TRAINING MATERIAL

Ready, Set, Fizz

Materials

- 100 ml graduated tubes or cylinders (2)
- 50 ml cups or beakers (2)
- 2 effervescent antacid tablets
- Water
- *Optional:* food coloring

Notes to the presenter

Before beginning this activity fill the water jug. *Optional:* Use food coloring to dye the water and make it easier to see and more fun.

For each visitor group:

- Pour 20 ml of water into each cup.
- Break one tablet in half and place both pieces into one tube, then crush the other tablet into lots of little pieces and pour the powder into the tube.
- After the experiment, dump the contents of the tubes into a sink or waste container. It's best to let the tubes dry out between groups. Try giving them a good shake to remove excess water!

Safety

Supervision required. Do not eat or drink these materials. The antacid tablets contain medication.

Staff training resources

Video: *Ready, Set, Fizz,* vimeo.com/album/3636993

Credits and Rights

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Tips for leading hands-on science activities

Greet your guests
Say “hello,” make eye contact, and smile. People will come over if you look welcoming, available, and friendly.

Let them do the activity
As much as possible, let your guests do the hands-on parts of the activity, and let them discover what happens. (If your activity has a surprise, don’t give it away!)

Encourage exploration
Provide positive feedback and assistance when people need it, but let them experiment and learn for themselves. Don’t insist people do things the “right” way—sometimes learning how something doesn’t work is just as valuable as learning how it does work.

Ask questions
Help people observe and think about the activity. Try to use questions that have more than one answer, such as: “What do you see happening?” “Why do you think that happened?” “What surprised you about what you saw?” “Does this remind you of anything you’ve seen before?”

Be a good listener
Be interested in what your guests tell you, and let their curiosity and responses drive your conversation forward.

Share what you know
Use clear, simple language. Focus on one main idea—you don’t need to explain everything at once! Keep the information basic for starters, and share more with interested learners.

Use examples from everyday life
Familiar examples can help explain abstract concepts. Be aware of different abilities, keeping in mind that children do not have the same skills or vocabulary as adults.

Offer positive responses
If people haven’t quite grasped a concept, you might say, “That’s a good guess,” or “Very close, any other ideas?” Never say, “No” or “Wrong.” You can offer hints or suggestions for things to think about or watch carefully.

Share accurate information
If you aren’t sure about something, it’s ok to say, “I don’t know. That’s a great question!” Suggest ways that people can learn more, by trying another activity or looking up information at the library or online.

Remain positive
Maintain an inviting facial expression, positive tone, and open body language throughout the interaction.

Thank your guests
As your interaction ends, suggest other activities that you think your guests might enjoy.

Have fun!
A positive experience will encourage learning.