

# STEM ACTIVITY

## Naaman and the Servant Girl

Total Time: 15 minutes  
In Class Time: 10 minutes

### You will need:

- Clear drinking glass (about 12 oz/350 mL)
- Liquid bleach
- Cola soft drink



**STEP 1: TEACH:** Naaman had to wash in the Jordan River to be healed from leprosy. What we're going to do might remind you of that.

**STEP 2:** Pour some cola into the glass until the glass is half- or three-quarters full.

**STEP 3:** Pour bleach into the glass until it is full. The cola will lighten significantly

**STEP 4:** Stir the glass and let it sit for a few minutes as you discuss the results with the children. The cola will lighten more upon sitting. **DO NOT LEAVE THE GLASS UNATTENDED** (it will look a lot like a glass of water).

**STEP 5:** Pour the contents of the glass down the drain promptly when finished.

## EXPLAINING THE SCIENCE:

Atoms are the basic pieces of matter. They are like God's building blocks for every material in the world. Molecules are groups of atoms that come together to make a new material. Bleaches work by breaking down the parts of molecules that give a material its color. These colored parts of molecules are called chromophores. When we poured the bleach in the cola, it broke down the cola's chromophores, and caused it to lose its color.