

RULES RULE! RELATED RESOURCES

EXPERIMENTS

Growing Gummy Bears

An experiment in osmosis. Great for practicing lab notebook keeping skills.

Materials:

- Boiling water
- 2 tbsp salt
- 2 tbsp sugar
- 4 gummy bears (or gelatin-based candy)
- ½ cup white vinegar
- 4 clear glasses
- Labels for glasses

Procedure:

- Fill the first two glasses with boiling water (adult help required)
- Dissolve the sugar in the first glass. Label it as containing sugar.
- Dissolve the salt in the second glass. Label it as containing salt.
- Add the remaining boiling water to the third glass. (adult help required) Label it as containing only water.
- Place the first three glasses in the fridge to cool.
- Fill the final glass with vinegar. Label it as containing vinegar.
- Once the first three glasses cool, remove them from the fridge. Place a gummy bear in each. Use the same color for best comparison.
- Leave on the counter, and check every few hours. How do the results compare after a full 24 hours?

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Dancing Grapes

A simple experiment to answer a simple question: will grapes float in different types of water? This is a good opportunity to practice lab notebook keeping skills.

Materials:

- Grapes
- Tap water
- Sparkling water
- Two clear glasses

Procedure:

- Fill one glass with tap water
- Fill the other with sparkling water
- Add the same number of grapes to each
- Write down your observations!

CRAFTS

Decorate a Notebook

Decorate a lab notebook, adventure journal, or church journal to use during your explorations!

Materials:

- A Notebook
- Glitter pens, markers, puffy paint (optional)
- Stickers, Magazine cut outs (for decoupaging, optional)
- Any other craft supplies to customize your notebook!

Write your name on the inside cover of your notebook. Give it a title, then customize it using any of the craft supplies listed above!

RULES RULE! RELATED RESOURCES

BOOKS

Orthodox

Title: Josiah and Julia Go to Church

Author: Kelly Ramke Lardin

Summary: Follows a brother and sister through liturgy as they learn how to behave.

Grade Level: Pre-K +

Scientific

Title: Usborne First Illustrated Science Dictionary

Author: Sarah Khan

Summary: Good overview of a wide variety of scientific terms, including those related to conducting experiments and presenting results. Also contains multiple safety tips throughout.

Grade Level: K+

Title: Step into Science: What's the Problem?

Author: Kylie Burns

Summary: Goes through how to ask questions that can be formed into experiments. Includes a few short experiments, how to set up a lab notebook, and rules to perform experiments safely.

Grade Level: 3-6

Title: Step into Science: What's Going to Happen?

Author: Paul Challen

Summary: Guides kids on how to develop a testable hypothesis. Includes a few short experiments and lab notebook tips.

Grade Level: 3-6

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BOOKS

Title: Step into Science: What's the Plan?

Author: Natalie Hyde

Summary: Discusses experimental variables, lab materials and tools, as well as lab safety and lab notebook tips.

Grade Level: 3-6

Title: Step into Science: What's Going On?

Author: Kylie Burns

Summary: Overview of data collection and analysis, focusing on observations and data tables. Includes experiments, lab notebook tips, and questions to help evaluate your procedure.

Grade Level: 3-6

Title: Step into Science: What Do We Know Now?

Author: Robin Johnson

Summary: Relays the importance of making mistakes, retesting experiments, and sharing data. Includes lab notebook tips and experiments.

Grade Level: 3-6

Title: Foraging with Kids

Author: Adele Nose far

Summary: Guide to foraging different edible plants, and their common uses. Contains black-and-white illustrations and foraging tips.

Grade Level: 3 and up

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SONGS

Title: Science Safety Song

YouTube Channel/Artist: Little Learner Lab

Link: <https://www.youtube.com/watch?v=7t820AHuoAs>

Title: The Sound of Science - Lab Safety Song with Puppets

YouTube Channel/Artist: Tine Walma - Fletchers Meadow SS

Link: <https://www.youtube.com/watch?v=yxc4uqEn2jE>

Title: In Church

YouTube Channel/Artist: Ancient Faith Kids - Rocko's Music
Factory

Link: <https://www.youtube.com/watch?v=ZfAXK2gaS4k>