



Skip into Science

Day 1

Materials Needed:

- pH [strips](#)
- Ph [Scale for kids](#)
- Jars or glasses of red/ purple liquids: wine, grape juice, cranberry juice, koolaid, gatorade, water with red food coloring, tomato juice
- Jar or glass of water

Set Up:

On a table, set up the liquids and label them. Have the ph chart handy.

What to do:

Introduce it!

- **Say:** Welcome everyone to Skip into Science and Story! To get started, read the Bible story about Jesus turning Water into Wine using the Spark Story Bible found on page 410.
- **Ask:** Where was Jesus? (a wedding) What happened at the wedding? (they ran out of wine) What did Jesus do? (he turned water into wine)

Get to it! [game, service, experiment instructions]

Say: Today in our Bible story, we learned that Jesus turned water into wine! What a miracle that must have been. For our experiment, we are going to check the PH on different purple and red liquids. Let's get started!

1. What is pH? Check out this [here](#) for a good explanation. Most liquids are either what we call an acid (like lemon juice or stomach acid) or bases (like hair dye).
2. What is the pH scale? Scientists use a pH scale to measure whether a liquid is more acidic or basic. Using a piece of litmus paper, the results will be somewhere on the scale of 1-14. If a liquid is from 0-7, it's an acid, or if a liquid is from 7 to 14, it's a base. Some liquid like pure water can be a 7, and that is neutral, neither an acid or a base.

3. Say: Today we have some purple or red liquids to test whether the liquid is more acidic or basic. Before we test each liquid, we will create a hypothesis for each.
4. Start with water. Since we will be using tap water, it might not be a perfect 7 but should be close.
5. Review what is in each jar/ glass, and before you test ask kids whether they think it is more acidic or basic.
6. At the end of testing, review what is the most acidic or basic to see if the hypothesis were correct.

Debrief it!

- **Huddle Questions:** What liquid surprised you the most in the pH test? Why? Jesus changed the water into wine, and it was a miracle? How might Jesus change you? In what ways? Would it be a miracle, too?
- **Bible Buddy:** Frankie was once a tadpole, that changed into a frog! Just like water into wine! Frankie will help remind us that Jesus can change the world and us, too! (Pass out Bible Buddy)
- **Practice the Bible Point**
Leader says: Jesus changes me!
Kids say: Thank you, Jesus!

Pray it out!

In a large circle, stand up, and say: Frankie Frog, our Bible buddy for today, reminds up that Jesus can change the world, and that makes us jump for joy! So to pray, we are going to squat down, and pray. When we say "Amen!" jump up! Let's pray:

Dear God, thank you for sending Jesus who can change the world, one person at a time, and even me! Thank you, Jesus! Amen.