



Geology Rocks Onsite Lab Information Guide

Dear participating teachers,

Greetings from the San Diego County Office of Education's Science Outreach Team! We are looking forward to visiting your school site for the **Geology Rocks Lab**. Please familiarize yourself with the information detailed in this document. This will ensure an optimal experience before and during the program.

Whether you have participated before or if this is your first program, we hope that that the experience will be academically enriching, relevant, and memorable for your students. Please ensure that you complete a program evaluation. Your feedback will help us continue to modify this amazing program for students throughout San Diego County.

Please review the list below

1. Please submit the Program Schedule and Logistics documents no later than 10 business days after SDCOE staff confirm your program date. scienceoutreach@sdcoe.net
2. There are activities and PowerPoints that will prepare your students for the program. They cover key concepts and vocabulary that are integral parts of the program content.
3. The program activities must take place in an indoor location (multipurpose room, gym, etc.). Ensure that the location is large enough to accommodate three 10x10 spaces for the activity stations.
4. Our staff will be arriving in a standard cargo van. We request close access to the program location. This can be a dedicated parking spot in the main lot or a place inside the campus. SDCOE vehicles cannot be driven over curbs, grass, gravel, mud, dirt or other uneven surfaces to reach the program location. Our staff reserves the right to refuse to travel or park over any surface deemed unsafe.
5. SDCOE staff will need to have access to a projector and screen.
6. Inform all relevant school site personnel of the program date/schedule/location and our onsite requirements (access to a sink, unlocking of gates, etc.).
7. There is a maximum of 30 students for each one-hour session. Program sessions are approximately 60 minutes. A maximum of four sessions per visit to a school site. Please set the schedule with at least 10 minutes between classes. The first session may start no earlier than 8:00am.
8. Arrive at the program location no later than five minutes before the start of your session.
9. Ensure that your students have nametags on before their arrival to the program.
10. Divide your class into three groups.

11. Our staff will adhere to the most current SDCOE COVID prevention guidelines while onsite. This will include: remaining fully masked during the duration of their time on campus, using hand sanitizer and disinfecting program resources between class sessions, and maintaining proper distance from students, volunteers, and staff. At the discretion of the Program Manager, our staff will also comply with specific school/districts requirements. This must be presented and determined with the Program Manager prior the program date

The program design of the ***Geology Rocks Virtual Lab*** will to introduce students to scientific principles, geologic history, and earth system dynamics. The students will be engaged with hands-on, inquiry-based activities that will address key concepts, such as Plate Tectonics, rock and mineral properties, and tsunamis. Our instructors will facilitate each station's content through the 5 E's framework. The stations are connected to Next Generation Science Standards for Middle School. Your students will become terrestrial and marine geologists to examine the complexities of earth science.

Activity Station Overview

Mineral and Rock Identification

Students will compare and classify common mineral and rock samples. They will understand the processes that form these elements.

Plate Movement

Students will determine how long it will take for the Pacific and North American plates to slide past each other and bring the Gulf of California alongside San Francisco.

Tsunami Speed

Students will calculate the speed of the 2004 Indian Ocean tsunami. They will use this information find out how quickly it reached Band Aceh, Indonesia from the earthquake's epicenter.

Epicenter Triangulation

Students will learn how the process of triangulation can aid in a geologist's determination of an earthquake's epicenter.

Please call (858) 290-5986 or email scienceoutreach@sdcoe.net if you have any questions. We are looking forward to connecting with you soon!

SDCOE's Science Outreach Team