# **Powered by Love (Ages 11-14)**

# **Materials Needed**

assorted round balloons; empty bottles with narrow necks, such as water bottles; small funnel; baking soda; vinegar; spoon; permanent marker

#### **Prepare in Advance**

Gather or purchase supplies. Try the experiment to discover the proportions of vinegar and baking soda that work best.

## New Church Concept Rock

"As a rock signified the Lord as to faith, and faith from the Lord, therefore wonderful things were done upon a rock, of which it is written in the book of Judges: The angel of Jehovah said to Gideon that he should take the flesh and the unleavened things, and put them upon the rock, and pour out the broth, and there went up fire out of the rock, and devoured the flesh and the unleavened things." Arcana Coelestia 8581.6. Have you felt inspired to do something you know is right? Perhaps you've been moved by a cause you're passionate about, or something calls you to jump in to make a difference in a way you are able to. The Lord is present in our minds through true ideas we've learned. His presence can inspire us with a love of acting on what we know to be good or right



and turning what we know into a positive action that makes a difference. This activity explores how connecting what we know with what we love results in action or use.

- 1. What true ideas do you know? How many can you think of?
- 2. The Lord is present with us through the true ideas we know. These ideas form our conscience—the voice we hear in our minds when we are thinking about whether or not to do something. Conscience tells us to do right actions and not to do wrong actions. Will knowing true ideas bring us closer to heaven if we do not act on them? Why or why not? (Knowing what's true will not change us unless we practice it. To become a heavenly person, we must do what we know is right when an opportunity comes up.)
- 3. The angel of the Lord appeared to Gideon while he was threshing wheat in the wine press. Gideon was hiding the wheat to keep it safe from the Midianites, who would have stolen it. Wheat means goodness. So this represents that Gideon loved what is good, as well as what is true. It is because of this that the angel of the Lord came to him and asked him to help Israel.
- 4. By doing what is right, true ideas become good and useful acts.
- 5. We're going to do an experiment that mixes two substances to create a new product. It illustrates how combining good loves (baking soda) with true ideas (vinegar) produces something new (carbon dioxide).
- 6. Pour vinegar into an empty bottle.
- 7. Use a permanent marker to draw a smiley face on a balloon.
- 8. Stretch the balloon as if you were preparing to blow it up. Using a funnel, put two teaspoons of baking soda into the balloon. Shake the baking soda down into the balloon.
- 9. Stretch the neck of the balloon tightly over the top of the bottle, holding the neck of the balloon so the baking powder does not go down into the bottle yet.

- 10. When you're ready for the reaction to begin, straighten the balloon and let the baking soda drop down into the vinegar. Swirl the bottle a few times and let it sit. Watch the balloon grow.
- 11. When gas production slows down, swirl the bottle to see if it picks up. The quantity of baking powder in the balloon will make a difference to the quantity of gas produced in the experiment. To produce more carbon dioxide, add more baking soda.
- 12. How is the vinegar like true ideas we know? (It just sits there—like ideas sit in our minds.)
- 13. What happened when the baking soda mixed with the vinegar? (There was a reaction—a change in the vinegar and baking soda that produced carbon dioxide.)
- 14. The baking soda in this experiment is like true ideas. What do you think the inflating balloon might picture? (Doing something useful that makes a positive difference.)





## New Church Concept Desire for Truth

"Those who desire to know truths, and to investigate them from the Word, are those who are in the spiritual affection of truth, and who love truth.... And those alone are in that affection who desire to live according to truths from the Word, thus according to the precepts of Lord." Apocalypse Explained 249:2



#### New Church Concept The Power of Angels

"Angels have absolutely no power on their own. All the power they have comes from the Lord. They are powers to the extent that they recognize this fact. Any of them who believe that their power comes from themselves immediately become so weak that they cannot resist even a single evil spirit. This is why angels take absolutely no credit to themselves and turn down any praise or admiration for anything they have done, but attribute it all to the Lord." *Heaven and Hell* 230