## **STEM ACTIVITY** King Solomon

Total Time: 15 minutes In Class Time: 10 minutes

## You will need:

- Two cups
- Egg
- Water
- Table salt
- Spoon
- Hand towel (for cleanup)



**STEP 1:** Fill two cups to three-quarters full with water. In one cup, stir in three heaping table-spoons of table salt. Add nothing to the other. Remember which is which!

**STEP 2:** Gather the children. TEACH: Chris had to use wisdom to solve the mystery of his father's missing invention, like Solomon did to find out which woman was the baby's mother. Now we have a mystery to solve.

**STEP 3:** Place the egg carefully into the cup of plain water. It sinks.

**STEP 4**: Fish out the egg with the spoon and dry it off with a hand towel. Then drop it into the salt water. It floats.

**STEP 5:** Present the mystery: Why does the egg float in one cup, but not the other? Try to lead the kids through the process of discovering the answer, being as scientific as possible. If necessary, use the following questions:

- What causes something to float or rise to the top? (having less density)
- What is the difference between the two cups of water? (One is salty.)
- Does the saltiness change the density of the water? (Yes. Makes it denser.)

## **EXPLAINING THE SCIENCE:**

The more dense a substance is, the more it is affected by gravity. Because of this, less dense substances float in or rise above denser substances. In this case the egg is more dense than water, so it sinks. But the salt water is more dense than the egg, so the egg floats.