



Geology Rocks Virtual Lab Information Guide

Dear participating teachers,

Greetings from the San Diego County Office of Education's Science Outreach Team! We are looking forward to connecting with you live from our Virtual Learning Space. Please familiarize yourself with the information detailed in this document.

The Science Outreach Team is excited to announce a new program, ***Geology Rocks Virtual Lab***, for the 2020/2021 school year! We hope that this new experience will be academically enriching, relevant, and memorable for your students.

Please review the list below

1. Please submit the Program Schedule no later than 10 business days after your program date is confirmed by the SDCOE staff. scienceoutreach@sdcoe.net
2. All activities will be conducted from inside our Virtual Learning Space. We ask that your students are located in a space on campus, which can remain undisturbed during each session.
3. Each participating class should arrive promptly at its scheduled time. Each program session is approximately 60 minutes. There is a maximum of 30 students for each session. A maximum of four sessions can be scheduled per day. Please set the schedule with at least 10 minutes between classes. The first session may start no earlier than 8:30am. The final session may end no later than 2:00pm.
4. Have your students ready to interact with the instructor. During the facilitation of the activities, our staff will be asking questions. Please have yourself or another staff assist in selecting the students to answer the questions and monitoring student behavior. Station worksheets are available for the student to complete along with the instructor.
5. Please complete and submit the Program Receipt no later the 2 business days after the program. scienceoutreach@sdcoe.net

The program design of the ***Geology Rocks Virtual Lab*** will 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 reach Banda 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