



# SESSION 1

## Bible Story

### The Creation Story

Genesis 1:1–2:9

## Pathfinder

Arise! Shine with Love

## Materials

- ☉ Black posterboard
- ☉ Laundry soap
- ☉ White poster paint
- ☉ Shallow containers
- ☉ Several 3" paintbrushes
- ☉ Crayons (including white crayons)
- ☉ Markers
- ☉ Highlighters
- ☉ Glow-in-the-dark markers (if available)
- ☉ Copy paper
- ☉ Construction paper (variety of colors)
- ☉ Hand-held ultraviolet lights

**Note:** The Session 5 experiment “Capillary Actions and Reactions” calls for advance preparation. Review this experiment for potential inclusion in your Session 1 setup.

# Take a Look at Invisible Light!

## Discovery Experiment

### I. Preparation

Mix equal amounts of laundry soap and white poster paint in a shallow container. Dip the paintbrush in the mixture. Shake the paintbrush one time to remove excess paint. Hold the paintbrush over the posterboard. Skim your finger across the bristles to create a starry pattern on the posterboard.

### II. Observation

Hold up the starry poster you created earlier.

**ASK: When we talk about the beginning of the universe, what do you think about?**

**SAY SOMETHING LIKE: One of the most interesting things that we hear about in Genesis 1 is how God made light!**

**ASK: What is light?**

**SAY SOMETHING LIKE: We usually think of light as something we can see. But some light is actually invisible. Let’s do an experiment to show what I mean.**

### III. Question & Hypothesis

Turn the room lights off. Shine an ultraviolet light on the poster.

**ASK: Why do you think these stars are shining more brightly now?**

### IV. Experiment

**Step 1:** Allow the Explorers to select different writing instruments and different papers. Invite them to prepare three different papers. For example, highlighter on white construction paper, white crayon on black construction paper, and so forth. Encourage the Explorers to choose different combinations of materials from one another. That way, the whole group will see more differences between materials.

**Step 2:** On each paper, ask the Explorers to create a picture or design. Some possibilities include writing the words: God said, “Let there be light!” Explorers could also draw pictures from creation. For example, different kinds of animals, planets, stars, the moon, and so forth. Ask the Explorers to put their names on each paper they create.

**Step 3:** Encourage the Explorers to make predictions about which materials will glow most brightly. Invite them to arrange their papers in order from what they predict will glow the most to what they predict will glow the least. (step 3 not pictured)

**Step 4:** Have the Explorers use the hand-held ultraviolet lights to test their pictures. Were their predictions correct? Invite them to change the order of their papers based on their observations. Finally, invite the whole group to put all of the papers into three groups: glows the most, glows a little, doesn’t glow much at all.



## V. Analyze & Apply

SAY SOMETHING LIKE: **Ultraviolet light is invisible. Some things shine very brightly under ultraviolet light. Some of the materials (crayons, markers) we used have something in them called “phosphors.”**

Have the Explorers repeat the word: “phosphors.”

SAY SOMETHING LIKE: **Phosphors soak up light. When we turned off the lights and used the ultraviolet lights, we energized that light stored in the materials. That made our papers glow in beautiful ways!**

ASK: **When God made the universe and our world, what did God make?**

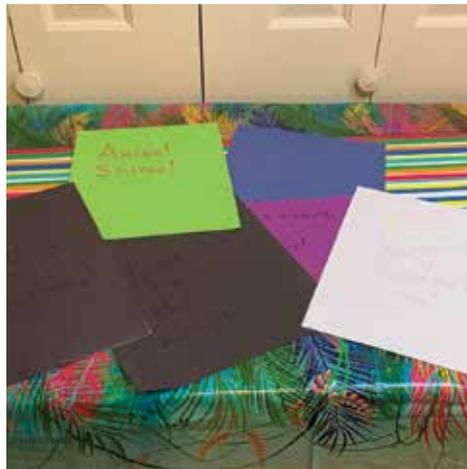
Invite the Explorers to share different things made by God in creation.

SAY SOMETHING LIKE: **We can’t see God, but we can know a lot about God by looking at the world God made. We can shine God’s Light of Love on all creation!**

Step 1



Step 2



Step 4





## Bible Story

### The Creation Story

Genesis 1:1–2:9

## Pathfinder

Arise! Shine with Love

## Materials

- 🌀 Create-a-Compass Kit
- 🌀 Tacky glue
- 🌀 Markers or crayons

**Note:** The Session 5 experiment “Capillary Actions and Reactions” calls for advance preparation. Review this experiment for potential inclusion in your Session 1 setup.

# Create-a-Compass\*

## Adventure Experiment

### I. Preparation

Gather materials for this experiment from the **Create-a-Compass Kit**. Make one example compass to show Explorers. For each Explorer, make sure to have one compass, one cardboard circle, and one string.

### II. Observation

**ASK: What are some tools we could use to find our way around Adventure Island?**

Hold up an example of the compass Explorers will create.

**ASK: Does anyone know what this is? How does it work?**

**SAY: Today we are going to create a compass to find our way around Adventure Island. Let’s look at the directions our compass shows.**

Show the cardinal directions—North, South, East, and West—to your Explorers. You may also choose to show intercardinal directions—Northeast, Southeast, Southwest, and Northwest—as well.

### III. Question & Hypothesis

**ASK: How can we use a compass to find our way around Adventure Island?**

### IV. Experiment

**Step 1:** Distribute the cardboard circles for each Explorer, as well as markers or crayons.

Direct Explorers to decorate their cardboard circles. Note that the center will be covered by the compass, and that space needs to be reserved for directional markers N, E, S, and W. (Tip: Draw the ‘N’ directional marker opposite the punched hole in the cardboard so that compass may be used while hanging around Explorer’s neck.)

**Step 2:** Put a small amount of tacky glue in the middle of the cardboard circle and place the plastic compass onto the glue.

**Step 3:** Put the string through the punched hole in the cardboard circle and tie it. Make the resulting string long enough for Explorers to comfortably wear around their necks and so as not to be a choking hazard.

\*Purchased item from Cokesbury

## V. Analyze & Apply

SAY SOMETHING LIKE: **The red side of the arrow on your compass will always point north. Your compass won't be correct until the red arrow points to the 'N' that you have drawn. You may need to spin slowly until the red arrow points to the 'N' before you can read your compass.**

Have the Explorers move so that their red compass arrows all point to 'N'.

Ask: **What do you see to the North? to the South? to the East? to the West?**

SAY SOMETHING LIKE: **The red arrow on your compass always points North because it is aligned with the Earth's magnetic field. If you have your compass near a strong magnet, however, the red arrow will point to the magnet.**

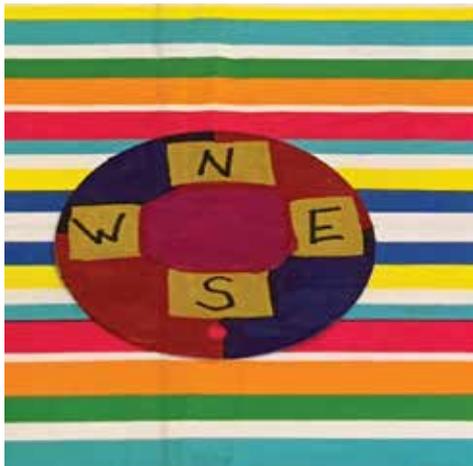
**But when no strong magnets are nearby, it will point North.**

Demonstrate the effects of having a strong magnet nearby using the lodestone included in the **Create-a-Compass Kit**.

SAY SOMETHING LIKE: **Everywhere we go, we experience God's creation. And everywhere we go, we can find ways to shine God's Light of Love. What are some ways you can show God's love to people? What are some ways you can show God's love to other parts of creation?**

If you have time, lead Explorers in activities using their compasses. For example, play a version of "Simon Says" using compass bearings in your commands (e.g. "Simon says move 3 steps west").

Step 1



Step 2



Step 3

