Green Machine 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 ***Green Machine 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.) or where there is adequate coverage from the sun throughout the day. This can be an area with patio-style cover or sunshade sails. If you have portable pop-up tents that will suffice as well. 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. Inform all relevant school site personnel of the program date/schedule/location and our onsite requirements (access to a sink, unlocking of gates, etc.).

6. There is a maximum of 30 students for each one-hour session. Minimum requirements for programs sponsored by the County of San Diego are 20 participating students in each of two sessions. 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.

7. Arrive at the program location no later than five minutes before the start of your session.

8. Ensure that your students have nametags on before their arrival to the program.

9. Divide your class into three groups.

10. One adult volunteer will be needed to assist the Green Machine staff during each session. The volunteer will be facilitating the Water Cycle station. Please ask them to arrive a few minutes early to receive training for the activity.

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 ***Green Machine Lab*** introduces students to scientific principles, natural systems, and environmental occurrences, specifically those affecting food production. The students participate in hands-on, inquiry-based activities that will address key concepts, such as predator/prey relationships, organic vs. inorganic soil, and the water cycle. Our instructors facilitate each station's content through the 5 E's framework. The stations are connected to Next Generation Science Standards for Kindergarten through 3rd Grade.

Your students will become environmental scientists to find out how certain organisms and processes can have a significant impact on local ecosystems. This program strives to empower them to find alternative solutions and become active stewards of the environment.

Activity Station Overview

Integrated Pest Management
Students will learn that insects can have a beneficial, detrimental, or neutral impact on ecosystems. They will examine the relationships between certain species and see how this can be an alternative to chemical pesticides.

Soil Science
By examining and sorting a sample of compost, student understand that soil can be comprised of varying elements. Mineral content, detritus, and living organisms will affect the overall productivity of a soil sample. This can determine which types are suitable for sustainable plant growth.

Water Cycle
Students will understand how this natural process moves water through urban, wild, and agricultural areas. They will learn the importance of this element in relation to healthy plants.

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