Classroom Teacher Preparation

Scientific Practices 0: First Day

Please use the following to prepare for the next SfS lesson.

Description:

This is an introductory lesson for the first day of teaching in your classroom. It serves to introduce the students to the Science from Scientists (SfS) program, its methods & rules, and the scientists. This lesson **will** be paired with another activity-based mini lesson, which will vary based on instructor/teacher preference and class time/requirements.

Lesson Objectives – SWBAT ("Students Will Be Able To…"):

3rd-8th

- Get familiarized with Science from Scientists program, instructors, and lesson structure
- Know the ground rules on safety, team work behavior, and working procedures during our lessons
- Learn that they will be accountable and will commit to become scientists during our lessons by signing the "SfS pledge"

Preparation:

This will be our first lesson so there is no preparation necessary for students.

Teachers – please make sure to ask your SfS instructors if you have any questions. Please also review the Pledge that your Scientists will have sent with this document.

Room Set Up for Activities:

Depending on the activity, students will be working in different group sizes – your instructor will let you know how your room should be set up.

For the first day (and other days) it may be helpful for instructors if student's names are on their desks.

Safety

There are no safety precautions for this lesson.

Related Modules

This lesson may be taught with several different mini-lessons or shortened versions of lessons. These include:

Scientific Practices 22: Teamwork Mini-Lesson - Cup Stacking **–** Promotes team building through cup stacking (with limited tools and restricted communication). Developing good teamwork skills at the beginning of the year will prepare students for the active group work they will be involved in throughout the year in their science classes.

Scientific Practices 21: Mini-Lesson – Nature of Science **–** Focuses on being an active participant in the scientific learning process. With scientific inquiry, students will begin to appreciate that as their knowledge of science increases, their scientific perspectives will also change, using a hands-on puzzle analogy.

Scientific Practices 3: Mystery Tubes **–** Focuses on the importance of models in science. Students observe a "mystery tube" and then build models to understand how it works.

Scientific Practices 2: The Observation Challenge **–** Students distinguish between subjective vs. objective observations and between quantitative vs. qualitative observations. They will test these skills with a mystery object challenge: students will need to observe objects, describe them, and see if their observations allow their peers to correctly guess their object.

For other module sequences and groups, look here: www.sciencefromscientists.org/sequences

Standards Covered:

Our 'First Day' lesson does not have standards associated with it, but our other lessons do!

Please click the following link to our website to review the standards covered by our lessons, listed by state: http://www.sciencefromscientists.org/standards/

Lessons are matched to both national NGSS and local state standards.

After Our Visit:

Our Classroom Post can be found on our website at sciencefromscientists.org/cohorts. Use the name of your school/cohort and password to log in.

To help Evaluate, check out our Open Response questions online at sciencefromscientists.org/open-response-questions. They are freely available for all of our lessons for current teachers. Use the password supplied by your instructor to log in.

For an Extension activity, please check out the classroom post for more details relevant to the lesson you and your instructor chose for today. For other lessons, there will be a direct link to the Extension activity in this section.

Additional Resources:

The following are some great science education YouTube channels – we often link to videos from these sources throughout the year. They are also great sources to peruse for your in-class science lessons.

- SciShow: https://www.youtube.com/user/scishow
- SciShow Kids: https://www.youtube.com/user/scishowkids
- Crash Course Kids: https://www.youtube.com/user/crashcoursekids
- Sick Science – beyond cool experiments you can do at home (Steve Spangler): https://www.youtube.com/sickscience
- MinutePhysics: https://www.youtube.com/user/minutephysics
- MinuteEarth: https://www.youtube.com/user/minuteearth