospel of Jesus Christ with all attending. Every leader and team member should be ready to clearly present the gospel and counsel those wanting to learn more. Children are usually soft-hearted toward things of the Lord, and some will be interested in becoming a follower of Christ. Be ready, because eternal matters matter most!

Before

- **Pray.** Salvation is God's work, not ours. We cannot bring about salvation for anyone. We need to ask God to prepare the children and open their hearts to him.
- **Be prepared.** Learn more about presenting the gospel and counseling a child about salvation.

During

The gospel will be presented during the lesson time. Opportunities may arise, however, to share with a child one-on-one or with a small group of children. If so, keep the following in mind:

- Becoming a child of God involves repenting of one's sin and having faith in the death and resurrection of Jesus Christ. Repentance involves understanding what sin is (disobeying God's commands) and desiring to turn from that sin.
- You can use the booklet *How Can I Become a Child of God?* along with your Bible to explain the plan of salvation. Children need to see and hear God's Word, so have your Bible opened and marked ahead of time with the appropriate scriptures.
- Avoid abstract phrases like "asking Jesus into your heart." Instead, use terminology like "becoming a child of God." Most children still think in concrete terms and need examples that are easy to understand.
- If a child indicates an interest to know more after hearing the gospel presentation, ask questions (such as the following) that require more than a "yes" or "no" answer:
  - » What do you want to talk to me about?
  - » Do you know what sin is?
  - » Can you think of a specific sin (wrong) you have done?
  - » Are you bothered by your sin?

  These questions are important. A child who cannot verbalize a sin or does not seem to be repentant about being a sinner may not fully understand his need for a Savior. In this situation, you might list some child-oriented examples of sin and ask him to notice any time he catches himself sinning over the next few days. Give him the *How Can I Become a Child of God?* booklet. Pray with him, then send him on his way. Check back a day or two later, if possible.
- If the child does seem to be sincerely sorry for his sins, you can proceed with more questions like the following:
  - » Why did Jesus come to earth? Why did Jesus need to die? Why did Jesus rise again?
  - » Why do you want Jesus to be your Savior?
  - » Why should God let you into his family? (Make sure the child understands that salvation is not based on what he does but is a gracious gift of God through faith in the death and resurrection of Jesus.)
- Pray for discernment while listening to a child's answers.
- When a child seems to have a basic understanding of salvation (belief in Jesus' death and resurrection, admission of and repentance from sin, and a desire to follow the Lord), encourage him to talk to his parents about what it means to become a child of God (if they are followers of Christ). Encourage a child who comes from a non-Christian home to verbalize his understanding to the Lord through prayer. There is no one prayer that should be prayed. Encourage him to ask the Lord to forgive him and help him know he is a child of God.
- Let him see in your words and your face that you are excited that he wants to become a child of God! Read Luke 15:10 to him.
- Some children may not want to make decisions but may want to learn more, to be assured of salvation, or to confess sin. Read Romans 10:9–10 and John 10:28–29 with children who are seeking assurance of their salvation. Encourage them to ask the Lord to help them know they are his children. If a child wants to confess sin, read 1 John 1:9 with him and encourage him to ask the Lord to help him know he is forgiven when he repents.

After

- Review what it means to be a child of God.
  - » How long does God keep his children? (Hebrews 13:5; John 10:28–29)
  - » Can anything separate God from his children? (Romans 8:38–39)
  - » What happens when God's children sin? (1 John 1:9)
  - » What do children of God believe? (Romans 10:9)
- Explain that Jesus loves his children and wants to spend time with them. Discuss practical ways to grow as a child of God. Provide him with the *Growing Up in God's Family* booklet and share the following:
  - » Read your Bible and obey what you read. You can start your Bible reading with the short Bible study book you will receive the last day of VBS. (Provide a Bible if he doesn't have one. Be sure to fill out the presentation page.)
  - » Pray every day. Prayer is talking to God.
  - » Go to a church that believes and teaches the Bible as the Word of God.
  - » Tell others about Jesus. Tell your friends, family, and neighbors how they can become children of God.
- Fill out a Decision Card and turn it in to the VBS director.
- Stay in touch with the child through post cards, visits, or phone calls. Invite him to upcoming church events.

Course Overview

Theme Verse: Psalm 113:3

	Day 1 The **Wonder** of His Birth	Day 2 The **Wonder** of His Childhood	Day 3 The **Wonder** of His Ministry Years	Day 4 The **Wonder** of His Death & Resurrection	Day 5 The **Wonder** of His Return
Title	Jesus Is Born	Jesus at the Temple	Jesus Does Wondrous Things	Jesus Dies and Lives Again	Jesus Is Coming Back
Bible Passages	Matthew 1–2; Luke 2	Luke 2:39–52	Selections from the Gospel of Mark	Select verses; Matthew 27–28	Select verses; Matthew 25:14–29
Lesson Focus	The baby King's birth was a wonder. What amazing happenings surrounded it?	The young King's childhood was a wonder. What was he like as a child and teen?	The adult King's ministry years were a wonder. What astonishing things occurred?	The risen King's death and resurrection were a wonder. How were they like no other?	The return of the King of kings will be a wonder. What should we be doing in the meantime?
Apologetics Content	Is Jesus the most important person ever born?	Is Jesus God or man—or both?	Has anyone else had the power to raise himself from the dead?	Was Jesus completely dead?	How will Jesus return?
Gold Mine Memory Time	John 1:14	Luke 2:52	John 21:25	John 20:31	Matthew 6:10
Names of Jesus	Creator, Immanuel	Carpenter	Almighty	Savior	King of Kings
Animal Pals	Tiny the Cougar Kitten	Junior the Wolf Pup	Mighty the Bison	Champ the Grizzly Bear	Mission the Horse
Carpenter Joe's Crafts	Christmas Crèche Ticket to Ride Ornament	Covered Wagon Conversations Mini Horseshoes Game	Praise Journal Names of Jesus Print	Spikes Cross Necklace Sunset Silhouette	Money Pouch Wonder Junction Bank
Carpenter Joe's Science	Star of Wonder Cone in a Cornfield	Lasso Lesson Layers upon Layers	Weather the Storm Power Play	Riding the Rails Pushy Plates	Spread the Word Marvelous Magnetism
Sweet Sadie's Snacks	Gold Nuggets Biscuit Baby	Carpenter Scraps Wolf Puppy Chow	Mini Flapjacks Loaves & Fish	Light & Dark Breadstick Rattler	Pizza Wheels Apple Wheels
Gallopin' Gabe's Games	Nativity Stations Catch the Caboose	Tough Trials Obstacle Course Annie, Annie Over	Mercantile Mania Name Above All Names Scavenger Hunt	Safecracker Make Your Claim	Wild West Relays Sheriff's Coming
Cool Contests	Guess the Gold Nuggets	Spirit of the West Day	Old West Dress-Up Day	Names of Jesus Challenge	Mission Money Mania

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Carpenter Joe's Science and Crafts

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1:1 Answers IN GENESIS®

Handy Helps

Yee-Haw!

Howdy, partners!

Look to your left—do you see the cattle over yonder stampeding across the plains? Look to your right—can your eyes make out the sun-covered buttes of the desert? Look behind you—the brand-new transcontinental railroad is rumbling along the tracks! From the Badlands of South Dakota to the high peaks of the Rockies, there is wonder to be discovered everywhere we turn in the Old West!

Join us as we gallop through the wonder-filled West, where our friends at Wonder Junction will teach us about the grandest wonder of all—Jesus Christ. Each day, we'll dig deeper into who this awe-inspiring Jesus is, answering questions such as:

- What amazing things happened surrounding Jesus' birth?
- What was Jesus like as a child and teen?
- What wonders occurred during Jesus' ministry years?
- How were Jesus' death and resurrection like no other?
- What should we be doing as we wait for Jesus' return?

Wonder and amazement await us each day at Wonder Junction, where kids will gather at the **All Aboard Assembly**, a high-energy beginning that includes wacky intros, lively songs, a mission moment, and prayer.

Then we're off to rotate through five fun sites:

High Point Bible Time, where God's Word is taught in creative, hands-on ways.

Carpenter Joe's Science and Crafts, where kids get their hands dirty as they make crafts and explore God's world through science experiments.

Sweet Sadie's Snacks, where kids munch on some downright tasty home-cooked vittles.

Gallopin' Gabe's Games, the rambunctious rec time where kids might just get plumb tuckered out.

Miss Millie's Missions, Music, and Memory Verses, where kids sing songs, learn their memory verses, or go in-depth with the mission moment featuring Children's Hunger Fund.

Finally, everyone is rounded up to head back to the **All Aboard Assembly** for the closing, where there's more singing, contest results, and the highly anticipated daily drama that highlights the shenanigans of two bumbling bandits who are transformed after learning about the *wonder*ful life of Jesus Christ.

So dust off your boots, grab your bandana, and get ready for a rootin' tootin' good ol' time at Wonder Junction!

Our Goal

We are so thankful for how God has chosen to use the Answers VBS programs over the past years! But why did we decide to embark on such an undertaking in the first place, and why are we still at it, by God's grace?

Our primary goal has always been to bring God glory by boldly and unashamedly proclaiming him to a strategic group—young people. From both a biblical and statistical point of view, young people are a big deal. They're not only awesome—we love 'em!—but they're also dearly cherished by our Lord and tend to be softhearted toward spiritual things. Researchers generally agree most people become Christians when they're children, so it's apparent this age group is a huge mission field!

Children are loved by their Creator, and Jesus said to let them come to him (Luke 18:16). We want children to come to Christ and not be hindered in any way from doing so. To that end, we combine a biblically rich VBS with off-the-chart, irresistible fun. In a day and age when content sometimes suffers, we don't want to sacrifice rich teaching. But it's also crucial that the most exciting book in the world not come across as boring or irrelevant. We want to reflect our creative, inspiring, joy-giving God who made laughter and fun.

So why do we do it? We want kids around the world to hear about and personally meet our awesome God and understand how they can receive eternal life through repentance and faith in Christ Jesus. We believe VBS is a great way to introduce them to God, as it is one of the biggest outreaches of the year for most churches.

We pray you will find that every prayer prayed, every minute invested, every dollar spent, and every word spoken will bring God glory as you reach kids for Christ.

Just remember—VBS is worth it. May God richly bless your VBS. We're praying for you!

Your Role

Your role is outlined in the following pages. Your responsibilities may include:

- Planning crafts and science experiments for all age levels
- Overseeing assistants
- Organizing sign-up for donations of materials
- Buying all supplies that have not been donated
- Enlisting help and preparing supplies
- Acting as the presenter during VBS or overseeing others who present the activities
- Overseeing the daily setup and cleanup of the area(s)
- Making sure key lesson themes are reinforced
- Praying over all aspects of this job before, during, and after VBS

Frequently Asked Questions

The content of *Wonder Junction* may be new to you. For a list of helpful articles on the topics covered in this VBS program, please visit AnswersVBS.com/wonderfaq.

Terms to Know

Throughout the VBS curriculum, various terms will be used. Here is a list of some of the most common terms to know.

Partners (as in, "Howdy, partners!"): Groups of children (individual classes) named after Old West people, such as Miners, Ranchers, Blacksmiths, and Homesteaders.
Group Guides: Group leaders who guide the partners from place to place during VBS. No teaching is required of this position.
High Point Bible Time: Bible and apologetics lesson time happening at the High Point Chapel.
Truth Teachers: Teachers of the High Point Bible Time.
Carpenter Joe's Science and Crafts: Rotation site where crafts are made and science experiments are explored.
Sweet Sadie's Snacks: Indoor or outdoor location where snacks are served.
Gallopin' Gabe's Games: Indoor or outdoor site (outdoor is preferred) for recreation time.
Miss Millie's Missions, Music, and Memory Verses: Rotation site where kids can spend additional time learning songs and memory verses and hearing about missions.
Gold Mine Memory Time: Time to learn and practice the daily Bible verse.
Animal Pals: Our friendly animal mascots that remind us of the main themes of each day.
Toddlers: 2–4-year-olds.
Pre-Primaries: 4–6-year-olds or children ages 4 through those who have completed kindergarten.
Primaries: 6–9-year-olds or children who have completed grades 1–3.
Juniors: 9–12-year-olds or children who have completed grades 4–6.

For multi-age K–6 travel groups, we recommend using the material for the Primaries.

Top 20 Tips for Carpenter Joe's Science and Crafts

1. Pray! This is your most important preparation. Give all concerns to the Lord and watch *him* do great things!
2. This guide offers main craft and science experiment suggestions as well as ideas for extra crafts and craft kit options. Some are simple and quick, while others are more involved. There are also toddler crafts. Think through your time and resources and decide which crafts and/or science experiments you will do each day.
3. Gather faithful helpers who will prepare items well in advance. Record their names, addresses, cell phone numbers, and email addresses so you can contact them quickly and easily.
4. Make a sample of every craft and science experiment before you meet with your team for the first time so they can visualize what you are presenting. Each helper should make a sample of each craft so they're familiar with all the steps. Try out each science experiment ahead of time and make sure your presenters have done a trial run as well.
5. Host "Craft Shops" or "Science Shops." Workers can drop by and pick up materials to prep at home, or they can stay for part or all of the time. Assembly lines can be set up to prep craft materials quickly. Weekday or Saturday mornings from 9 a.m. to noon, complete with doughnuts and coffee, can be an enjoyable time in preparation.
6. Use an office paper cutter for cutting patterns or paper with straight edges. Make sure to remove the paper cutter and any other dangerous supplies, such as miter saws and craft knives, from the classrooms. If a science experiment calls for this type of item, store it in a safe place before and after use.
7. Be prepared. Organize crafts into individual kits for each child, using plastic baggies or lunch sacks. Place the individual kits into boxes labeled for each rotation. Organize science experiment supplies as well, considering whether they will be done by individuals, groups, or as a teacher demo as noted in the directions.
8. Cover the tables with plastic tablecloths and secure with tape.
9. Craft glue, such as Tacky Glue, works better than school glue for grade-schoolers. Toothpicks and Q-tips work well for dipping into and applying the glue.
10. Permanent markers in vibrant colors can be a good alternative to paint for grade-schoolers. They work on most surfaces—paper, wood, fabric, and plastic.
11. Decorate the room to correspond with the theme. See Decorating Decisions in the Director Guide for possible ideas. Play VBS music to set the mood. Display the memory verses on each table or around the room. Place a sample of each craft or science experiment on every table so children can visualize what they will be making or doing.
12. Overhead projectors or slide presentations are helpful for sharing directions in crafts, and pictures of things referenced in science. Video capabilities are also helpful in the science room.
13. Use this time to engage in conversation and share God's love. Be ready to offer smiles, hugs, and laughs. (Be aware of your church's appropriate touching policies.)
14. Be ready to help children who are easily frustrated. Helping with steps requiring physical dexterity does not detract from the child's creativity.
15. To reinforce the day's lesson, share the Teaching Tie-In that goes with each craft or science experiment. Ask the kids about what they're learning throughout your time together or right before they leave this rotation.
16. Print the daily memory verses on address labels and place on finished crafts or experiments, if possible.
17. Give leftover craft supplies to sick children, another VBS, or your church's resource area.
18. Always, always, always put names on crafts and take-home science experiments! Strips of masking tape work well for name labels.
19. The test churches divide this rotation time by having 17 minutes in a science room, attempting one or two science experiments, and 17 minutes in a craft room, doing one or two crafts.
20. This book is loaded with fabulous stuff—more than you'll probably be able to do—so consider incorporating unused ideas at other times during your ministry year.

Download the patterns mentioned in this book from AnswersVBS.com/wonderresources.

DAY 1 EXPERIMENT

Star of Wonder

Materials

- ☐ Rotational Axis of Earth Illustration
- ☐ 10 or more 4-inch star cutouts
- ☐ Painter's tape or other wall adhesive
- ☐ 1 large, 20-inch, yellow ball or balloon
- ☐ Small globes or earth balls, 1 per person
- ☐ 1 globe for demonstration
- ☐ Optional: star cutouts or glow-in-the-dark stars, 1 per person to take home

Prep

1. Place all but one of the 4-inch stars randomly on the walls around the room and secure them with painter's tape. Keep one for demonstration.
2. Print the IMAGE.

Tip Corner

- In place of the earth ball/globe, use a small blue or green ball or balloon and tell kids that it represents the earth.
- Instead of telling kids how fast the earth is rotating at the equator, consider calculating approximately how fast they are spinning at your location by using the following method.

  Look up the approximate latitude of your location on a map. Calculate the distance around the earth at your latitude:

  - » cos(latitude) x 40,000 = distance in km
  - » cos(latitude) x 25,000 = distance in miles
  - » Divide by 24 hours to get miles per hour (mph).

Class Time Directions & Dialogue

Introduction

Have you ever looked up into God's wondrous night sky? Pause. What have you seen? Take responses. On a clear night, we see lights in the sky, right?

- If the light is twinkling, what is it? Take responses—a star.
- If the light is solid, what is it? Take responses—a planet.
- If the light is flashing and moving slowly, what is it? Take responses—a plane.
- If the light moves fast and has a long tail, what is it? Take responses—a comet.
- If the light moves very fast and then disappears from view, what is it? Take responses—a shooting star, which is actually a meteor that has entered our atmosphere and is burning up.

Today, we're going to talk about a star—a unique star mentioned in the Bible. According to the Bible, we understand that the wise men came to worship Jesus before he was two years old. What led them to Jesus? Take answers. Read Matthew 2:9.

We're going to do an experiment that will teach us something about this special star! First, let's make sure we all understand some things about the motion of the earth and stars.

Everyone, be very still. Let the kids settle. What would you say if I said none of you are being still? Take

answers. It depends on *perspective*, or what you're being compared to.

- If we compare ourselves to the room around us, we are still.
- If we compare our location here to where we were before we came today, have we moved?
- If we compare our location in space to where we were an hour ago, have we moved? Yes, we've moved a big distance. Some of that distance is due to the rotation of the earth. Make your globe spin around one time.

Everyone, spin around one time right where you are. Wait for children to spin once. That was pretty quick, just a few seconds. Who knows how long one rotation of the earth takes? How many hours? It's a number between 1 and 50. Shout it out if you think you know. Take answers. It takes 24 hours, or one day, to make one full rotation.

Point to the north and south poles either on your globe or on the ROTATIONAL AXIS OF EARTH ILLUSTRATION. So, if you were standing at either the north or south pole, one rotation would barely move you. You would spin around once per day without moving your feet. For example, imagine standing in the middle of a merry-go-round and not moving your feet while it spins. I'll spin the globe and you keep your feet firmly in place to represent this. Do so.

Now look at the equator. Use your finger to draw a line around the earth at the equator. Show the distance on the ROTATIONAL AXIS OF EARTH ILLUSTRATION. This is called the circumference, or the distance around the earth. Does anyone have a guess how many miles it is? Take guesses. It's a little under 25,000 miles (40,000 km). We would have to travel that distance in 24 hours, so we'd really be moving, wouldn't we? I'll spin the globe again and let's jog fast in place to represent this, even though it's not nearly fast enough. Do so. We would be going a little over 1,000 miles per hour (1,670 kmph)! Wow! That's about 16 times faster than your car goes on the highway!

Optional paragraphs: The earth doesn't just spin. What else does it do? Take answers. It revolves around the sun like this. Demonstrate by making your globe orbit around the sun. How long does it take to travel one time around the sun? How many days? It's a number between 0 and 1,000. Shout it out. Take answers. It takes one year or approximately 365 days. Does anyone know how far the earth travels in that year? Take answers. You may want to write the following number out dramatically: 584,000,000 miles (940,000,000 km). Who can count that high? That's a really big number, isn't it? So while we're rotating, we're also revolving! If you thought we were moving quickly in our daily rotation, check this out. We revolve around the sun at a speed of around 66,620 miles per hour (107,200 kmph)! We would have to travel around the earth near the equator more than two and a half times in one hour if we wanted to feel that speed! Try to spin and rotate around your chair at the same time. Do so.

And that's not even all of our motion in space. The solar system (including our earth) is orbiting around our Milky Way galaxy. And our entire galaxy is moving, including the sun—which is the nearest star—so we can add that motion to our rotating and revolving.

Directions

Now let's talk about the stars we see in the night sky. Show thumbs-up if you think they're moving and thumbs-down if you think they're not. Do so. Thumbs-up—they are moving, but maybe not in the way you're thinking. Raise your hand if you think that stars are moving because you've seen them cross the night sky. Acknowledge.

Stars do appear to cross the night sky, but it's actually the earth rotating around that makes them appear to move. The stars are far away, and they're moving really fast, but since the distance they travel is much, much smaller than the distance from us, we can't tell they're moving. Again, it's a matter of perspective. In fact, astronomers have to study stars for years to see their movements because we're so far away from them.

Did you notice the stars that are around our room? Acknowledge. Okay, we're going to imagine they're stars in the sky.

- Everyone, pick up one of the earth balls and point to any place on it. Imagine you're at that spot on the earth.
- Now point your finger to one particular star.
- Rotate your earth by turning your wrist counterclockwise while still pointing at the star. Demonstrate.
- As you turn your earth, do the stars appear to move with it? Take answers. No, they don't. But did their positions change in your sky? Acknowledge. Yes, they sure did.

Who remembers what the Bible says about the star that led the wise men to Jesus? Take answers. Reread Matthew 2:9. How could this be? How, if the earth continued to rotate, could a star stay over one particular place like this? Demonstrate by making a star move with the earth's rotation. Look at the stars around our room. How could this one star ***stay*** over the house where Jesus was? What do you think? Take answers. This particular "star" could ***not*** have been a typical star that we find in the universe because of the way it moved and then stayed in position. This had to have been a supernatural star, a supernatural light sent to lead the wise men to our Savior, Jesus. God is all-powerful. He can make anything he chooses—including this star of wonder.

Optional: Everyone may take home a star to remind them of the star that went before the wise men and stopped over the house where Jesus was.

DAY 1 EXPERIMENT

Cone in a Cornfield

Materials

- ☐ Parícutin Photo
- ☐ Map of Mexico Volcanoes
- ☐ Cinder Cone Volcano Collage
- ☐ Cinder Cone Volcano Formation
- ☐ Pie plate
- ☐ Zippered plastic bag of sand
- ☐ Scissors
- ☐ YouTube.com/answersvbs video experiment using ammonium dichromate
- ☐ Device to play the video

Prep

1. Print the IMAGES.
2. Put sand into the zippered plastic bag.

Tip Corner

- Use a computer to show the YouTube video or show it on a video screen. You may want to make the illustrations into slides and show on the screen as well.
- Prepare more zippered baggies of sand and pie plates if you'd like to have the kids try this at their tables.

Class Time Directions & Dialogue

Introduction

The first wonder that we're learning about here at Wonder Junction is the wonder of Jesus' birth. The Bible gives us a record of Jesus' life on earth.

Although nothing compares to the wonder of Jesus, there are many natural wonders on earth. We have written records from birth to death of one of those natural wonders. I'm going to read what a man said about this natural wonder and then you can guess what it is. Around 4 p.m. on February 20, 1943, a man named Dionisio Pulido reported this:

> I left my wife to set fire to a pile of branches when I noticed that a crack, which was situated on one of the knolls of my farm, had opened . . . and I saw that it was a kind of fissure that had a depth of only half a meter. I set about to ignite the branches again when I felt a thunder, the trees trembled, and I turned to speak to Paula; and it was then I saw how, in the hole, the ground swelled and raised itself 2 or 2.5 m high, and a kind of smoke or fine dust—grey, like ashes— began to rise up in a portion of the crack that I had not previously seen. . . . Immediately more smoke began to rise with a hiss or whistle, loud and continuous; and there was a smell of sulfur.

What do you think this man was talking about? What was happening? Take answers. There was a volcano forming right there in his cornfield! Can you imagine walking around in your yard and all of a sudden the ground starts rising up and spewing ashes? Show PARÍCUTIN PHOTO. That would be pretty scary! But there are lots of volcanoes on earth, so why is this the only one to be called a natural wonder? Take answers. The birth of a volcano had not been recorded before, as far as we know. But thanks to this event, we now have a written record of the complete life cycle of a volcano.

Here are five facts about this volcano. Help me count them off by putting up your finger and saying "1":

Hold up one finger and say, "One!" The name of this natural wonder is Parícutin. Let's say that together. Do so. It was named after the nearby village of Parícutin, one of the two villages destroyed by flying rocks and fire, and then buried by the lava flow.

Hold up two fingers and say, "Two!" Two weeks of earthquakes led up to this event. Even now, the region continues to have many earthquakes.

Hold up three fingers and show MAP OF MEXICO VOLCANOES. It occurred in west central Mexico in an area that already has more than 1,400 volcanoes.

Hold up four fingers and show CINDER CONE VOLCANO COLLAGE. It is a cinder cone volcano. Cinder cones are the simplest and most common type of volcano, and once they stop, they typically don't erupt again. Therefore, Parícutin has been classified as extinct. However, we know it's still hot because rainwater forms steam when it seeps into the cone.

Hold up five fingers and say, "Five!" Parícutin erupted for nine years and reached a final height of 1,391 feet (424 m) above where the cornfield was. That's almost five football fields high! Can you imagine if this happened in your backyard?

Show the CINDER CONE VOLCANO FORMATION ILLUSTRATION. Let's talk about how a cinder cone volcano forms. What is magma? Take answers. Magma is molten rock that's normally found deep inside the earth where there's lots of pressure and it's very, very hot.

Who can tell me what a cinder is? Take answers. A cinder is a small piece of rock that forms when magma and hot gases escape the earth through a crack in the earth's crust, often created by an earthquake. The molten rock flies up into the air and cools into a cinder before landing.

Most of the cinders fall back down near the crack and pile up, making a cone shape, so the name "cinder cone" is very appropriate.

What's the difference between magma and lava? Take answers. Magma is the molten rock that's still inside the earth, and lava is that same molten rock once it has flowed out. While a cinder cone volcano is erupting, additional cracks near the base of the volcano often allow lava to flow out and spread across the area. This is exactly what happened with Parícutin.

Show the YouTube video demonstrating the ignition of ammonium dichromate, which looks like a cinder cone volcano as it burns.

Directions

Let's see what happens when we try to form a cone of our own.

SAND DEMONSTRATION:

I have a bag of sand, and I'm going to see if it will create a cone when my pretend cinders fall to the ground. Be sure everyone can see the pie plate before continuing. Let's imagine that the center of this pie plate is a new crack that just opened in the earth and that molten rock and gas are spraying up into the air. I'm going to hold this bag over the crack, cut a small hole in the bottom corner, and let the grains fall as if they were the cinders from a volcano. Cut the hole. Who thinks it will form a cone shape? Acknowledge. Let's see! Wait while the sand falls. We did it! Keep in mind that there are other types of volcanoes that form in different ways. You can research volcanoes if you want to learn more about them.

DAY 2 EXPERIMENT

Lasso Lesson

Materials

- ☐ Cowboy Illustration
- ☐ Vaquero Illustration
- ☐ Parts of a Lasso Illustration
- ☐ 1 yard (1 m) of paracord (4 mm) per person
- ☐ 1 water bottle for every 1–3 people
- ☐ 1 authentic lasso/rope

Prep

1. Print the **IMAGES**.
2. Practice your rope-throwing technique. Search "how to throw a lasso" on YouTube.
3. Place student supplies on tables.
4. Search "how to tie a honda knot" on YouTube.
5. Tie the following knots on one end of each paracord rope to make a lasso:
   - » Tie a small overhand knot at the end of the rope. This is the stopper knot.
   - » Tie a loose overhand knot.
   - » Tuck the end under and up through the bottom-right loop of the loose overhand knot.
   - » Hold the loop that was made when the tucked end went under and up through the overhand knot in step 3 and pull the unknotted end of the rope to tighten the overhand knot. Pull down on that same loop to slide the stopper knot to the overhand knot and form the circle.
   - » Feed the unknotted end of the rope through the circle to make the lasso.

Tip Corner

- Make the illustrations into a slide show.
- You may want to show a video of a cowboy using a lasso to rope a cow.
- Used ranch ropes can be purchased at CoolHorse.com by searching "used lariat."

Class Time Directions & Dialogue

Introduction

Today, we're talking about the wonder of Jesus being a child. Isn't it mind-blowing to think of God as a child? Jesus had parents, and his dad had a job. Do you remember what it was? Take responses—a carpenter. Read Matthew 13:53–56 and ask what kinds of things Jesus may have learned.

Kids in the Old West might have had dads who were carpenters too. Or they might have had dads who were cowboys. What skills might the son of a cowboy have learned? Take responses.

Hold up a lasso/rope. Speaking of cowboys, who knows what this is? Take answers. Yes, it's called a lasso in some areas, but in other areas, it's called a lariat, or simply a rope. Who would use this? Take answers. Show **COWBOY ILLUSTRATION**. Cowboys, ranchers, and wranglers used lassos. Even though cowboys call it a rope, in order for it to work well, it can't be just any piece of rope. Lasso rope needs to be stiff so the loop stays open. Give them each a chance to feel the authentic lasso/rope. Ask if it feels like they expected.

Let's brainstorm in groups around our tables to come up with some answers to this question: What could

roping skills be used for? Possible answers may include lassoing or catching a cow or horse, pulling one out of the mud/quicksand; rescuing a drowning cowboy; moving large items, such as dragging wood to a campfire; competing at a rodeo; etc.

Optional paragraph: We're going to talk more about lassoing in a moment, but first, I want to give you a little history lesson. Did you know that raising cattle in the West became very popular after 1860? Acknowledge. The railroads made it easier to move things from city to city, including cattle. So rather than people only keeping a small number of cows for their own needs, ranches with hundreds, or even thousands, of cattle started popping up all over the West. Ranchers were able to tell which cattle belonged to them because each animal would be branded, or marked, with the symbol of their ranch. Branding was usually a job for the cowboys. One cowboy would rope and hold down a cow, usually a calf, while another cowboy would make the mark.

Optional paragraph: Another responsibility of the cowboys was to get on their horses and drive the herd to new places—perhaps to a cow town to catch a train or simply moving to another area on the ranch for grazing (eating). Show VAQUERO ILLUSTRATION. The first cowboys in the West were Spanish. They had originally built ranches in Mexico and imported horses from Spain in order to work the cattle herds on horseback. As herding cattle became popular in the United States, the American cowboy copied the methods of the vaquero, which is Spanish for cowboy.

Directions

Now, let's learn the parts of the rope. Show the authentic lasso or the PARTS OF A LASSO ILLUSTRATION.

- Coil—the bulk of the rope that is wound up into a circle
- Tail—the last part of the rope that hangs down; it doesn't get thrown, but helps the wrangler (cowboy) know when he/she is at the end of the rope
- Loop—the circular part at the opposite end from the tail that is used to catch or hold an animal
- Lip—the bottom of the loop farthest from the hand
- Honda—the special knot used to keep the loop and to help tighten the rope
- Spoke—the distance from the knot to where you hold the loop

Although I'm not a professional cowboy, I'm going to attempt to explain and demonstrate the basics of how to throw a rope. If you're interested in learning "proper" technique, you can ask an adult at home to show you videos of real cowboys roping things. Watch carefully, because you'll get to try it too.

Demonstrate the following steps in slow motion:

- The cowboy holds the loop and an arm's length of rope in one hand with the pointer finger pointing in the direction of the object being caught, while the rest of the coil is in the other hand.
- Raise your elbow as the pinky side of that hand goes up into the air and a circle is made over your head.
- Once your hand finishes the circle and the tip has come to the front, flick your wrist so that the pointer finger is once again facing the target.
- Repeat that circular motion until you're ready to throw.
- When you flick your wrist forward, release the rope.
- Let me try to do this at full speed. Throw the rope.

Optional paragraph: Although that might look easy, there are certain conditions that need to be just right to make a good throw. These might sound too technical, but I'll say them just so you know there's more to throwing a rope than just "throwing a rope." There is a science to it. The motion of the hand in a horizontal plane over the head needs to supply a uniform circular motion to the rope. The arm has to be far enough away from the body so the rope doesn't hit the body. When spinning the rope, it must be rolled between the thumb and forefinger to avoid twisting. And the spoke needs to be the right length, usually about the length of the thrower's arm. When all of these conditions are met, there are four forces that are balanced, and the loop should hold its shape open for a successful throw. Those four forces are the weight of the rope, the centrifugal force caused by the circular motion, the tensile axial stress of the spoke, and the force that resists bending of the rope.

You each have a mini lasso rope on your table. Why won't we be able to throw these ropes like a cowboy throws a real rope? Take answers. Besides the fact that they're miniature, the forces won't be balanced. These mini ropes don't weigh enough and they bend too easily. But we can still have some fun with them. Rather than "throw" our ropes, we're going to "fling" them and see if we can capture the water bottles on our tables. Wait while the children experiment with roping. Gather the ropes when finished.

DAY 2 EXPERIMENT

LAYERS UPON LAYERS

MATERIALS

- ☐ Grand Canyon Photo
- ☐ Types of Rocks Collage
- ☐ Grand Canyon Layers
- ☐ Colorado Plateau
- ☐ Grand Canyon Fossils
- ☐ Canyon Lake Gorge
- ☐ Rock Formations
- ☐ Painter's tape to hang pictures on the walls
- ☐ Jolly Ranchers, 2 different colors per person
- ☐ 1-oz. portion cups, 2 per person
- ☐ Paper plates, 2 per person
- ☐ Plastic spoons, 1 per person
- ☐ Hammers (or other hard items to smash the hard candies—even a rock), 1 per person

PREP

1. Print pictures of **ROCK FORMATIONS** and hang them around the room.
2. Print other **IMAGES**.
3. Place student supplies on tables.

TIP CORNER

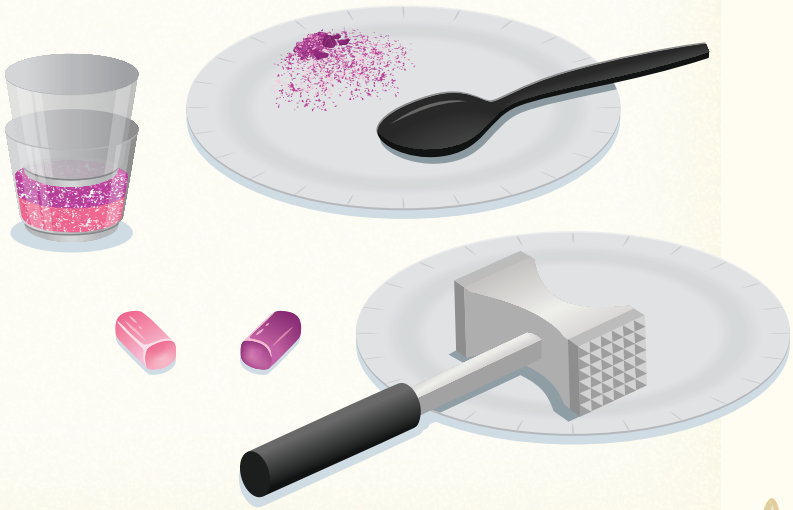
- This makes two layers of "rock." For an additional layer, add an extra candy and portion cup to each person's supplies.
- If you crush the hard candies ahead of time, add powdered sugar to keep the pieces from sticking together.

CLASS TIME DIRECTIONS & DIALOGUE

Introduction

Show **GRAND CANYON PHOTO**. Raise your hand if you've heard of the Grand Canyon. Acknowledge. Raise your hand if you've ever visited the Grand Canyon. Acknowledge. Did you know the Grand Canyon is one of the seven natural wonders of the world? The Grand Canyon twists and turns for 277 miles (446 km), is 4–18 miles (6–29 km) across, and is, on average, one mile (1.5 km) deep. It is ***not*** the biggest canyon in the world, but the exposed rock layers that we can see are what make it a natural wonder. The Grand Canyon contains all three types of rock.

Who can tell us the names of the three types of rock? Show **TYPES OF ROCKS COLLAGE**. Igneous, metamorphic, and sedimentary. Which type is formed when hot molten rock crystallizes and cools? Take answers. Igneous rock. Which type is formed when existing rocks are put under great pressure and heat? Take answers. Metamorphic rock. Why do you think that reminds me of a butterfly? Take answers. A caterpillar goes through metamorphosis as it changes into a butterfly. Metamorphic rock goes through a metamorphosis—or change—of its own. The third type of rock is sedimentary. Sediment includes pieces of rock and minerals as sand, silt, or clay particles. Little pieces of rock are broken off existing rocks by weathering. This sediment is carried by wind or water until it is deposited or trapped somewhere. If these particles get buried, they can become cemented together, forming sedimentary rock. When the particles are traveling in moving water, like a river, the largest, heaviest particles settle first and the smallest, lightest particles settle last. Have you ever noticed layers in rocks? Layers are formed because of the differences in the sediment making up that rock.



Show GRAND CANYON LAYERS. There are over 20 layers of rocks in the Grand Canyon. Igneous and metamorphic rock layers are down near the river at the bottom in the deepest parts of the canyon. These bottom layers would have been formed on day three of creation week. Some sedimentary layers would have formed between creation week and the flood, but most of the sedimentary rock layers we see in the Grand Canyon (and elsewhere) formed because of the global flood. Who knows which flood I'm talking about? Take answers. It's the global flood that God sent to judge the wickedness of mankind about 4,300 years ago. The one for which Noah built the ark. When the great flood occurred, there was a lot of dirt, sand, silt, and sediment swirling around in the water. As the sediments sorted (larger pieces settling first, then smaller settling last) in the flowing water, layers formed, which later become sedimentary rock after the water drained and the layers hardened. Show COLORADO PLATEAU. During the later stages of the flood when the sea basins lowered, a large area of land called the Colorado Plateau lifted up and caused some of these newly formed layers of sediment to bend and tilt. Do you think you could take a sedimentary rock and bend it without cracking it? Take answers. You can't. Once the cementing process is complete, you have a hard, brittle rock. The metamorphic rock at the bottom cracked, so why didn't the sedimentary layers at the top crack? Take answers. They weren't cemented into hard rock yet. So what does that tell us? Take answers. These layers were still soft. Geologists, people who study rocks, would call it "plastic." There was 4,000 feet (1.2 km) of stacked plastic rock in the canyon area that had not yet hardened. That sounds like good evidence that the global flood occurred, doesn't it?

Show GRAND CANYON FOSSILS. Here's some more evidence. Fossils, including sea creatures, which had to be buried quickly, have been found in many layers of the Grand Canyon. Also, erosion is not found between most of the layers! People would expect to see that if the layers were laid down over a very long time.

So far, we talked about the layers of the sediment, but how do we get from there to a canyon that is about a mile (1.6 km) deep? Take answers. Remember that river at the bottom of the canyon, down near the metamorphic rock? That is the Colorado River. Well, as the flood waters went down, a huge amount of water got trapped behind a plateau, which acted like a dam. Then at some point, the dam gave way, and all of that water went rushing through and helped carve out the Grand Canyon. We don't know how long it actually took for the Grand Canyon to form, but since the flood occurred around 4,300 years ago and much weathering and erosion has occurred since then, we know for sure it took much less time than that. We do have records of how long it took for other canyons to form though. Show CANYON LAKE GORGE. For instance, Canyon Lake Gorge in Texas was formed in just three days in July 2002 when a spillway overflowed. Canyon Lake Gorge is 1.5 miles (2.4 km) long and up to 80 feet (24 m) deep and is proof that rapid canyon formation can and does happen.

Directions

Let's have a look at some rock formations. Show the ROCK FORMATIONS PICTURES. These pictures are not all from the Grand Canyon, but they ***are*** all from the western United States. The portions of the rock formations that we can see here are mainly sedimentary. Any igneous or metamorphic rock would be buried down at their bases. Can you see layers in these photos? Acknowledge. Let's make some "rock layers" of our own!

Everyone needs two portion cups, two paper plates, two hard candies of different colors, one spoon, and one object to smash with. Does everyone have all of those items? Acknowledge. We're going to work together, so please listen.

1. First, take your supplies and spread out. Do not touch anyone with your hammer/smashing tool.
2. Unwrap one of your candies and put it between the two paper plates.
3. Carefully take your plates down to the floor and make sure your piece of candy is centered between the plates.
4. Hold your smashing tool in your hand while you hold the edge of your plates with your other hand. Hit the top plate really hard one time, right where the candy is. Now peek under the top plate to see if your candy is smashed or if you need to hit it again.
5. Carefully lift your plate back up to the table. Now take your spoon and scoop all of those candy pieces into one portion cup.
6. Put the empty cup inside the one with the candy, hold the top edges of the bottom cup, and push down with an open palm on the top cup. Push down several times, but make sure you don't push so hard that your cups break. You now have your first rock layer.

Repeat this process with a different colored candy to make a second layer. Wait until the children finish. You just weathered your pretend rocks, deposited the sediments, and applied the pressure as if it was all buried. I'd say this experiment was a pretty good representation of how sedimentary rock layers are made, except that ours tastes a lot better, wouldn't you agree?

DAY 3 EXPERIMENT

Weather the Storm

Materials

- ☐ Water Cycle Illustration
- ☐ Lightning Diagram
- ☐ Wind Diagram
- ☐ 1 electric kettle or other means to boil water
- ☐ 1 clear, heat-safe measuring cup of ice water
- ☐ Blue food coloring
- ☐ Optional: 1 cylindrical object (paper towel tube, can, jar, water bottle)
- ☐ 1 large glass pitcher of ice water for each table
- ☐ 2 x 2-inch paper tissues, 1 per person
- ☐ Inflated balloons, 1 per person

Prep

1. Print the IMAGES.
2. Use the painter's tape to make a start line on the floor.
3. Put a few drops of food coloring in the ice water.
4. Blow up balloons. Put them in a bag in the middle of each table.
5. Place large pitchers of ice water on each table.

Tip Corner

- Print "Old-Timey Weather Prediction" sayings from TheFarmersLamp.com and hang them around the room.
- Print online pictures of blizzards, dust storms, lightning, wind shear, and condensation to show or hang on the walls.

Class Time Directions & Dialogue

Introduction

Jesus is God the Son and has all power. He even has power over the weather. Read all or some of the following verses that show God's power: Jeremiah 10:13; Psalm 147:8; Job 37:3–12; Zechariah 10:1; Mark 4:35–41.

Today, we're going to talk about the weather. What kind of weather conditions do you think occurred in the Old West? Take answers. There were all kinds of conditions. Many of the storms went unrecorded because weather wasn't forecasted and tracked as well in the olden days as it is now. Some reports of big storms have been recorded in people's diaries and through interviews, so we know harsh weather conditions did exist.

One of the most notable storms occurred in the winter of 1886. The weather was brutally cold with blizzard conditions, and a great number of cattle were lost. That storm was named the "Big Die-Up" because of all the cattle that died.

In 1859, a traveler entered details in his diary about what he called, "the father of all thunderstorms." What do you think he meant by that? Take answers. A ***really*** bad storm, likely the worst he'd ever experienced.

A woman reported in an interview that during the blizzard of 1873, her father brought their horse, cow, and calf into the house to keep them alive!

A hunter described the temperature being so unbearably hot that even the buffalo didn't want to move. Then, the temperature dropped, bringing a severe thunderstorm. Cowboys called this a "Blue Norther"—hot, then cool, then a severe storm. If they had a name for it, they must have experienced it more than a few times. Don't you think?

Tornadoes destroyed entire settlements, tents, wagon trains, Native American villages, and anything else in their path as they ripped their way across the land.

We should also mention dust storms. With dirt roads and grazing cattle, the conditions in the Old West were very dusty. When the wind came through, it could pick up the dust. If conditions were right, flying dust in the air could become so thick you couldn't see and could barely breathe. Cowboys wore bandanas around their necks and were able to pull them up over their noses and mouths to keep out some of that dust!

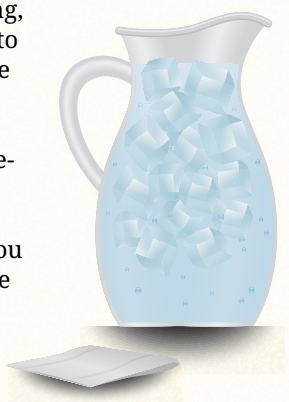
Directions

So there were all kinds of weather situations happening, including lots of rain and snow. Show the **WATER CYCLE ILLUSTRATION**. Raise your hand if you've heard of the word *precipitation*. Acknowledge. Precipitation is any form of liquid or solid water falling from the clouds. Where does this water come from? Take answers. Water vapor rises from puddles, streams, rivers, lakes, and oceans and forms clouds. There's water vapor in the air all around us, but the molecules are much too small to be seen. Have you heard of humidity? Acknowledge. Humidity is the percentage of water vapor in the air compared to the maximum amount that the air can hold. What happens when that water vapor hits something cold? Take answers. It condenses. Water vapor molecules join together. Eventually, if enough molecules combine, they form drops.

There's a glass pitcher filled with ice water on your table. Can you see any water drops on the outside of the pitcher? Acknowledge. If you can't tell that the outside is wet, take one of the small squares of paper tissue and touch it to the outside of the pitcher. Do so. Did it get wet? Acknowledge. Do you think the pitcher is leaking? Acknowledge. No, water vapor from the air condensed on the cold glass.

When water vapor condenses into clouds up in the sky, that water can remain as a cloud until it's too heavy, and then it falls to the ground. What determines whether it falls as rain, snow, or ice? Take answers—the temperature.

Now let's discuss thunder and lightning. If you think thunder comes first, I'm going to have you rumble. If you think lightning comes first, I'm going to have you make a lightning bolt with your arms. Ok, which one do you think comes first? Do so. Actually, the lightning comes first, so let's start there. What is lightning? Take answers. Show **LIGHTNING DIAGRAM**. It's an electric charge that has been built up through static friction, or rubbing, of water molecules in the clouds. The charge is seeking to transfer to something grounded, such as the ground, a tree, a building, or whatever it can find to receive the charge. Have you ever walked across carpet and got a shock when you touched something? Acknowledge. It's the same thing, just at a lower level of charge. You picked up a static charge from the carpet and it jumped to the other object. Have you ever rubbed a balloon on your head and it made your hair stick up? Have them try this with the balloon. Each can get a balloon from the bag in the middle of the table. Again, static charge.



What about the thunder? What causes that? Take answers. When lightning strikes, the molecules in the air get pushed out of the way and the air gets super hot and expands quickly. Then it cools, causing an air pocket to collapse, like when you clap your cupped hands together. This causes the loud rumbling, crashing noise of thunder.

Show **WIND DIAGRAM**. Then there's the wind. What causes it? Take answers. When the air gets warm, the molecules spread out and the air rises. This leaves fewer molecules down near the ground, which lowers the air pressure. When air gets cool, it sinks. This brings more molecules down near the ground, raising the air pressure. Wind is caused by differences in air pressure because when warm air rises, cool air blows in to take its place. Simply put, wind is the movement of air molecules. It always flows from high pressure to low pressure, so cool air rushes into areas of warmer air. The larger the pressure difference, the stronger the wind. What power!

Let's see how hot and cold air moves by using this water. I'm going to pour hot water into this colored cold water and see if the cold water stays mostly at the bottom. Slowly and gently transfer the hot water from the kettle into the measuring cup of ice water. Did most of the cold water stay below the hot water? Take answers.

Optional paragraph: When the speed and direction of the wind are different at different heights, it's called wind shear. This is common in thunderstorms and can create gusty spurts of wind. Roll a cylinder a short distance on a table as you speak. Sometimes a horizontal rotating tube of air can form. If an updraft of warm air pushes that horizontally rotating air, it can stand the cylinder upright on end so it's now a vertically rotating tube of air. Once a storm starts vertically rotating, it's called a supercell. What do we call a vertically rotating tube of air that comes down to the ground? Take answers—a tornado! What power!

And to think that God has all this power under his control—what a wonder!

DAY 3 EXPERIMENT
POWER PLAY

Materials

- ☐ Victoria Falls Picture
- ☐ Old West Windmill
- ☐ Wind Turbine
- ☐ Pinwheels, 1 per person
- ☐ 1 waterwheel model for demonstration (possibly in a clear bin with a bucket of water to use to move the wheel)
- ☐ 1 empty gallon jug

Prep

Print the three **IMAGES**.

Tip Corner

Convert the pictures into a slideshow, or add short videos of things like Victoria Falls and wind turbines.

Class Time Directions & Dialogue

Introduction

Have any of you ever visited a waterfall? Maybe you saw one on a hike or even saw Niagara Falls? Take answers. They're an amazing display of God's power.

Show **VICTORIA FALLS PICTURE**. There's one very powerful waterfall that's been designated as one of the seven natural wonders of the world. Does anyone know the name of this particular waterfall? Take answers. It's Victoria Falls, and it's in Africa. There are taller waterfalls, and there are wider ones too. But if we consider volume, or amount of water, along with the width and height, Victoria Falls is the largest waterfall in the world. Show gallon jug. Picture about 450,000 of these full of water spilling over the falls ***every second*** during the wet season. That's a lot of powerful moving water, isn't it?

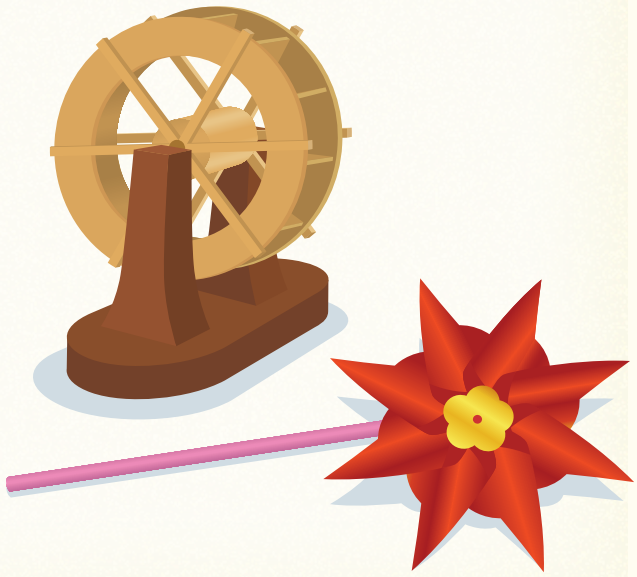
Directions

Did you know people have been using moving water to power equipment for a very long time? For thousands of years, people have been using waterwheels to supply the power to grind grain and cut lumber. Show the waterwheel model and demonstrate as you talk. Either have two group leaders carry the bin with the model and silently show each table as you continue talking, or gather the kids around the table with the model up front.

- Running water makes the wheel spin like this.
- That makes the shaft turn here.
- The shaft is connected to gears and levers that spin the millstones for grinding grain or move saws up and down for cutting lumber.

Now let me ask you a few questions.

- Do you think waterwheels were used in the Old West? Take answers. Yes, they were.
- Can you think of a situation where they wouldn't have been able to use waterwheels? Take answers. Much of the land in the Old West was dry. You can't turn a waterwheel without moving water, right?
- Do we still use waterwheels? Take answers. Not much. Now we use electricity to power machinery.



- What could people in the Old West have used for power if they didn't live near flowing water? Take answers. Show **OLD WEST WINDMILL**. They could use the wind. By catching air in the blades, a windmill turns a central shaft, similar to how the waterwheel turns its central shaft. The spinning shaft can once again be connected to the mill by gears and levers and this time, the wind supplies the power. Windmills were also used to pump water. Some people in rural areas still use windmills to pump water today.

Pass out the pinwheels, one per person. Look at your pinwheel. It has some parts similar to a windmill. Why do you think the blades are curved? Take answers. That allows them to catch the moving air.

Let's do some activities now to test the power of moving air.

- Spin your pinwheel using your finger. Can you get it to spin either direction with your finger?
- Now blow on it. Can you also get it to spin either direction with your breath?
- Which seems the best for spinning—your finger or your breath?
- Does your pinwheel turn best clockwise or counterclockwise? Take answers. Most pinwheels spin best counterclockwise. Which way works best for ours? Let kids test the pinwheels.
- Now experiment with wind variables. Blow in different ways to see what works best. Blow harder, softer, from the top down, and from the bottom up to see if any of these variables matter. Wait while kids experiment. Did you notice any differences? Take answers. Did you find that blowing in certain areas made it spin better than other areas? Acknowledge.
- Why do you think that happened? Take answers. If wind isn't caught in the cup made by the curve of the blades, it doesn't turn as well.
- Now try holding your pinwheel so you will be blowing on it from the side. Blow from the left side, then from the right side. What happened? Take answers. Did the spin direction change? Take answers. Which spin direction is best? Take answers. The best spin direction is the one that catches the wind in the curved cup. Point out the curve on a pinwheel.

Optional paragraph: Do you think you could use your pinwheel to power anything at home? Take answers. Probably not. The vertical shaft doesn't move on a pinwheel, and it's not connected to anything. It's also much smaller than windmills of the Old West or wind turbines of today. If you were to replace your shaft with one that spins with the pinwheel, you might be able to do a little bit of work. You could always try it and see if you could make a small invention at home!

Show **WIND TURBINE**. Has anyone seen the great big three blade windmills that are used today to harvest power from the wind? Acknowledge. Technically, they're called wind turbines because the spinning shaft activates a generator that turns the wind energy into electricity. These giant wind turbines can be found on land or mounted on poles in shallow areas of oceans. One typical industrial wind turbine with a blade length of about 160 feet (50 m) usually produces between two and three megawatts of power. There are over 70,000 wind turbines in the United States alone that have the capacity of over 146 billion watts! That's a lot of power!

It's fun to think about these forms of power, but of course, the only one with unlimited power is Jesus himself. Whether it's calming a storm or raising the dead, Jesus is Almighty!

Download the patterns mentioned in this book from AnswersVBS.com/wonderresources.

DAY 4 EXPERIMENT

RIDING THE RAILS

Materials

- ☐ Transcontinental Railroad Map
- ☐ Sharp Turn Picture
- ☐ Wheels on Left-Hand Curved Track Picture
- ☐ 1-inch tapered caps (Caplugs T-249-2 T Series) or plugs, 4 per station or per person
- ☐ 1-inch PVC pipe (inside diameter ¾ inch) or other 1-inch straight, rigid tubing, 1½-inch pieces, 2 per station or per person
- ☐ 1-inch PVC pipe (or other tubing), 3½-inch pieces, 1 per station or per person
- ☐ Glue
- ☐ G-gauge model train track (straight and curved) per station or per person
- ☐ Blocks, books, or small boxes to elevate one side of each piece of track so wheels roll downward
- ☐ Electrical tape

Prep

1. Print the **IMAGES**.
2. Make train wheels:
   - » Cut PVC pipe into two 1½-inch pieces and one 3½-inch piece per station. Put aside the 3½-inch piece to be used as the "straight wheels."
   - » Glue the larger end of a tapered cap to each open end of a 1½-inch piece of PVC pipe so that the smaller end of the cap is to the outside. Allow to dry. Reinforce the cap/tube joint with electrical tape pulled tightly around the very edge of the cap. This is the "small outer edged wheels."
   - » Glue the smaller end of a tapered cap to each open end of a 1½-inch piece of PVC pipe so that the larger end of the cap faces the outside. Allow to dry. Reinforce the cap/tube joint with electrical tape pulled tightly around the very edge of the cap. This is the "large outer-edged wheels."
3. Place tracks and wheel sets at each station.

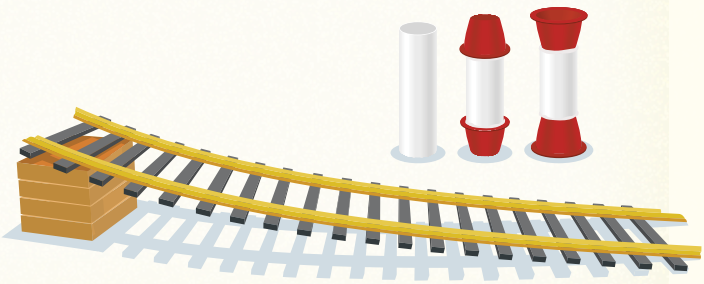
Tip Corner

- Bring in a model train for interest.
- Make your own rails with four ⅜-inch-width bamboo craft sticks (11–16-inch lengths typically available), 2½-inch mini craft sticks, one per inch of length of the bamboo sticks, and glue.
  - » For straight track, position two bamboo craft sticks parallel on their long, thin edges, 2 inches apart. Glue a mini craft stick "railroad tie" across both bamboo sticks. Repeat, attaching mini sticks at 1-inch intervals, ensuring that the "rails" remain 2 inches apart.
  - » For curved track, soak two bamboo craft sticks, bend them slightly, and stabilize their position to dry into a curve. Position the curved sticks parallel on their long, thin edges, 2 inches apart. Glue mini craft sticks across both bamboo sticks at 1-inch intervals.
- Straight wheels can be made of any smooth 3–4-inch cylindrical object. Tapered wheels may be made by connecting two small 1½-inch–2-inch tall plastic cups, top to top for the small outer edged wheels and bottom to bottom for the large outer edged wheels. Due to the weight difference, the elevation angle may need to be adjusted.

Class Time Directions & Dialogue

Introduction

Have you ever ridden on a train? Take responses. **How about an olden-day train?** Take responses. **Do you know when the transcontinental railroad was built in the United States?** Take answers. **Between 1863**



and 1869. What does transcontinental mean? Take answers. Yes, *trans* means across and *continental* has to do with the continent, which in this case is North America, so across North America. The Eastern US rail network was already in place east of the Missouri River, so when we discuss the building of the first transcontinental railroad in the US, we're really talking about finishing it between Omaha, Nebraska and Sacramento, California. Raise your hand if you think the new rails were built east to west, from Nebraska to California. Raise your hand if you think they were built the other way, California to Nebraska. Acknowledge. Well, you're all correct.

Two railroad companies were hired to lay the rails. Show TRANSCONTINENTAL RAILROAD MAP. The Union Pacific Railroad started in Omaha, Nebraska, and worked toward the west while the Central Pacific Railroad started in Sacramento, California, and worked toward the east. They used very precise measurements for the tracks to meet up correctly. What difficulties do you think they might have run into as they built the railroad? Take answers. There were mountains, valleys, rivers, and trees in their way. They were working out in the middle of nowhere where it was hard to get food and water. There were also animals, particularly bison, to deal with. And what about the weather?

By the time the two railroads came together at Promontory Summit in Utah on May 10, 1869, numerous tunnels, trestles, and bridges had been built. Nearly 1,800 miles (2,900 km) of railroad track had been placed. Now people could make the journey from New York to California in a few days instead of the weeks or months it took before, using horses and wagons.

Directions

Did you know that trains don't have steering wheels? So how do they go around curves? Take answers. It has to do with the wheels. Let's experiment to see what happens with different wheel shapes. On the table in front of you, there are three different types of wheel sets that we're going to test. Show the wheels as you talk. One set is the same size the whole way across, so both wheels are exactly the same. One set is tapered so the wheels are smaller toward the outside. The other wheels are tapered in the opposite direction so they get bigger toward the outside. Gently place each wheel set on the pieces of straight and curved track. To be successful, they need to roll from the top to the bottom of the rails without falling off. You may go ahead and start testing. Wait while the children experiment.

Let's check our results. Raise your hand if you think the straight wheels performed the best. Acknowledge. Who thinks the ones with the small outer edges did the best? Acknowledge. Who thinks the ones with the large outer edges did the best? Acknowledge. The best wheel setup on real trains is small outer edges. If you're quiet, you may keep experimenting while I explain why the tapered wheels that are smaller toward the outside are best. There is actually a scientific reason!

Newton's first law of motion says that a body in motion tends to stay in motion, and a body at rest tends to stay at rest, unless acted on by an outside force. So if a train is traveling on straight tracks, it tends to keep going straight. Any of our wheel sets should work on completely straight track. But if the track curves and the train continues going straight, we could have a derailment. Trains have wheel ***sets***, which means both wheels rotate together at the same time and at the same rate.

Show SHARP TURN PICTURE. When a train needs to go around a corner, the wheel on the outside edge of the curve will have to travel a farther distance than the wheel on the inside of the curve. Can you tell that the outer line is longer than the inner line of this curve? Acknowledge. Trains don't travel curves as tight as this one, but the curve in this picture makes it easier for us to see there's a difference in travel distance. With both train wheels turning together, how can we make one side travel farther? Take answers. If we use tapered wheels, we can solve this problem, but the wheels must be tapered in the correct direction.

Optional paragraph: Let's work through a scenario together to find the answer. If our train is entering a left-hand curve, the wheels on the right side of the train will need to travel farther than the ones on the left for the train to get around the curve. Remember, Newton's first law tells us that the train wants to keep going straight. Show WHEELS ON LEFT-HAND CURVED TRACK PICTURE and point appropriately as you go. The rails are heading off to the left as we enter the curve, making the train, which wants to go straight, ride on the left side of its wheels. That means that the right wheel will ride on its inside edge and the left wheel will be on its outer edge. Since we need the right wheel to travel farther in a left-handed curve, which of our wheel sets has the larger diameter on the inside of the right wheel? Take answers. Yes, the one that's tapered smaller toward the outside! Will the left wheel be riding on its smaller edge in our scenario? Take answers. Yes, the science revealed the correct choice! Although the actual size difference isn't as large as the ones we experimented with, real train wheels are indeed tapered to be smaller to the outside.

DAY 4 EXPERIMENT

Pushy Plates

Materials

- ☐ Layers of the Earth Image
- ☐ Plate Tectonics Map
- ☐ Mount Everest Photo
- ☐ Mandarin oranges, ½ per person
- ☐ Paper towels or napkins 1 per person
- ☐ Paper plates, 1 per person

Prep

1. Print the IMAGES.
2. Cut oranges in half through the stem.

Tip Corner

- Use oranges such as mandarins or clementines for easy peeling.
- Baby wipes cut in half are good for messy hands when done.

Class Time Directions & Dialogue

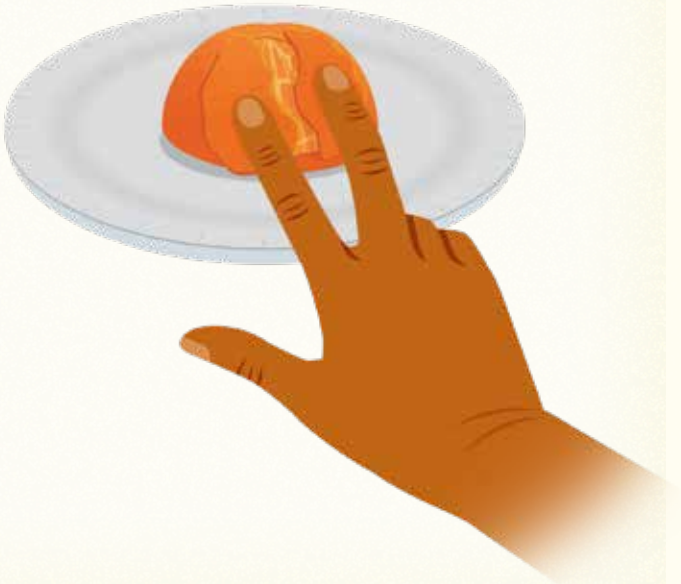
Introduction

Today, we are learning about the death and resurrection of Jesus. Who can tell us why these events are so important to us? Take answers. In Romans 6:23, we're told the penalty for sin is death. Jesus paid the penalty, took the punishment, for our sins through his own death. Do any of us deserve to have someone else pay for our wrongdoings? Acknowledge. Absolutely not. Jesus didn't save us because we deserve it. He saved us because he loves us. He took our sin on himself and paid our penalty when he died on the cross. His resurrection showed that God accepted his sacrifice. Read Romans 5:8. What a *wonder*-ful gift!

Does anyone know what geological phenomenon happened when Jesus died? Take answers. Read Matthew 27:50–51. There was an earthquake! Earthquakes occur when two sections of the earth's crust slide past each other in opposite directions, get stuck, and then break free. This releases a great amount of energy that causes the earth to quake. Sections of the earth's crust can interact in several ways—by sliding past each other, by moving away from each other, and by moving toward each other. These interactions are what we're going to experiment with today.

Directions

Before we experiment, let's make sure we understand some things about the earth. Hold up LAYERS OF THE EARTH IMAGE. Look at this picture. It shows us that in the center (point to the inner core) the core is very hot—super hot! Point to the mantle. The mantle is above the core and (point to the crust) the crust is above that. You can see the crust is a thin layer compared to the rest of the earth. It's the earth's outer "skin." Who thinks the crust is one big piece that surrounds the earth? Acknowledge. Who thinks the crust is broken into several pieces which float on the mantle? Acknowledge. Hold up the PLATE TECTONICS MAP. The crust is broken into many pieces that float on the hot mantle (rock made plastic by heat and pressure). So you can see on this map there are some big tectonic plates and there are some small ones. The boundaries, or edges, of these plates are where most of earthquakes and volcanoes form. We're going to use our orange half to experiment with the movement of two neighboring plates.



Place your orange, cut side down, onto a paper plate. Pretend this is the earth. Pull off a large piece of the peel, like the earth's crust. Pause. Now rip your peel into two pieces to make your tectonic plates and place them back over the orange, which will be our mantle. Pause. Can you feel how your plates can wiggle a little bit if you push on them? Acknowledge. If you look at the line where your peel plates meet, is it completely smooth and straight? Take answers. No, it's not. Well, the real plate edges in the earth's crust aren't smooth and straight either. The edges get stuck as they try to slide past each other, but eventually, they break free and create an earthquake. Let's experiment by putting your pointer fingers on your peel plates, push them close together and try sliding them in opposite directions so the edges slide against each other. Pause. Did they slide easily? Take answers. If you had your plates pushed close together, they wouldn't have slid past each other very easily. You would have had to add energy to get them to slide. But once the stress of pushing them overcomes the friction, that energy would be released as a quake when they finally move. The San Andreas Fault that runs through California is an example of this kind of sliding.

Next, let's try moving our plates apart. Put your pointer fingers on your orange peels again. This time, push them down and apart from each other. Pause. Can you see the orange mantle between the plates? Acknowledge. That mantle would come up into the rift between the plates and cool, making new crust.

Now we're going to try pushing our plates together, but there are a couple of things that can happen depending on what kind of crust we have. It could be either oceanic or continental. Oceanic crust is denser, so if the two kinds of crusts moved toward each other, the oceanic plate would sink under the continental plate. This sunken crust is called "subducted." The subducted crust then melts into the mantle.

Let's try a subduction. Put your pointer fingers on your peel plates, but this time, place your right finger close to the edge where the plates meet. Push down a little harder with your right finger as you push the peel plates toward each other. This is the more dense oceanic plate. Did your right plate go under your left plate? Take answers. You may have created a volcano or some mountains there!

What if both of our plates were oceanic, or both continental, and they converged, or came together at the same spot? What would happen? Take answers. Try pushing your peel plates together with the same amount of downward force on them. Pause. Did the converging edges mash together and bump upwards? Take answers. Well, let me tell you about one of the seven natural wonders of the world that was actually formed by the convergence (coming together) of two continental plates. Do you have any guesses as to what this natural wonder is? Take answers. It's Mount Everest!

Show MOUNT EVEREST PHOTO. Mount Everest is in the Himalayas, a mountain range on the border of India and Tibet. When the global flood of Noah's day occurred, the tectonic plates were moving rapidly, dragging the land masses at speeds of several feet per second. Show the PLATE TECTONICS MAP and point to where the Indian and Eurasian plates meet. The Indian plate collided forcefully with the Eurasian plate and the land buckled and rose up, forming the mountains. When measured from sea level to the very top, Mount Everest is the highest point on earth at 29,035 feet (8,850 m) and rising. Did you know it's still growing? It's only growing about as fast as your fingernails, but it's growing. So next time you trim your fingernails, remember that the pushy plates of the earth's crust have moved about as far as your nails have grown since they were last trimmed.

DAY 5 EXPERIMENT

SPREAD THE WORD

MATERIALS

- ☐ Telegraph Picture
- ☐ Morse Code Papers, 1 per person
- ☐ Pens or pencils, 1 per person
- ☐ 1 small flag of any kind
- ☐ 12-oz. paper cups, 2 per person
- ☐ Cotton twine in 5-feet lengths, 1 per person
- ☐ Medium paper clips, 2 per person
- ☐ 1 Slinky toy or similar spring toy for demonstration
- ☐ Optional: spring toys for students to use or take home
- ☐ 1 nail with the same diameter as your twine, for prep

PREP

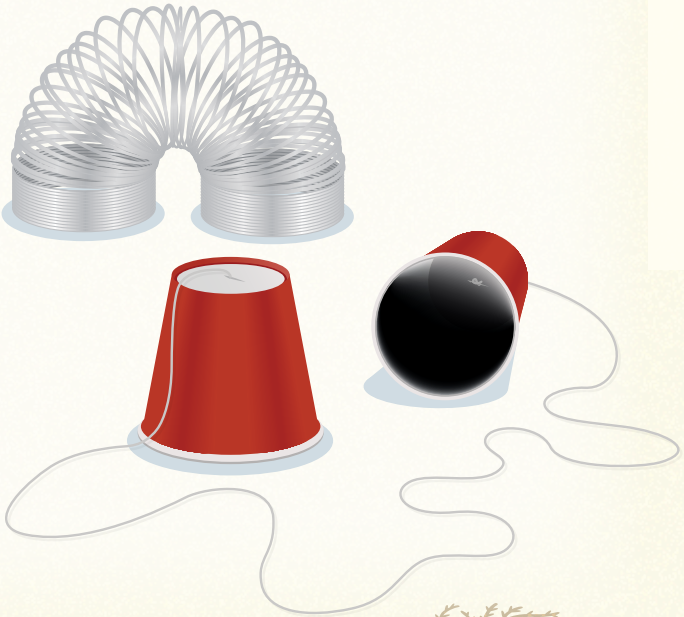
1. Print the **TELEGRAPH PICTURE**.
2. Print 1 **MORSE CODE PAPER** per person, then place papers at each station along with pens or pencils.
3. Assemble the cup phones as follows:
   - » Carefully use the nail to poke a hole in the bottom center of each cup.
   - » Thread one end of the twine from the bottom outside to the inside of the cup.
   - » Pull enough twine into the cup to allow it to be knotted onto a paper clip.
   - » Gently pull out the slack so the paper clip rests inside at the bottom of the cup.
   - » Attach the other end of twine to the second cup in the same way.

CLASS TIME DIRECTIONS AND DIALOGUE

Introduction

What could we do if we needed to give information to someone we wouldn't be seeing for a while? Take answers. We could call them, text them, send them an email. But let's say that we're back in the Old West in the year 1830. How could we send our message? Take answers. We could write a letter, but keep in mind that the mail coach was pretty slow. We could send a person called a courier which would be a little faster. If the message was of great importance, we might be able to get the sender at the signaling station to send the message for us through the signaling system. What do you think I mean by "signaling system"? Take answers. There were actually several different ways people sent messages through signals. They used lights, flags, mirrors, drums, smoke—whatever could be seen or heard from a distance and could have a meaning attached. Let's see if you can decode this word that I'm going to flag signal to you. Use your flag and explain each time you wave it, it represents a letter. One wave is an A. Two waves stands for B. Three stands for C, and so forth. Wave the word "CAB" by first waving the flag three times, then one, then two, and see if they guess it.

To send a message a longer distance, someone had to send the signal. Then another person, up in a tower on a distant hill, would receive the message, and if it still had further to travel, that person would repeat the message to the next tower down the line. This would continue until the message reached its destination. Let's play a quick round of the telephone game to remind us of relaying a message down a line. Do so.



In 1835, a man named Samuel Morse developed a code using dots and dashes to represent the English letters and numbers. Who knows what this code is called? Take answers: Morse code. Morse enlisted the help of two men to design and build a machine to send this code. It was called the telegraph. Show the TELEGRAPH PICTURE. By tapping the code on a lever that was connected to a battery, the electrical circuit would be opened and closed in long and short bursts. The message was immediately sent down the wire as short "dots" or long "dashes" of electricity. At the receiving end, an electromagnet operated according to the signal and the operator could decode and read the message. In 1844, the first message was sent over the newly strung telegraph wires that went from Washington, D.C., to Baltimore, Maryland. You'll find this message on the papers at the center of your table. By the way, it is in Morse code, so you'll have to decode it. Have them each grab a MORSE CODE PAPER and pen or pencil, then do so.

It wasn't long though, before the telegraph was used to share news. In 1861, the Western Union Telegraph Company completed the first transcontinental telegraph line. Who remembers what transcontinental means? Take answers. Things were quickly changing in the Old West, weren't they?

Directions

Technology has certainly advanced since the invention of the telegraph. Alexander Graham Bell was credited with inventing the telephone in 1876. Bell, with the help of Thomas Watson, developed a receiver that could turn electricity into sound. Pick up the Slinky. You see, sound travels in longitudinal waves (same direction as the disturbance causing the sound.) Although we can't see sound waves, I'm going to demonstrate how a sound wave travels. Do the following as you say it. I'm going to hold this coil by its ends, stretch it out (approximately one yard or one meter), and allow it to rest on the table. Do you see that I can move one hand in until a small section of the coil squeezes together? Acknowledge. When I do that, I am compressing it. Return hands to original position. Now watch what happens when I quickly compress it from one side. Did you see the compressed area move down the whole coil? Watch again. Repeat. The wave moved through the Slinky. Sound must travel through something—molecules in the air or the metal of this Slinky. Different sounds have different frequencies and wavelengths, and those characteristics determine what the sound wave is like.

String telephones aren't electrical, but they allow the sound waves to travel across a string from one cup in to another. Let's experiment and see if we can hear our partner's voice come through the string. Here are some instructions, so listen carefully. These phones are made with paper cups. Paper can rip, so you need to be careful. The string has to be pulled tight enough so the sound wave can travel through it, but don't pull so tightly that you rip the cup and the string comes out. You'll need to have a partner for this to work. If you need a partner, raise your hand so your leader can help you find one.

Does everyone have a partner? Acknowledge. Decide which of you is going to send their message first. The sender needs to put the cup over his mouth while the receiver puts the cup over his ear and makes sure the string is tight. Wait while the children experiment.

Today, it's so much easier for us to send and receive information than it was for the people in the Old West. There's one very important message that needs to be sent out to the world. What do you think that is? Take answers. Jesus! Trusting and following Jesus is the only way to be saved from our sins. We need to spread the word!

DAY 5 EXPERIMENT

Marvelous Magnetism

Materials

- ☐ Aurora Borealis Photo
- ☐ NASA Sun Earth Illustration
- ☐ Hard plastic petri dishes, 1 per station or per person
- ☐ Iron filings, 1 teaspoon per station or per person
- ☐ Bar magnets, 1 per station or per person
- ☐ Half sheets of white paper, 1 per station
- ☐ Tape to stick the magnet to each station
- ☐ 1 compass per station

Prep

1. Print the **IMAGES**.
2. Pass out materials to each station.
3. Tape 1 magnet to each station and cover with the white paper.

Tip Corner

- Print additional pictures of the *aurora borealis* to show the various colors described.
- Give students an original Wooly Willy toy to play with. Check online for availability.

Class Time Directions and Dialogue

Introduction

Read 1 Thessalonians 4:16–17. What a wonder that will be, don't you think? Acknowledge. To see everyone who followed Jesus raised up into the sky to be with him will be a wonder to behold. But until then, there are many other wonders in the sky we can see now. One of them is one of the seven natural wonders of the world. Any guesses as to what it is? Take answers and show the AURORA BOREALIS PHOTO. This is an image of the *aurora borealis*, also known as the northern lights.

The *aurora borealis* is a spectacular show of dancing lights commonly seen near the arctic circle. This phenomenon occurs when charged particles, electrons from the sun, travel on solar winds, interact with earth's magnetic field, and get molecules excited in the atmosphere. The color is given off when those excited molecules drop back down to their regular energy state. The most common color is green, but other colors that are seen are red, blue, purple and sometimes pink, yellow, white, or orange.

Who knows why the earth has a magnetic field? Take answers. God created the earth with a molten outer core. What does molten mean? Take answers—melted. Inside the earth, the molten outer core swirls around and creates huge electrical currents. The currents create a magnetic field around the earth. It's a good thing, too, because God designed this magnetic field to protect us from harmful solar radiation, cosmic rays, and other particles. Show NASA SUN EARTH ILLUSTRATION. When the solar wind pushes our magnetic field, the field distorts and forms this tail like you see here. Without the solar winds, the magnetic field lines would form even, continuous loops all the way around the earth, going from the magnetic north pole to the magnetic south pole. In other words, God has designed a force field to protect us.

Optional paragraph: So why are we most likely to see the aurora at the arctic circle? Take answers. It's a bit complicated, but we can simplify it to say that the charged particles of the solar wind follow the magnetic field lines to the pole areas, which is where the field lines come closest to the earth. Does that mean that we can see auroras at the south pole too? Take answers. Yes! Southern auroras are called *aurora australis*.

Directions

Let's talk about magnets for a moment. Have you ever played with two magnets? Acknowledge. Have you tried to push them together, and they repelled each other? Acknowledge. Why does that happen? Take answers. All magnets have a magnetic north and a magnetic south pole. The poles that are alike, such as a north and a north, repel (push away from) each other. But opposite poles attract (move toward) each other.

All magnets also produce these magnetic fields that we've been talking about, just not as big as the ones that circle around earth. The magnetic field is the area around a magnet that has magnetic force. Magnetic force is what interacts with magnetic objects by attracting or repelling. What about a compass; does it contain a magnetic object? Take answers. Yes. And what magnet is it interacting with? Take answers. It aligns its direction with the magnetic field lines of earth. There is one compass on every table. Take a look to see what it says and then everyone point to the north. You may need to explain how your particular compasses work as there are a couple different kinds. Look around. Is everyone pointing the same direction?

Can you see the magnetic field lines of earth if you look around the room? Take answers. No, but since our compasses interacted with it, we know that the earth's magnetic force is here, right? Acknowledge. Well, magnetic field lines are invisible, but there's a way we can get a glimpse at them by experimenting with a magnet and a magnetic material. Please wait until I have given all of the instructions before you touch anything. At your station, there is a magnet under that white piece of paper. There is also a petri dish—that round plastic container—that contains iron filings. You can experiment by moving the petri dish all around near the magnet to see what kinds of field lines you can trace with the filings. You may go ahead and begin. Wait for children to experiment. What happened? Did you see how the filings aligned themselves with the magnetic field lines? Take answers.

It's pretty marvelous how God created a protective magnetic force field around our home. At the same time, he lets us experience some of his wonder through the beauty of the auroras, too.

Toddler Crafts

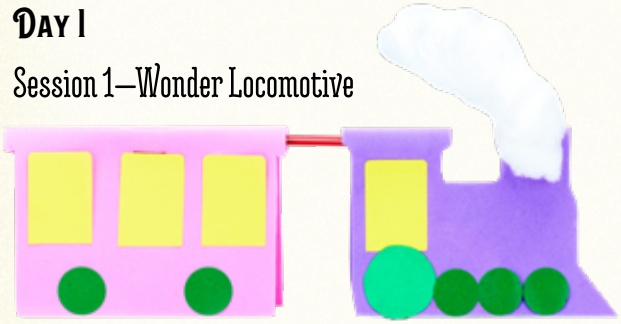
Thematic Craft Ideas

Some basic items will not be listed in supply lists below, such as an office paper cutter, scissors, glue, stapler, ruler, and a pen or pencil.

For gluing, pour a small amount of glue into a plastic bowl or plate for children to share. Provide small paintbrushes or cotton swabs for spreading.

Day 1

Session 1—Wonder Locomotive



Gather the following supplies: Locomotive Pattern, 8 ½ x 6-inch foam sheet cut into 6 x 4½ inches (two per child), 1 x 3-inch yellow office labels cut in half, 1-inch and ¾-inch circle labels, plastic stirring straws, and cotton balls. Optional: You may want to glue on the labels if they are not sticky enough.

Ahead of time, cut the yellow labels in half. Make a locomotive and train car for each child. To do so, fold each 6 x 4½-inch foam piece in half widthwise. Place the **LOCOMOTIVE PATTERN** with the dotted line on the fold of one foam piece. Trace around the pattern, then cut out the shape. For the train car, trim the second folded foam piece on both sides, starting at the bottom edge, leaving a ¼-inch overhang at the fold to look like a roof. Slide the stapler over the fold about a ½ inch down and staple once in the front and back of the locomotive foam piece and in the center of the car foam piece.

During class, let children choose one locomotive and one train car. Slide a stirring straw through the space between the fold and the staples to attach the locomotive to the car. Children will add one yellow label to the locomotive and three labels to the car for windows. Remind them to press and rub hard. Next they will add one or two large circle labels, plus two or three smaller circles for wheels on the locomotive. Then add two small circles to the train car. Gently stretch out a cotton ball, then glue one end onto the smokestack of the locomotive. Flex the foam pieces near the bottom to make the train stand up. You may want to allow children to decorate both sides of their train.

TEACHING TIE-IN

Long ago, in the Old West, a train was a wonderful new thing. People were excited to ride on a train. But there's nothing more exciting than Jesus! We're learning today that Jesus is wonderful. Jesus is God. He came from heaven and was born as a baby. When you play with your train, remember that Jesus is a wonder.

Session 2—Tiny the Cougar Coloring Sheet

Gather the following: Day 1 Animal Pal Coloring Sheets and crayons. Optional: yellow and brown tissue paper and large plastic wiggle eyes. You'll also need the Day 1 Animal Pal Poster.

Ahead of time, print one coloring sheet for each child. Optional: Cut small pieces of yellow and brown tissue paper and pour glue into bowls for kids to share.

During class, children will color their coloring sheet. Optional: Glue small pieces of yellow tissue onto the body and brown pieces for the kitten's spots, then add large wiggle eyes.

TEACHING TIE-IN

Refer to the **DAY 1 ANIMAL PAL POSTER**. **What's the name of our animal pal today?** Take responses. Continue discussion about the pal and its significance.

Day 2

Session 1—Old West Vest/Sheriff Badge

For a clip-on badge to wear, gather: Sheriff Star Pattern, 3-inch wide-mouth canning lids, alligator clips, and crayons. Optional: gold or silver glitter.
For the vest, gather: paper grocery bags, ¾-inch round labels (same as Day 1 craft), and Old West stickers (item 1220880).

Ahead of time, print and cut out the **SHERIFF STAR PATTERNS**. For the vest, cut a neck and armholes into each grocery bag and cut an opening in the front. Turn vest inside-out, then open and clip off extra, making it even with armholes. (Check online for additional instructions.)

During class, children will color the badges. *For the clip-on badge,* glue the colored star pattern to the front of a canning lid. Add glitter to the points of the star, if desired. Have an adult hot-glue an alligator clip on the back of each badge to clip to children's clothes. *For the vest,* glue the colored badge onto the vest. Children can add circle labels for buttons and decorate with stickers.

TEACHING TIE-IN

Help the children put on their badges or vests. **We've been talking about the Old West where they had sheriffs who kept people safe from bad guys. Today, you can pretend to be a sheriff. Even kids in the Old West played pretend. When Jesus was a kid, maybe his friends pretended to be different people too.**

Session 2—Junior the Wolf Coloring Sheet

Gather the following: Day 2 Animal Pal Coloring Sheets and crayons. Optional: faux fur and ½-inch black pom-poms. You'll also need the Day 2 Animal Pal Poster.

Ahead of time, print one coloring sheet for each child. Optional: Cut pieces of faux fur to fit the shape of the tail.

During class, children will color their coloring sheet. Optional: Glue the faux fur onto the tail and a black pom-pom onto the nose.

TEACHING TIE-IN

Refer to the **DAY 2 ANIMAL PAL POSTER**. **What's the name of our animal pal today?** Take responses. Continue discussion about the pal and its significance.

Day 3

Session 1—Stormy Miracle Boat

Gather the following per child: Boat Patterns, 9-inch regular paper plates, blue tissue paper, and crayons or markers. Optional: raindrop and/or fish stickers.

Ahead of time, print and cut the **BOAT PATTERNS**. Fold each paper plate in half, creasing across the center only. (Do not flatten the plate.) Staple *once* at each corner of the fold along the plate edge to hold it closed. Cut tissue paper into 10 x 4-inch strips (two per child).

During class, children will color the picture on the pattern. Fold the picture along the dotted line. Slide over the folded plate so the folds match and the picture is centered. Hold the picture in place and staple it to the plate edge once at the bottom, front, and back. *Do not staple the plate edges together.* Add waves by folding the tissue paper strips lengthwise. Lay the boat flat and place the folded edge of the tissue along the curved edge of the plate. Staple in place, then flip the tissue back over the staples so it lies down around the boat. Repeat on the back side, then stand the boat up. Optional: Let the children put raindrop or fish stickers around the edges of the plate and on the tissue.

TEACHING TIE-IN

Review the account of the storm as kids rock their boats back and forth. They can lift up the tissue paper attached to the edge of their boats when you mention the huge waves. Then they can smooth the tissue out again after Jesus calms the storm. **Today, we learned about Jesus' wonderful power. He made everything, so he can control it. He told the storm to stop, and it did! Jesus is a wonder.**

Session 2—Mighty the Bison Coloring Sheet

Gather the following: Day 3 Animal Pal Coloring Sheets and crayons. Optional: brown yarn and plastic wiggle eyes. You'll also need the Day 3 Animal Pal Poster.

Ahead of time, print one coloring sheet for each child. Optional: Cut yarn into 2-inch lengths.

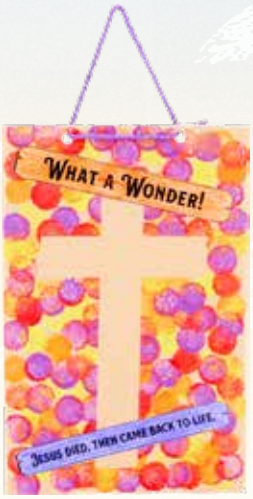
During class, children will color their coloring sheet. Optional: Add yarn to the end of the bison's tail and beard. Attach wiggle eyes.

TEACHING TIE-IN

Refer to the **DAY 3 ANIMAL PAL POSTER**. **What's the name of our animal pal today?** Take responses. Continue discussion about the pal and its significance.

Day 4

Session 1—Sunset Painted Cross



This requires time for the paint to dry. Plan for another activity before returning to finish the craft.

Gather the following: Painted Cross Signs, colored cardstock, 8½ x 6-inch sheets of tan or brown craft foam, painter's tape, ½-inch foam spouncers (round sponge heads on sticks), washable paints (red, yellow, orange, and purple), hole punch, and yarn or narrow ribbon.

Ahead of time, print on colored card stock and cut out one set of **PAINTED CROSS SIGNS** for each child. Make a cross with the tape: Place a 6-inch strip of painter's tape, lengthwise down the center of each foam sheet, 1½ inches from the top. Then lay a 5½-inch tape strip across (perpendicular) the first strip, about an inch from the top end. Rub down the edges so there are no wrinkles or air pockets. Cut the yarn or ribbon into 12-inch lengths.

During class, children will use the spouncers to paint dots all over the foam sheet and along the edges of the tape. After the paint is dry, help children remove the tape to reveal a cross, then glue on the signs. Punch two holes near the top edge, about 3 inches apart. Tie yarn or ribbon through the holes for hanging.

TEACHING TIE-IN

We've been pretending to live in the Old West. Did you know that the sun always goes down in the west? It's called a sunset. Sunsets can make pretty colors in the sky. What is on your beautiful sunset picture? There's a cross on your picture. Who died on a cross to save sinners? Jesus. **And he rose from the dead! What do the signs say?** Read the words aloud. **You can hang your cross picture at home to remind you of our wonderful Savior, Jesus.**

Session 2—Champ the Grizzly Coloring Sheet

Gather the following: Day 4 Animal Pal Coloring Sheets and crayons. Optional: brown felt or faux fur and ½-inch black pom-poms. You'll also need the Day 4 Animal Pal Poster.

Ahead of time, print one coloring sheet for each child. Optional: Cut the felt or fur into round pieces to fit the belly of the bear.

During class, children will color their coloring sheet. Optional: Glue the fur rounds onto the bear's belly and add a pom-pom to the nose and/or ears.

TEACHING TIE-IN

Refer to the **DAY 4 ANIMAL PAL POSTER**. **What's the name of our animal pal today?** Take responses. Continue discussion about the pal and its significance.

Day 5

Session 1—Giddyup Horse Puppet

Gather the following supplies: Giddyup Horse Puppet Pattern, paper lunch bags, crayons, ¾-inch-wide ribbon, and brown, black, or tan yarn.

Ahead of time, print the **HORSE PUPPET PATTERN**. Cut the ribbon into two pieces per child: 4¼ inches long with angled ends and 3 inches long with straight ends for the bridle. Cut sets of 12 pieces of yarn, about 2 or 3 inches long.

During class, children will color their horse head and mouth. Cut them out and glue to a lunch bag as shown on the pattern sheet. Line up the top of the mouth piece with the fold under the flap of the bag. On top of the flap, spread glue *on the bag* up the middle of the flap to the top edge according to the shape of the horse face. (Be careful not to spread all the way to the left and right edges.) Lay the face on the flap so the eyebrows line up with the top edge. Glue on the ribbons for the bridle, then attach the yarn onto the mane.

TEACHING TIE-IN

They didn't have cars in the Old West, so many people rode on horses. People could go to lots of places on

DAY 1 CRAFT

CHRISTMAS CRÈCHE

JUNIOR, PRIMARY & PRE-PRIMARY

MATERIALS

- ☐ Lamb Face Pattern
- ☐ O Come, Let Us Adore Him Label Pattern
- ☐ Uline (S-18146) Kraft (brown) 4 x 4 x 1 mailer boxes, 1 per child
- ☐ Dark blue card stock, 4 x 4-inch pieces, 1 per child
- ☐ White card stock, 1 sheet per 39 children
- ☐ Black card stock, ½-inch circles, 2 per child (150+ per sheet)
- ☐ Brown card stock, 1 sheet per 35 children
- ☐ Red copy paper, 1 sheet per 39 children
- ☐ Beige linen cloth, 2 x 2-inch pieces, 2 per child
- ☐ Unfinished wood peg dolls, 2⅜ x ⅞-inch, 1 per child
- ☐ Unfinished wood peg dolls, 2 x ¾-inch, 1 per child
- ☐ Unfinished split wood balls, ½-inch, 1 per child
- ☐ White pom-poms, 1-inch, 2 per child
- ☐ Brown chenille stems, 1 per 2 children
- ☐ Large gold star stickers, 1 per child

TOOLS AND BASIC SUPPLIES

- ☐ Office paper cutter
- ☐ ½-inch hole punch
- ☐ Scissors
- ☐ Glue sticks
- ☐ Glue dots
- ☐ Zippered baggies
- ☐ White acrylic paint
- ☐ Toothpicks
- ☐ Fine-point Sharpies
- ☐ Colored markers

PREP

1. Assemble the boxes for each child.
2. Cut the dark blue card stock into 4 x 4-inch pieces.
3. Cut the beige linen cloth into 2-inch squares.
4. Print the **LAMB FACE PATTERN** onto white card stock and rough cut 2 faces per child. The kids can do the finish cutting.
5. Print the **O COME, LET US ADORE HIM PATTERN** onto red copy paper and cut out.
6. Hole punch black card stock into ½-inch circles.
7. Cut brown card stock into 1½-inch squares.
8. Cut brown chenille stems into 3-inch pieces.
9. Make individual kits in zippered baggies for each child with all the above supplies.

Download the patterns mentioned in this book from AnswersVBS.com/wonderresources.

Tip Corner

For the stars, metallic silver Sharpies can be substituted for white paint and toothpicks—especially for younger kids.

Teaching Tie-In

Show the sample craft and say:

Do you know when you were born (your birthday)? How about where you were born? Take responses. **Jesus came to earth as a baby, but his birth had extraordinary events surrounding it. What were some ways Jesus' birth was different than everyone else's?** Take responses.

Today at VBS, we're making a Christmas Crèche to remind us of some of those wonder-filled events that happened.

Class Time Directions

1. Stick the large gold star near the top center of the blue card stock square.
2. Glue stick the blue card stock square to the inside bottom of the box so the star is near the side where the box flap tucks in.
3. Dip a toothpick into white paint, then carefully make tiny dots all over the blue card stock to look like stars. Set aside to dry.
4. Attach a lamb head and a black circle base to each white pom-pom with glue dots.
5. For the manger, take the brown card stock square and bend two opposite sides up. For the legs, take the two chenille stem pieces, make an *X*, and then twist the pieces together at the center a couple times. Then bend the ends down and glue dot the middle of the *X* to the underside of the manger.
6. For baby Jesus, take a piece of beige cloth and position it like a diamond in front of you. Then glue dot the split wood ball to the top corner. Next, add a glue dot to the right corner. Fold the bottom corner up, the left corner over and then the right corner last, pressing down to secure. Use a fine-point Sharpie to draw a face on the wood ball—2 dashes for closed eyes and a smile.
7. Use markers to color clothes on the wood peg dolls (the larger doll for Joseph and the smaller doll for Mary). Add face details with a fine-point black Sharpie. Attach the other piece of cloth to Mary's head for a veil. Use one glue dot on each side of her head and one on her back.
8. Set up your manger scene to see how everything looks. Then glue stick the red O COME, LET US ADORE HIM LABEL to the outside of the box lid tab that sticks up at the front.
9. Place all the pieces inside and close the lid to take it home.

Super Simple Idea

Each day, at least one super simple option is included, which is a premade craft kit from Oriental Trading Company that goes along with the main concepts of the day. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

As an alternative to the Day 1 main crafts, try the following craft kit. Note that this is available at the time of printing and may not be available later.

- 3D Journey to Bethlehem Stand-Up Craft Kit (Item Number: #13911851)—Manufacturer does not recommend for children under three years of age.

DAY 1 CRAFT

Ticket to Ride Ornament

JUNIOR, PRIMARY & PRE-PRIMARY

Materials

- ☐ Wonder Junction Ticket Pattern
- ☐ Wood craft sticks, 4½-inch, 2 per child
- ☐ Mini craft sticks, 2½-inch, 4 per child
- ☐ Silver or gold paper drinking straws, 1 per 2 children
- ☐ Tan card stock, 1 sheet per 15 children*
- ☐ 20-gauge copper wire, 12 inches per child

*If printing the pattern in sepia (instead of black and white), use white card stock.

Tools and Basic Supplies

- ☐ Office paper cutter
- ☐ Wire cutters
- ☐ Glue dots
- ☐ Craft glue
- ☐ Scissors
- ☐ Quart-size zippered baggies

Prep

1. Print the **WONDER JUNCTION TICKET PATTERN** onto tan or white card stock and cut one per child.
2. Cut the straws in half.
3. Cut the copper wire into 12-inch lengths.
4. Place a ticket, 2 regular craft sticks, 4 mini craft sticks, 2 silver straw pieces, and one 12-inch piece of wire in zippered baggies for each child.

Tip Corner

For younger kids, substitute chenille stems for copper wire.

Teaching Tie-In

Show the sample craft and say:

Do you have favorite Christmas ornaments you enjoy putting up each year? Take responses. Why do we celebrate Christmas? Take responses. Today, we're making this keepsake Ticket to Ride ornament so we can always remember this VBS. But more importantly, we can always remember Jesus—the reason we celebrate Christmas in the first place! There wouldn't even be such a thing as Christmas if it weren't for Jesus.

Class Time Directions

1. Take the 4 mini craft sticks and position them like railroad ties side-by-side approximately ½ inch apart.
2. Place a drop of glue about ½ inch from both ends of each mini craft stick, then lay the 2 long craft sticks across the minis, creating a railroad track.
3. Glue the straw pieces to the long craft sticks.
4. Wrap the ends of the copper wire around the upper rail to hang the ornament.

Download the patterns mentioned in this book from AnswersVBS.com/wonderresources.

5. Place a glue dot on the upper silver or gold rail directly above the third mini craft stick (counting from left to right). Then place a glue dot on the lower silver or gold rail directly above the second mini craft stick.
6. Position the ticket on an angle over the 2 glue dots and press into place.

Super Simple Idea

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- Nativity Suncatcher Ornaments (Item Number: #14324579)—Manufacturer does not recommend for children under three years of age.

DAY 2 CRAFT

Covered Wagon Conversations

JUNIOR, PRIMARY & PRE-PRIMARY

Materials

- ☐ Wheel and Seat Pattern
- ☐ Wagon Cover Pattern
- ☐ Questions Pattern
- ☐ 1 x 2 wood boards cut into 3-inch long pieces, 1 per child
- ☐ Tan card stock, 1 sheet per 4 children
- ☐ Ivory card stock, 1 sheet per 3 children
- ☐ Colored card stock, 1 sheet per child

Tools and Basic Supplies

- ☐ Scissors
- ☐ Glue sticks
- ☐ Glue dots
- ☐ 1¼-inch hole punch (preferred)
- ☐ Black fine-point permanent markers and brown wide-point water color markers
- ☐ Transparent tape
- ☐ Quart-size zippered baggies

Prep

1. Cut the 1 x 2 boards into 3-inch long pieces. Sand if necessary.
2. Print the **WHEEL AND SEAT PATTERN** onto tan card stock. Cut apart the seats. Cut out (or hole punch) the wheels, 8 per child.
3. Print the **WAGON COVER PATTERN** onto ivory card stock and cut out the wagon covers.
4. Print the **QUESTIONS PATTERN** onto colored card stock.

Tip Corner

- Heavier weight brown kraft card stock (110 lb/300 gsm) can be substituted for tan card stock. But first make sure your copier or printer can handle it.
- Make kits for each child, placing small materials in zippered baggies.

Teaching Tie-In

Hold up the sample craft and say:

In the 1800s, folks traveled in caravans (groups) of covered wagons as they headed out West. It could be large groups of people at times, and I'm sure they had many conversations along the way. Today, we talked about Jesus' first recorded conversation. Does anyone remember how old he was? Take responses. He was 12. His family had traveled in a group to the temple in Jerusalem where he amazed the teachers with his astonishing knowledge and wisdom. Can you imagine a 12-year-old being smart enough to teach the most learned men of the day?

As you make your own covered wagon today, you'll fill it with some conversation starter cards to use with your family at dinnertime or bedtime. It's a fun way to remember Jesus as a child.

Download the patterns mentioned in this book from AnswersVBS.com/wonderresources.

Class Time Directions

1. Use a brown marker to color all four sides of the block of wood. Use a black marker to add wood grain and other details.
2. Assemble the wagon cover by glue sticking the "A" tab over "B" tab with the frame lines on the outside. Then glue the assembled cover to the top of the wagon. Press and hold to make sure it sticks.
3. Take the wagon seat piece and fold in half lengthwise (with the wood grain). Then open and glue the back to one end of the wagon.
4. Take the 8 wheel cutouts and glue two together, back-to-back, to make 4 double-thick wheels. Then glue dot the wheels to the side of the wagon and tape the inside of each wheel to the underside of the wagon.
5. Finally, cut out the question strips and place inside the covered wagon.

Super Simple Idea

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- 3" x 6" Jesus Walks With Us Sandal Foam Craft Kit (Item Number: #13830702)—Manufacturer does not recommend for children under three years of age.

DAY 2 CRAFT

Mini Horseshoes Game

JUNIOR, PRIMARY & PRE-PRIMARY

Materials

- ☐ Mini Horseshoes Game Cover and Directions Pattern
- ☐ Clear plastic deli containers, 8 oz., with lids, 1 per child
- ☐ Colored card stock, 1 sheet per 2 children
- ☐ 1½-inch #8 flathead machine screws, 1 per child
- ☐ Brown self-adhesive craft foam circles, 3¾-inch diameter, 1 per child
- ☐ Black chenille stems, 4 per child
- ☐ Orange chenille stems, 2 per child
- ☐ Blue chenille stems, 2 per child
- ☐ Drinking straws, 1 per 2 children

Tools and Basic Supplies

- ☐ Scissors
- ☐ Scratch awl (to poke hole in bottom of deli container)
- ☐ Glue sticks
- ☐ Quart-size zippered baggies

Prep

1. Use a scratch awl to poke a hole in the bottom center of each deli container.
2. Print **MINI HORSESHOES GAME COVER AND DIRECTIONS PATTERN** onto colored card stock and cut out one of each per child.
3. Cut the brown craft foam into 3¾-inch diameter circles.
4. Cut the drinking straws in half.

Tip Corner

- Make kits for each child, placing small materials in zippered baggies.
- Be sure to use a flathead screw. If you use a rounded head, the container will wobble.

Teaching Tie-In

Show the sample craft and say:

Today, we're making a mini horseshoe game we can play with our family and friends. Do you like to play games? I wonder if Jesus ever played games. Isn't it amazing to think that the Son of God may have played a game when he was a child? And even more astonishing is the fact that before Jesus came to earth, he had existed forever and knew everything that would ever happen in the future—including you being here today making this game!

Class Time Directions

1. Remove the backing from the foam circle, then carefully press it, sticky side down, onto the inside bottom of the container. Keep pressing until it has fully adhered—especially at the center.
2. Flip the plastic container over. Then take the machine screw and press it through the center hole and the craft foam until it stops.

Download the patterns mentioned in this book from AnswersVBS.com/wonderresources.

3. Glue stick the **MINI HORSESHOES GAME COVER** circle to the top of the plastic lid and the **GAME DIRECTIONS** circle to the bottom of the lid.
4. To make a horseshoe, take a black and a blue chenille stem and hold them side-by-side with the ends even. Next, twist the stems together all the way from top to bottom so it looks like a black and blue candy cane. Then fold it in half and twist together again from top to bottom. Now, bend it into a "U" shape like a horseshoe.
5. Repeat step 4 so that you have 2 black/blue horseshoes and 2 black/orange horseshoes.
6. Store all pieces in the container when not in use. This includes taking the straw off and laying it flat inside the container.

Super Simple Idea

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- Horseshoe Picture Frame Magnet Craft Kit (Item Number: #13943739)—Manufacturer does not recommend for children under three years of age.

DAY 3 CRAFT

Praise Journal

JUNIOR, PRIMARY & PRE-PRIMARY

Materials

- ☐ Corrugated cardboard sheets, 4 x 6 inches, 1 per child
- ☐ Brown kraft card stock sheets, 8½ x 11-inch (110 lb/300 gsm), 1 sheet per 4 children
- ☐ Masking tape
- ☐ White copy paper, 2 sheets per child
- ☐ Jute twine, 15 inches per child
- ☐ Brown acrylic craft paint

Tools and Basic Supplies

- ☐ Office paper cutter
- ☐ Small foam paint brushes
- ☐ Styrofoam bowls or plates (for paint)
- ☐ Baby wipes
- ☐ Paper towels
- ☐ Quart-size zippered baggies
- ☐ Glue sticks
- ☐ ¼-inch hole punch
- ☐ Scissors

Tip Corner

- For younger kids, pre-tape a portion of the card stock or substitute torn pieces of brown construction paper and glue stick for the masking tape.
- A hand drill with a ¼-inch bit can be used to drill holes in multiple pieces of cardboard at the same time.
- If time allows, include a stick pen for the journal and follow the same masking tape and paint process.

Prep

1. Cut the brown kraft card stock sheets into quarters.

   (Note that the dimensions of the back cover will be slightly larger than the front cover.)
2. Mark and punch 2 holes on each piece of brown kraft card stock (front cover) about an inch in from the left and right sides (longer sides) and a ½-inch down from the top (shorter side).
3. Mark and punch 2 holes on each piece of corrugated cardboard (back cover) so that the holes line up with the front cover.
4. Make sets of journal pages for each child. To do so, stack 2 sheets of white copy paper on top of each other, orient the papers vertically (short side on top), and cut them in half down the middle with an office paper cutter. Stack the cut sheets together, then fold the stack in half, top to bottom.

Download the patterns mentioned in this book from AnswersVBS.com/wonderresources.

5. Hole punch each set of journal pages so the holes line up with the holes in the cover pieces.
6. Cut jute twine into sets of two 5-inch pieces, a 3-inch piece, and a 2-inch piece.
7. Place 1 piece of brown kraft card stock, 1 piece of cardboard, a set of journal pages, the twine pieces, and a folded paper towel into a quart-size zippered baggie for each child.

Teaching Tie-In

Show the sample craft and say:

Today, we're making a praise journal. The Bible tells us to praise the Lord. Do you know what it means to praise? Take responses. **It means to remember how incredible God is, to thank him, to be in awe of him, to marvel at him. This journal is a good way to get started praising Jesus for who he is and what he has done. Can anyone think of something to write?** Take responses.

Class Time Directions

1. Starting with a 6–8 inch length of masking tape, tear off ½-inch pieces. Press them all over the front cover of the journal until it is completely covered.
2. Dab brown paint with a paintbrush onto the taped front cover, being careful not to use too much paint.
3. Rub the painted cover with a clean paper towel to even out the paint and absorb any excess so it will dry quickly.
4. Use baby wipes to clean paint off your hands.
5. After the paint is dry to the touch, insert the journal pages and line up the holes.
6. Tie the journal together with the two 5-inch pieces of twine, using square knots (right over left, then left over right).
7. Add a twine cross to the front of your journal. Apply a generous amount of glue stick to the longer piece of twine and press it into place vertically. Then apply glue stick to the shorter piece and press it into place horizontally, over the longer piece, to form a cross.

Super Simple Idea

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- DIY Journals Craft Kit (Item Number: #48/6771)—Manufacturer does not recommend for children under five years of age.

DAY 3 CRAFT

NAMES OF JESUS PRINT

JUNIOR, PRIMARY & PRE-PRIMARY

MATERIALS

- ☐ Names of Jesus Pattern
- ☐ White copy paper, 1 sheet per child
- ☐ Instant coffee
- ☐ Paper towels, 2 per child

TOOLS AND BASIC SUPPLIES

- ☐ Office paper cutter
- ☐ Kids' scissors
- ☐ Small basins (for water)
- ☐ Spoons
- ☐ Hair dryers (optional)
- ☐ Gallon-size zippered baggies

PREP

1. Cover the tables with plastic tablecloths to protect them from water and coffee stains.
2. Copy the **NAMES OF JESUS PATTERN** onto white copy paper, then cut out one per child.

TIP CORNER

Have extra prints on hand in case of mess-ups.

TEACHING TIE-IN

Show the sample craft and say:

Today we're making this Names of Jesus Print as we take time to think about how amazing Jesus really is. Did you know it's important to marvel at Jesus? Why do you think that is? Take responses. It can strengthen our faith when we remember who Jesus is and the astonishing things he has done. Never get used to Jesus! Keep marveling! One little way to start is to put this craft in a good spot where you can see it and think about Jesus.

CLASS TIME DIRECTIONS

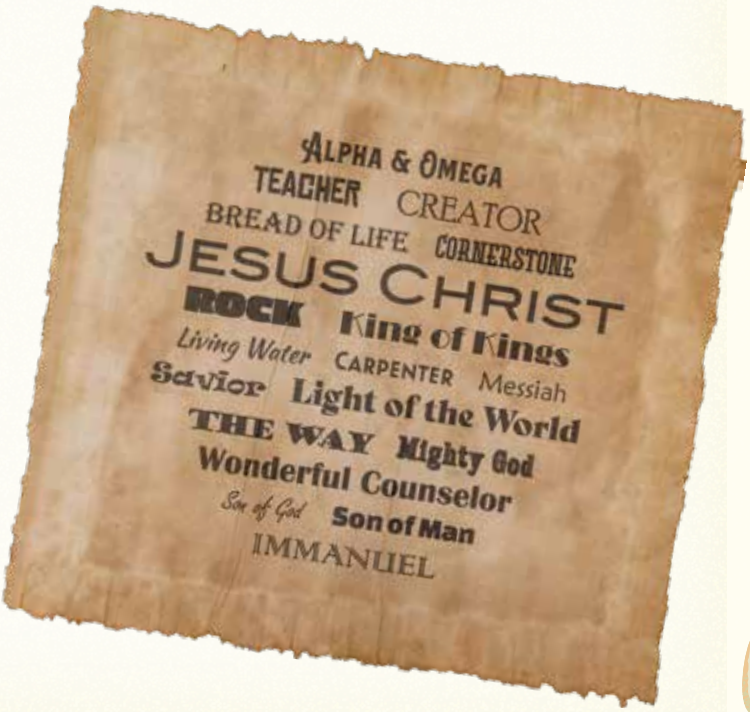
1. Wad up a paper towel and dip it in water. Then use it to wet the outer edges of the print thoroughly enough to soften the paper.
2. Use closed scissors to gently tear away at the wet edges to make them ragged and uneven.
3. Spoon some coffee crystals onto the center of a paper towel. Then ball it up, dip it in water, and use it to sponge coffee water onto the print. Be sure to wet the entire paper so no white remains.
4. Carefully put the wet print into a large zippered baggie to take home and dry or use a hair dryer to dry the print in class.

SUPER SIMPLE IDEA

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- Magic Color Scratch Names of Jesus Signs (Item Number: #13949845)—Manufacturer does not recommend for children under three years of age.



DAY 4 CRAFT

Spikes Cross Necklace

JUNIOR

Materials

- ☐ 2½-inch cut masonry nails, 1 per child
- ☐ 1½-inch cut masonry nails, 1 per child
- ☐ Jute twine, 40 inches per child

Tools and Basic Supplies

- ☐ Scissors
- ☐ Glue dots

Prep

Cut the twine into 40-inch pieces, one per child.

Tip Corner

Practice assembling the necklace beforehand so you can demonstrate with confidence.

Teaching Tie-In

Show the sample craft and say:

Today we've been talking about Jesus' astonishing death and resurrection. It's also astonishing that he did it willingly. This was God's perfect plan to save sinners. He loves you, and he died willingly to pay the penalty for your sin. He knew from eternity past that this would be his mission and there would come a day he would die on a cross and then come back to life.

As you've learned about Jesus this week, I hope you have come to realize how great he is, how sinful you are, and how much you need him as your Savior.

Class Time Directions

1. Take the longer nail and position it vertically in front of you with the nail pointing toward you. Then place a glue dot about two thirds up from the pointed end.
2. Take the shorter nail and press it onto the glue dot to form a cross.
3. Lay out the string horizontally in front of you, then place the cross over the center point of the string. Tie the string to the long nail just above the short nail with a single overhand knot pulled tight.
4. Gently pull the 2 strands straight down over the short nail and pinch them together behind the long nail as you flip the cross over. Tie another single overhand knot pulled tight, then turn the cross over again.
5. Now, crisscross the strands one at a time (bottom to top) around the center of the cross two times, keeping the string as tight as possible. Then tie a double knot behind the longer nail, just above the shorter nail.
6. Now, finish your necklace by tying the two ends together. If the strands are too long, shorten them with scissors.

Super Simple Idea

Try the following Oriental Trading Company craft kit. (Call 1 (800) 875-8480 or visit OrientalTrading.com.)

Note that this is available at the time of printing and may not be available later.

- Nail Cross Necklace Craft Kit (Item Number: #48/3102)—Manufacturer does not recommend for children under eight years of age.

DAY 4 CRAFT

Spikes Cross Magnet

PRIMARY & PRE-PRIMARY

Materials

- ☐ 3-inch cut masonry nails, 1 per child
- ☐ 2½-inch cut masonry nails, 1 per child
- ☐ Corrugated cardboard, one 3 x 4-inch piece per child
- ☐ 1-inch disk magnets, 1 per child

Tools and Basic Supplies

- ☐ Glue dots
- ☐ Black fine-point permanent markers
- ☐ Brown watercolor markers

Tip Corner

A scroll saw or band saw works well for cutting corrugated cardboard (adults only).

Prep

Cut the corrugated cardboard into 3-inch wide by 4-inch high crosses for each child. The vertical uprights and horizontal cross pieces should be 1-inch wide.

Teaching Tie-In

Show the sample craft and say:

Today, we've been talking about Jesus' astonishing death and resurrection. It's also astonishing that he did it willingly. This was God's perfect plan to save sinners. He loves you, and he died willingly to pay the punishment for your sin. He knew from eternity past that this would be his mission and there would come a day he would die on a cross and then come back to life.

As you've learned about Jesus this week, I hope each of you has come to realize how great he is, how sinful you are, and how much you need him as your Savior.

Class Time Directions

1. Draw vertical and horizontal wood grain lines on the cardboard cross with a black permanent marker. Then color the entire cross with a brown marker.
2. Turn the cross over and attach a disk magnet to the center with a glue dot.
3. Flip the cross back over, then attach the shorter nail to the horizontal cross piece with 2 glue dots—one near each end.
4. Take the longer nail and attach it to the vertical upright with 2 glue dots—one near the pointed end and one where the two nails meet.

Super Simple Idea

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- 8¾-inch I Love Jesus, Jesus Loves Me Cross Foam Craft Kit (Item Number: #48/9261)—Manufacturer does not recommend for children under three years of age.

Download the patterns mentioned in this book from AnswersVBS.com/wonderresources.

DAY 4 CRAFT

Sunset Silhouette (v.1)

JUNIOR & PRIMARY

Materials

- ☐ Silhouette Crosses Pattern
- ☐ John 3:16 Verse Pattern
- ☐ Clear plastic jars, 4 oz., with black lid (Uline S-9934B-BL), 1 per child
- ☐ Cotton balls, 15 per child
- ☐ Clear labels, 1½ x 2¾-inch (Avery 94230), 1 per child
- ☐ Clear labels, 1 x 2⅝-inch (Avery 6521), 1 per child
- ☐ Empty water bottles with lids
- ☐ Acrylic paint in yellow, orange, red, and purple
- ☐ Craft sticks, 1 per child

Tools and Basic Supplies

- ☐ Paper towels

Prep

1. Fill a bottle with water, add several drops of paint, and shake to mix. Repeat with each color, then test on some cotton balls to make sure the colors aren't too weak. Make as many bottles of each color as you need.
2. Print the **SILHOUETTE CROSSES PATTERN** onto 1½ x 2¾-inch label sheets and cut apart.
3. Print the **JOHN 3:16 VERSE PATTERN** onto 1 x 2⅝-inch label sheets.

Tip Corner

- To save money, use 4-oz. baby food jars. Spray paint the lids to cover the brand label.
- Have extra cross and verse labels ready in case some get messed up.

Teaching Tie-In

Show the sample craft and say:

Today we've been talking about Jesus' astonishing death and resurrection. It's also astonishing that he did it willingly. This was God's perfect plan to save sinners. He loves you, and he died willingly to pay the penalty for your sin. He knew from eternity past that this would be his mission and there would come a day he would die on a cross and then come back to life.

As you've learned about Jesus this week, I hope you have come to realize how great he is, how sinful you are, and how much you need him as your Savior.

Class Time Directions

1. Remove lid from jar and set aside.
2. Unravel 3 cotton balls and put them in the jar one at a time. Use the craft stick to press them down, making an even layer.
3. Add just enough (and no more) yellow water to saturate the cotton. Do not oversaturate!
4. Repeat steps 2 and 3 with orange, then red, and then purple.

5. Add the last 3 cotton balls to the top to hold everything in place. Then screw the lid on tightly.
6. Make sure the outside of the jar is dry. Use a paper towel, if necessary. Then carefully add the crosses label to the front of the jar and the verse label to the back of the jar.
7. When you get home, open the jar to let the cotton dry for a few days so it doesn't mold. Then replace the lid.

Super Simple Idea

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- Southwest VBS Cross Sign Craft Kit (Item Number: #14104088)—Manufacturer does not recommend for children under three years of age.

DAY 4 CRAFT

SUNSET SILHOUETTE (v.2)

PRE-PRIMARY

MATERIALS

- ☐ John 3:16 Verse Pattern
- ☐ Black card stock, 1 sheet per 4 children (bases) and 1 sheet per 44 children (crosses)
- ☐ Construction paper in yellow, orange, red, blue, and purple, 1 sheet of each color per 18 children
- ☐ White copy paper, 1 sheet per 40 children

TOOLS AND BASIC SUPPLIES

- ☐ Office paper cutter
- ☐ Scissors
- ☐ Glue sticks
- ☐ Sandwich-size zippered bags, 1 per child

PREP

1. For bases, use an office paper cutter to cut black card stock sheets into quarters.
2. For crosses, cut black card stock into 4¼ x ½-inch strips. Then cut each strip into 2 pieces—2¾ inches long and 1½ inches long.
3. Cut the construction paper into 5½ x 1-inch strips. About 18 strips per sheet.
4. Take one strip of each color (yellow, orange, red, blue, purple) to make separate stacks. Hold each stack firmly and use scissors to cut a gentle wave along one side only. Leave the other side straight.
5. Print the **JOHN 3:16 VERSE PATTERN** onto white copy paper and cut out labels.
6. Place a black card stock rectangle, a John 3:16 verse label, two cross pieces (shorter and longer), and a stack of colored papers into a zippered bag for each child.

TIP CORNER

Baby wipes (cut in half) work well for removing glue from sticky fingers.

TEACHING TIE-IN

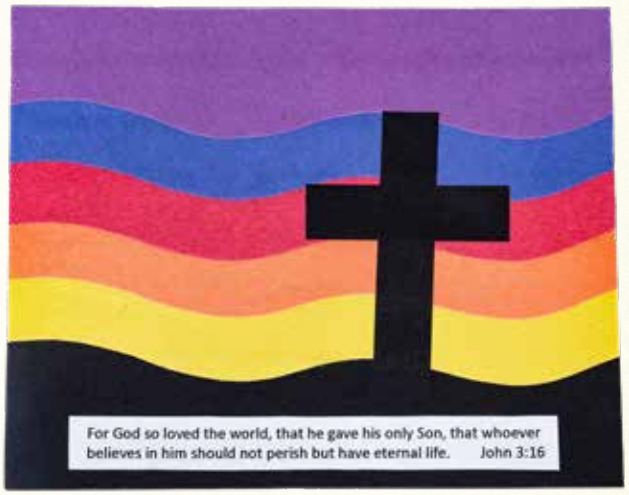
Show the sample craft and say:

Today, we've been talking about Jesus' astonishing death and resurrection. It's also astonishing that he did it willingly. This was God's perfect plan to save sinners. He loves you, and he died willingly to pay the punishment for your sin. He knew from eternity past that this would be his mission and there would come a day he would die on a cross and then come back to life.

As you've learned about Jesus this week, I hope you have come to realize how great he is, how sinful you are, and how much you need him as your Savior.

CLASS TIME DIRECTIONS

1. Empty the contents of the bag, then place the large black rectangle in front of you, positioned horizontally, or sideways.
2. Take the yellow strip and place it on the black rectangle, with the wavy side toward the bottom, about one inch up from the bottom. Then glue it into place, making sure the side edges are lined up.



3. Take the orange strip (wavy side down) and place it above the yellow strip, overlapping so about one-half inch of the yellow shows. Then glue it into place, making sure the side edges are lined up.
4. Repeat Step 3 with red, then blue, and then purple. If any black remains above the purple, simply trim it off with scissors.
5. Use the 2 black strips to make a cross. Take the longer strip and place it vertically (up and down) anywhere in the black area about one-half inch from the bottom. Glue it into place. Then take the shorter strip and glue it over the longer strip to form a cross.
6. Finally, glue the John 3:16 verse label to the black area below the cross.

Super Simple Idea

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- Southwest VBS Cross Sign Craft Kit (Item Number: #14104088)—Manufacturer does not recommend for children under three years of age.

DAY 5 CRAFT

Money Pouch (v.1)

JUNIOR & PRIMARY

Materials

- ☐ Drawstring Hole Guide Pattern
- ☐ Brown felt, 1 mm rolls or 9 x 12-inch sheets, cut into 8½-inch circles, 1 per child
- ☐ Black waxed cording, 2 mm, cut into 24-inch lengths, 2 per child
- ☐ Pony beads, 12 per child

Tools and Basic Supplies

- ☐ Fabric scissors
- ☐ Black Sharpies
- ☐ Scissors
- ☐ Masking tape
- ☐ Poster board

Prep

1. Make an 8½-inch circle template on poster board. Use the template to draw circles on the brown felt, then cut the circles out.
2. Print the **DRAWSTRING HOLE GUIDE.** Then center the guide on each felt circle and mark the location for each hole with a black Sharpie.
3. Make holes for the drawstrings by pinching the felt between your fingers at each black dot and use scissors to make a small slit. The slits should be made parallel to the edge of the fabric.
4. Cut the black cording into 24-inch pieces. Tie a knot approximately 3 inches from each end. Wrap one end of each piece with masking tape.

Tip Corner

- For younger kids, use only one drawstring.
- A piece of masking tape on the inside of the pouch works well as a name tag.

Teaching Tie-In

Show the sample craft and say:

Today, we've been talking about the parable of the talents and the importance of using our time and money and talents wisely for God. Can you think of something you're good at? Pause. Now think of a way you can use that ability for God. Anyone want to share what they thought of? Take responses.

We're making an Old West money pouch today to remind us of the importance of using everything God's given us—time, talents, money—for his glory. He made you and gave you everything you have, after all! You can show your thanks by using everything you have for him.

Class Time Directions

1. Begin weaving the taped end of one of the drawstrings (black cord) through each hole, starting from outside (under) the circle, until you have made it completely around the fleece circle.
2. Follow the same weaving path with the other drawstring, but begin and end at the opposite side of the circle. Both drawstrings should be going under and over together.
3. Remove the masking tape, then grab the ends of each drawstring and pull tightly to close your money pouch. Adjust the strings until they are all an even length.
4. To decorate the drawstrings, thread 3 pony beads onto each string and push them down to the knot. Then tie another knot against the other side of the 3 beads so they won't slide off.
5. Finish each drawstring by tying one more knot at the end.

Super Simple Idea

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- Life of Christ Banner Craft Kit (Item Number: #13629196)—Manufacturer does not recommend for children under three years of age.

DAY 5 CRAFT

Money Pouch (v.2)

PRE-PRIMARY

Materials

- ☐ 9-inch brown kraft paper plates, 1½ plates per child
- ☐ Assorted buttons, 1 per child
- ☐ Adhesive Velcro dots, 1 per child
- ☐ Brown yarn, 30-inch lengths, 1 per child

Tools and Basic Supplies

- ☐ Office paper cutter
- ☐ Scissors
- ☐ Glue dots
- ☐ Stapler
- ☐ ¼-inch hole punch
- ☐ Earth-toned crayons (brown, tan, etc.)
- ☐ Optional: craft glue

Prep

1. Cut some of the paper plates in half.
2. Cut yarn into 30-inch lengths.

Tip Corner

For a better seal, you may want to add a bead of craft glue before stapling.

Teaching Tie-In

Show the sample craft and say:

Today, we've been talking about the parable of the talents and the importance of wisely using our time, money, and talents for God. Think of something you're good at. Pause. Now think of a way to use that ability for God. What did you think of? Take responses. We're making an Old West money pouch today to remind us of the importance of using everything God's given us for his glory. He made you and gave you everything you have! You can show your thanks by using everything for him.

Class Time Directions

1. Use the crayons to color the backs of a half plate and a whole plate.
2. With colored sides out, lay the half plate on top of the whole plate to create a pocket. Staple them together along the rounded edge.
3. Fold the full plate down over the half plate. Crease it about a ½ inch above the top edge of the half plate.
4. Attach the Velcro dot under the flap, then add a button on the outside of the flap with a glue dot.
5. Punch a hole on each side under the flap. Thread the yarn through both holes, then tie the ends together.

Super Simple Idea

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- Life of Christ Banner Craft Kit (Item Number: #13629196)—Manufacturer does not recommend for children under three years of age.

DAY 5 CRAFT

WONDER JUNCTION BANK

JUNIOR, PRIMARY & PRE-PRIMARY

MATERIALS

- ☐ Door and Windows Pattern
- ☐ Roof and Awning Pattern
- ☐ Matthew 6:19–21 Verse Pattern
- ☐ Square tissues boxes, 1 per child
- ☐ Tan spray paint, amount varies
- ☐ Corrugated cardboard, 7 x 4⅜-inch pieces, 1 per child
- ☐ Corrugated cardboard, 5½ x 4⅜-inch pieces, 1 per child
- ☐ Brown card stock, 1 sheet per 2 children
- ☐ Yellow copy paper, 1 sheet per 3 children
- ☐ White copy paper, 1 sheet per 22 children

TOOLS AND BASIC SUPPLIES

- ☐ Office paper cutter
- ☐ Scissors
- ☐ Glue sticks
- ☐ Glue dots

PREP

1. Spray paint the tissue boxes on all sides except the bottom.
2. Cut the corrugated cardboard into 7 x 4⅜-inch and 5½ x 4⅜-inch pieces.
3. Print the **DOOR AND WINDOWS PATTERN** onto yellow copy paper and rough cut each set. The kids can finish cutting.
4. Print the **ROOF AND AWNING PATTERN** onto brown card stock and rough cut each set.
5. Print the **MATTHEW 6:19–21 VERSE PATTERN** onto white copy paper and cut apart.

TIP CORNER

- For younger kids, attach the 2 cardboard pieces and do all cutting beforehand.
- Use a straight edge/ruler to make the straight folds.

TEACHING TIE-IN

Show the sample craft and say:

The bank was a mighty important building in the Old West. Some people worked hard and made lots of money running businesses in those western towns. And they kept all the money they made in the bank.

Today, you're making your own bank where you can keep your money. It's a good reminder of what we talked about today—wisely using our time, our talents, and our resources (including our money) for God!

CLASS TIME DIRECTIONS

1. Attach the smaller piece of cardboard to the bottom of the box with glue dots so that 3 sides are flush with the box and 1 side sticks out, forming a "boardwalk" for the front of your bank building.

2. Attach the larger piece of cardboard to the front of the box with glue dots so that it rests on top of the boardwalk and creates a storefront for your bank building.
3. Cut out the yellow doors and windows. Then glue the door and one window to the front of the bank and a window on each side (not the back).
4. Cut out the brown cornice (the long roof decoration). Then glue it along the top edge of the storefront.
5. Cut out the awning (the roof over the door). Make a careful straight fold along the dark line, apply the glue stick to the tab only and attach it above the door.
6. Cut out the Wonder Junction Bank sign and glue it to the storefront in the space between the awning and cornice.
7. Cut out the roof. Then make a careful straight fold along the dark line, apply the glue stick to the tab only and attach it to the back of the storefront so the roof covers the hole.
8. Glue the Matthew verse to the back of the storefront above the roof tab.

Super Simple Idea

Try the following Oriental Trading Company craft kit. To order, call 1 (800) 875-8480 or visit OrientalTrading.com.

Note that this is available at the time of printing and may not be available later.

- Color Your Own Cheerful Giver Offering Banks—12 pc. (Item #: 13742634)

ANY DAY MORE CRAFTS FOR ALL AGES

Letter Stamping & Calligraphy

Materials

- ☐ Calligraphy-style Alphabet Pattern
- ☐ Rubber letter and number stamps
- ☐ Washable stamp pads
- ☐ White copy paper
- ☐ Pens

Tools and Basic Supplies

- ☐ Markers
- ☐ Wet wipes for cleanup

Prep

Make some calligraphy samples by printing the **CALLIGRAPHY-STYLE ALPHABET PATTERN** onto white copy paper.

Class Time Directions

1. Children have fun stamping and writing letters.
2. Explain that we can be thankful we have letters, because letters make words, and God used words to talk to us in the Bible.

Tip Corner

Use this area as a fun place for the kids to go after they've finished their main craft or science experiment.

Concentration

Materials

- ☐ Concentration Cards Pattern
- ☐ White or yellow card stock, 2 sheets per child
- ☐ Snack-size zippered baggies, 1 per child

Tools and Basic Supplies

- ☐ Office paper cutter
- ☐ Crayons or colored pencils

Prep

1. Print the **CONCENTRATION CARDS PATTERN** onto card stock, 2 sheets per child.
2. Cut out the squares with the paper cutter.
3. Place the squares into zippered baggies. You should have 12 sets of pictures (24 squares) per baggie.

Class Time Directions

1. Color the pictures with light-colored crayons or colored pencils, being careful not to press too hard so an impression isn't made on the blank side.
2. To play, lay the squares out on a table with the pictures facing down.
3. Take turns flipping cards over two at a time, trying to find a match. If a match is found, the player keeps those cards. If a match is not found, flip them back over.
4. Continue playing until all matches have been found. The player with the most matches wins.

Tip Corner

- Use fewer sets of pictures for younger children.
- This game can also be played by one person, finding all matches in a designated time period.

Download the patterns mentioned in this book from AnswersVBS.com/wonderresources.

Memory Verse Posters

Materials

- ☐ Daily Memory Verses
- ☐ White card stock

Tools and Basic Supplies

- ☐ Markers

Prep

1. Print a reference sheet of the **DAILY MEMORY VERSES** from the Digital Resources.
2. Make one or more sample posters as examples of incorporating a memory verse into a design.

Class Time Directions

Design and color your own posters. The more creative, the better!

Tip Corner

- Place these in a prominent location during the week for all to enjoy. Send them home on the last day of VBS or after the closing program.
- Use these posters to reinforce the memory verse of the day.

Step-by-Step Drawings

Materials

- ☐ Step-by-Step Drawings Pattern
- ☐ White copy paper

Tools and Basic Supplies

- ☐ Markers, crayons, or colored pencils

Prep

Print the **STEP-BY-STEP DRAWINGS PATTERN** onto white copy paper.

Class Time Directions

Provide extra copy paper for kids to practice drawing when they have extra time.

Tip Corner

The finished drawings can be cut out and added to the Wall Mural. (See below.)

Wall Mural

Materials

- ☐ Blue roll paper for a sky background
- ☐ Variety of colored copy paper
- ☐ Optional: a variety of Clip Art Images

Tools and Basic Supplies

- ☐ Markers, scissors, glue sticks

Prep

1. Hang a large piece of roll paper on an empty wall.
2. Print a variety of **CLIP ART IMAGES** from the Digital Resources and place at this station.

Class Time Directions

1. Use your imagination or the clip art images to draw and color an image that matches the theme for the day.
2. Cut out the artwork and glue it to the roll paper.

Tip Corner

Hang the completed mural in a prominent location on the last day of VBS or show it during the closing program for all to see.

Experiments Supply List

Day 1: Star of Wonder
- ☐ Rotational Axis of Earth Illustration
- ☐ 10 or more 4-inch star cutouts
- ☐ Painter's tape or other wall adhesive
- ☐ 1 large, 20-inch, yellow ball or balloon
- ☐ Small globes or earth balls, 1 per person
- ☐ 1 globe for demonstration
- ☐ Optional: star cutouts or glow-in-the-dark stars, 1 per person to take home

Day 1: Cone in a Cornfield
- ☐ Paricutin Photo
- ☐ Map of Mexico Volcanoes
- ☐ Cinder Cone Volcano Collage
- ☐ Cinder Cone Volcano Formation
- ☐ Pie plate
- ☐ Zippered plastic bag of sand
- ☐ Scissors
- ☐ YouTube.com/answersvbs video experiment with ammonium dichromate
- ☐ Device to play video

Day 2: Lasso Lesson
- ☐ Cowboy Illustration
- ☐ Vaquero Illustration
- ☐ Parts of a Lasso Illustration
- ☐ Paracord (4 mm) in 1-yard (1 m) lengths, 1 per person
- ☐ Water bottles, 1 per 1–3 people
- ☐ 1 authentic lasso/rope

Day 2: Layers upon Layers
- ☐ Grand Canyon Photo
- ☐ Types of Rocks Collage
- ☐ Grand Canyon Layers
- ☐ Colorado Plateau
- ☐ Grand Canyon Fossils
- ☐ Canyon Lake Gorge
- ☐ Rock Formations
- ☐ Painter's tape to hang pictures on the walls
- ☐ Jolly Ranchers, 2 different colors per person
- ☐ 1-oz. portion cups, 2 per person
- ☐ Paper plates, 2 per person
- ☐ Plastic spoons, 1 per person
- ☐ Hammers (or other hard items to smash the hard candies—even a rock), 1 per person

Day 3: Weather the Storm
- ☐ Water Cycle Illustration
- ☐ Lightning Diagram
- ☐ Wind Diagram
- ☐ 1 electric kettle or other means to boil water
- ☐ 1 clear, heat-safe measuring cup of ice water
- ☐ Blue food coloring
- ☐ Optional: 1 cylindrical object (paper towel tube, can, jar, water bottle)
- ☐ 1 large glass pitcher of ice water for each table
- ☐ 2 x 2-inch paper tissues, 1 per person
- ☐ Inflated balloons, 1 per person

Day 3: Power Play
- ☐ Victoria Falls Picture
- ☐ Old West Windmill
- ☐ Wind Turbine
- ☐ Pinwheels, 1 per person
- ☐ 1 waterwheel model for demonstration (possibly in a clear bin with a bucket of water to use to move the wheel)
- ☐ 1 empty gallon jug

Day 4: Riding the Rails
- ☐ Transcontinental Railroad Map
- ☐ Sharp Turn Picture
- ☐ Wheels on Left-Hand Curved Track Picture
- ☐ 1-inch tapered caps (Caplugs T-249-2 T Series) or plugs, 4 per station or per person
- ☐ 1-inch PVC pipe (inside diameter ¾-inch) or other 1-inch straight, rigid tubing, 1½-inch pieces, 2 per station or per person
- ☐ 1-inch PVC pipe (or other tubing), 3½-inch pieces, 1 per station or per person
- ☐ Glue
- ☐ G-gauge model train track (straight and curved), per station or per person
- ☐ Blocks, books, or small boxes to elevate one side of each piece of track so wheels roll downward
- ☐ Electrical tape

Day 4: Pushy Plates
- ☐ Layers of the Earth Image
- ☐ Plate Tectonics Map
- ☐ Mount Everest Photo
- ☐ Mandarin oranges, 1/2 per person
- ☐ Paper towels or napkins, 1 per person
- ☐ Paper plates, 1 per person

Day 5: Spread the Word
- ☐ Telegraph Picture
- ☐ Morse Code Papers, 1 per person
- ☐ Pens or pencils, 1 per person
- ☐ 1 small flag of any kind
- ☐ 12-oz. paper cups, 2 per person
- ☐ Cotton twine in 5-feet lengths, 1 per person
- ☐ Medium paper clips, 2 per person
- ☐ 1 Slinky toy or similar spring toy for demonstration
- ☐ Optional: spring toys for students to use or take home
- ☐ 1 nail with the same diameter as your twine, for prep

Day 5: Marvelous Magnetism
- ☐ Aurora Borealis Photo
- ☐ NASA Sun Earth Illustration
- ☐ Hard plastic petri dishes, 1 per station or per person
- ☐ Iron filings, 1 teaspoon per station or per person
- ☐ Bar magnets, 1 per station or per person
- ☐ Half sheets of white paper, 1 per station
- ☐ Tape to stick the magnet to each station
- ☐ 1 compass per station

Download the patterns mentioned in this book from AnswersVBS.com/wonderresources.

Crafts Supply List

Day 1: Christmas Crèche
- ☐ Lamb Face Pattern
- ☐ O Come, Let Us Adore Him Label Pattern
- ☐ Uline (S-18146) Kraft (brown) 4 x 4 x 1 mailer boxes, 1 per child
- ☐ Dark blue card stock, 4 x 4-inch pieces, 1 per child
- ☐ White card stock, 1 sheet per 39 children
- ☐ Black card stock, ½-inch circles, 2 per child (150+ per sheet)
- ☐ Brown card stock, 1 sheet per 35 children
- ☐ Red copy paper, 1 sheet per 39 children
- ☐ Beige linen cloth, 2 x 2-inch pieces, 2 per child
- ☐ Unfinished wood peg dolls, 2⅜ x ⅞-inch, 1 per child
- ☐ Unfinished wood peg dolls, 2 x ¾-inch, 1 per child
- ☐ Unfinished split wood balls, ½-inch, 1 per child
- ☐ White pom-poms, 1-inch, 2 per child
- ☐ Brown chenille stems, 1 per 2 children
- ☐ Large gold star stickers, 1 per child

Day 1: Ticket to Ride Ornament
- ☐ Wonder Junction Ticket Pattern
- ☐ Wood craft sticks, 4½-inch, 2 per child
- ☐ Mini craft sticks, 2½-inch, 4 per child
- ☐ Silver or gold paper drinking straws, 1 per 2 children
- ☐ Tan card stock, 1 sheet per 15 children (If printing in sepia, use white card stock.)
- ☐ 20-gauge copper wire, 12 inches per child (Use chenille stems for younger children.)

Day 2: Covered Wagon Conversations
- ☐ Wheel and Seat Pattern
- ☐ Wagon Cover Pattern
- ☐ Questions Pattern
- ☐ 1 x 2 wood boards, 3-inch pieces, 1 per child
- ☐ Tan card stock, 1 sheet per 4 children
- ☐ Ivory card stock, 1 sheet per 3 children
- ☐ Colored card stock, 1 sheet per child

Day 2: Mini Horseshoes Game
- ☐ Mini Horseshoes Game Cover and Directions Pattern
- ☐ Clear plastic deli containers, 8 oz., with lids, 1 per child
- ☐ Colored card stock, 1 sheet per 2 children
- ☐ 1½-inch #8 flathead machine screws, 1 per child
- ☐ Brown self-adhesive craft foam circles, 3¾-inch diameter, 1 per child
- ☐ Black chenille stems, 4 per child
- ☐ Orange chenille stems, 2 per child
- ☐ Blue chenille stems, 2 per child
- ☐ Drinking straws, 1 per 2 children

Day 3: Praise Journal
- ☐ Corrugated cardboard sheets, 4 x 6 inches, 1 per child
- ☐ Brown kraft card stock sheets, 8½ x 11-inch (110 lb/300 gsm), 1 sheet per 4 children
- ☐ Masking tape
- ☐ White copy paper, 2 sheets per child
- ☐ Jute twine, 15 inches per child
- ☐ Brown acrylic craft paint

Day 3: Names of Jesus Print
- ☐ Names of Jesus Pattern
- ☐ White copy paper, 1 sheet per child
- ☐ Instant coffee
- ☐ Paper towels, 2 per child

Day 4: Spikes Cross Necklace
- ☐ 2½-inch cut masonry nails, 1 per child
- ☐ 1½-inch cut masonry nails, 1 per child
- ☐ Jute twine, 40 inches per child

Day 4: Spikes Cross Magnet
- ☐ 3-inch cut masonry nails, 1 per child
- ☐ 2½-inch cut masonry nails, 1 per child
- ☐ Corrugated cardboard, 3 x 4-inch pieces, 1 per child
- ☐ 1-inch disk magnets, 1 per child

Day 4: Sunset Silhouette (V.1)
- ☐ Silhouette Crosses Pattern
- ☐ John 3:16 Verse Pattern
- ☐ Clear plastic jars, 4 oz., with black lid (Uline S-9934B-BL), 1 per child
- ☐ Cotton balls, 15 per child
- ☐ Clear labels, 1½ x 2¾-inch (Avery 94230), 1 per child
- ☐ Clear labels, 1 x 2⅝-inch (Avery 6521), 1 per child
- ☐ Empty water bottles with lids
- ☐ Acrylic paint in yellow, orange, red, and purple
- ☐ Craft sticks, 1 per child

Day 4: Sunset Silhouette (V.2)
- ☐ John 3:16 Verse Pattern
- ☐ Black card stock, 1 sheet per 4 children (bases) and 1 sheet per 44 children (crosses)
- ☐ Construction paper in yellow, orange, red, blue, and purple, 1 sheet of each color per 18 children
- ☐ White copy paper, 1 sheet per 40 children

Day 5: Money Pouch (V.1)
- ☐ Drawstring Hole Guide Pattern
- ☐ Brown felt, 1 mm rolls or 9 x 12-inch sheets, cut into 8½-inch circles, 1 per child
- ☐ Black waxed cording, 2 mm, cut into 24-inch lengths, 2 per child
- ☐ Pony beads, 12 per child

Day 5: Money Pouch (V.2)
- ☐ 9-inch brown kraft paper plates, 1½ plates per child
- ☐ Assorted buttons, 1 per child
- ☐ Adhesive Velcro dots, 1 per child
- ☐ Brown yarn, 30-inch lengths, 1 per child

Day 5: Wonder Junction Bank
- ☐ Door and Windows Pattern
- ☐ Roof and Awning Pattern
- ☐ Matthew 6:19–21 Verse Pattern
- ☐ Square tissue boxes, 1 per child
- ☐ Tan spray paint, amount varies
- ☐ Corrugated cardboard, 7 x 4⅜-inch pieces, 1 per child
- ☐ Corrugated cardboard, 5½ x 4⅜-inch pieces, 1 per child
- ☐ Brown card stock, 1 sheet per 2 children
- ☐ Yellow copy paper, 1 sheet per 3 children
- ☐ White copy paper, 1 sheet per 22 children

Tools and Basic Supplies
- ☐ Office paper cutter
- ☐ ¼-inch, ½-inch, and 1¼-inch hole punches
- ☐ Scissors & kids' scissors
- ☐ Stapler
- ☐ Glue sticks
- ☐ Glue dots
- ☐ Craft glue
- ☐ Transparent tape and masking tape
- ☐ Earth-tone crayons (brown, tan, etc.)
- ☐ Black fine-point permanent markers
- ☐ Colored markers
- ☐ Brown wide-point watercolor markers
- ☐ White acrylic paint
- ☐ Small foam paintbrushes
- ☐ Styrofoam bowls and plates
- ☐ Baby wipes
- ☐ Toothpicks
- ☐ Paper towels
- ☐ Zippered baggies (snack, sandwich, qt., gal.)
- ☐ Small basins (for water)
- ☐ Spoons
- ☐ Wire cutters
- ☐ Scratch awl
- ☐ Hair dryers (optional)
- ☐ Poster board

Check inside for supplies needed for the extra crafts and toddler crafts.

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