Grades 4 – 8

Cue Sheet

Guides for Teachers

Let's Go Science Show

Thursday, February 9, 2026
10:15am

Questions to ask students BEFORE the performance

- What are the steps in the scientific method?
- Why do scientists follow the scientific method and perform experiments to test hypotheses, rather than guessing or trusting their personal experiences?

Questions to ask students AFTER the performance

- What did you observe the performers doing to ensure their safety during demonstrations?
- Which demonstration surprised you the most, and why?
- What scientific idea or concept would you like to see demonstrated that was not? How do you think that could be done?

POPEJOY SCHOOLTIME SERIES

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About the Performance

The Let's Go Science Show is an interactive, high-energy performance that introduces students to the exciting world of science through hands-on demonstrations and audience participation. Led by two performers playing the roles of Professor Smart and Dr. Knowitall, the show illustrates scientific concepts on a large scale. Using physical comedy, fast pacing, props, sound, and lighting, the show engages its student audience in a manner most science classrooms cannot replicate.

While the concepts demonstrated are basic scientific ideas, the performance also opens up avenues of curiosity and scientific thinking. Physics, electricity, and illusions are among the possible concepts covered in the performance, which has been designed for grades 4-8. As audience members, students are invited to be active in observation and critical thinking, skills that can be reinforced in the class setting. This show can serve as a possible starting point for discussing the scientific method, importance of safety, and value of teamwork when testing ideas, or a continuation of those conversations.

Vocabulary

atom *(at-uhm)*- basic building block of a chemical element

atmosphere *(at-muhs-feer)*- layer of gases that surrounds a planet

attraction *(uh-trak-shuhn)*- force that causes two objects to move towards each other

chemical reaction *(kem-ih-kuhl ree-ak-shun)*- process where one or more substances are converted into different substances

circuit *(sur-kit)*- a closed loop that allows electric charge to flow

compression *(kuhm-presh-uhn)*- to press something into a smaller space

density *(den-suh-tee)*- mass of a substance per unit of volume

drag *(d-rag)*- force that resists the motion of an object

electrons *(ee-lek-tronz)*- subatomic particles with a negative electric charge

energy *(en-er-jee)*- ability to do work or produce heat/power

force *(f-or-s)*- a push or pull on an object that can cause it to move, stop, or change direction

friction *(frik-shuhn)*- tension created when one object slides against another object

fulcrum *(ful-kruhm)*- point on which a bar rests or is supported

gravity *(grav-uh-tee)*- a force of attraction acting between all bodies of matter

gyroscope *(jai-roh-skope)*- device used for measuring or maintaining orientation and angular velocity

inertia *(ih-nur-shuh)*- tendency of an object to stay motionless unless force is applied

kinetic energy *(ky-neh-tik en-er-jee)*- energy an object has that pushes or pulls

laws of motion *(lawz uhv moh-shun)*- three physical principles that describe how objects move and how forces affect that movement

lever *(lee-ver)*- a machine that helps lift, move, or balance objects more easily

mass *(m-a-ss)*- measurement of how much matter is in an object

molecules *(mol-uh-kyools)*- a group of two or more atoms that bond together

momentum *(mo-men-tum)*- force that moves an object

particle *(par-ti-kuhl)*- tiny building blocks of matter

physical reaction *(fiz-i-kuhl ree-ak-shun)*- process in which a substance's appearance or state changes, but does not change into a new substance

potential energy *(po-ten-shuhl en-er-jee)*- stored energy that has not been used yet

properties *(prop-er-teez)*- a quality of an object

resistance *(ri-zis-tanss)*- force that stops or slows down an object's motion

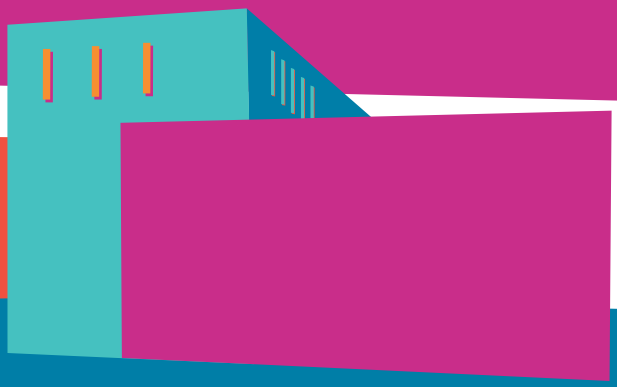
scientific method *(sci-en-tif-ik meth-uhd)*- a way for scientists to study and learn about the world

static electricity *(stat-ik ee-lek-tris-i-tee)*- the build-up of electric charge on the surface of an object

subatomic particle *(sub-uh-tom-ik par-ti-kuhl)*- tiny pieces of matter that are even smaller than atoms

suspend *(suh-spend)*- to hang an object from a higher position

Van de Graaff Generator *(van de graaf jen-uh-ray-tor)*- a machine that creates static electricity



Click here!

For more educational resources, including a video gallery and a study guide, visit the Let's Go Science Show webpage.

Facts about Popejoy Hall

- **Popejoy Hall officially opened on October 1, 1966.**
- **The hall can seat up to 1985 people.**
- **Most walls inside the hall are not parallel or perpendicular to the stage. Curves, angles, and soft or textured surfaces scatter the sound throughout the hall so that audiences can hear performances better.**
- **Popejoy Hall has an orchestra pit which raises and lowers. It is the largest elevator in the building.**
- **The ceiling over the stage is three times the height of the curtain opening. Sets can be lowered into place by pulleys and raised high enough to be stored completely out of sight when not in use.**

Follow us on social media to stay in the loop about upcoming performances and urgent announcements.

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