

Requirements for Middle School Teams:

- **Student team members are responsible** for designing and implementing their project.
- **Teacher/mentor** is available for **guidance and advice** on the team's project.
- The **project** must include: 1) *Lesson Plan*, 2) *Community Service*, 3) *Environmental Challenge/Solution*, 4) *Student Reflections*, 5) *Presentation of the Project* (i.e., portfolio, project board, Power Point, etc.) and 6) **Delivery** of the project including the Portfolio Checklist and Project Summary. These forms are attached and will also be sent electronically to the team teacher/mentor.

Deadlines:

December 12th 2008 - Your team must submit the enclosed documents: Parental Consent form for each student and the School Principal Consent form.

February 13th 2009 - Your team must submit your **QuikScience Challenge Project** before **5:00 pm on Friday, February 13, 2009** to the University of Southern California – Wrigley Institute for Environmental Studies. The team should submit their **entire presentation**: (2) copies either CD or DVD (no mini's!) and (1) printed paper version. This includes the Portfolio Checklist, Project Summary, Community Service, Lesson Plan, Environmental Challenge, and Reflections.

March 6-10th 2009 - A panel of selected judges, who will evaluate teams based on their portfolios and creative presentations, will determine the winners. The top three teams will be called back for an interview after which the final selections will be made.

March 19th 2009 - Please join us for the QuikScience Open House event! All teams are invited to this event at the Quiksilver, Inc. headquarters in Huntington Beach to view all the projects entered in the Challenge. The teams will receive special prizes, be entered in raffles, and enjoy great burgers before the announcement of the winning teams!

Guidelines:

1. **New Lesson Plan for the Oceans:** You, as students, work as a team to create and teach at least one new, ocean-related, lesson plan that fits into the science curriculum at your school, or for a lower grade classroom. The teacher/mentor will provide guidance and oversight for content accuracy. You can brainstorm the topic with your team! This lesson plan should use the ocean to illustrate or inspire students in some area of science and should be related to your public service project. The idea for the lesson plan can come from existing COSEE-West curricula www.usc.edu/org/cosee-west, other educational sources, or be invented by your team (perhaps the best!)

For ideas on HOW to teach take a moment to reflect on how you learn: Think of your favorite teacher: how did he/she teach, what activities did the students enjoy, how did the teacher speak, what interested the students in his/her lessons, what teaching resources or equipment was used? What is your favorite way to learn? How do you learn best? What do you enjoy about school (music, drama, small group work, problem solving, etc)?

You can explore other ideas about how we learn and learning styles at:

<http://vels.vcaa.vic.edu.au/support/teaching.html#teaching>

http://www.newhorizons.org/strategies/mi/front_mi.htm

Now develop your own strategies for teaching and learning. The key is to create a lesson and teach it how you would like to be taught! (See the enclosed Writing a Lesson Plan Guidelines).

Your lesson plan description in your Portfolio should describe:

- How it fits into your class' science curriculum
- What California state science standards it meets
- What grade level to be taught
- How many times lesson plan was taught
- The total number of students taught
- How they responded to the lesson plan
- How you modified the lesson plan as you taught it
- Any further improvement you would make after teaching it

2. **Community Service:** Your team should lead a larger group of your peers and/or members of the community in a public service activity involving the oceans or anything that affects the oceans (like storm-water runoff). You should be as creative as possible in this activity! You should also work to link it to some of the educational activities in your science classes at the school. If your project is an ongoing Community Service, describe how your team expanded and added new components to the project. Please include information such as the date & location of the event or activity, benefit to community, number of participants your project reached, relationship to your school, and any surprises or outcomes, etc. In your Portfolio submit a description of your Community Service project.

3. **Write a Solution for an Environmental Challenge:** *This component is new this year.* As you are working with your topic, seek solutions to environmental problems you uncover. For example, if you are teaching students about the dangers of runoff into the ocean, what are some creative solutions for preventing runoff, helping animals affected by runoff, or reclaiming beaches from present runoff damage. In your Portfolio describe a solution to the problem and what action would be required for this solution to be carried out. This should be 1/2 to 1 page long. (See the enclosed Solution for Environmental Challenge Guidelines).

4. **Reflections:** Each team member, including the teacher/mentor, must write a one-paragraph reflection on his or her personal experience in the QuikScience Challenge.

5. **Creative Presentations of the Project:** Your team should create a visually interesting presentation that documents your project. This will be submitted on two disks, either CD or DVD (no mini's). Judges will view the "Text Documentation" (Disk 1) and the "Presentation" (Disk 2) to select winners of the different prizes. Acceptable presentation items include photos, videos, websites, schedules, and/or physical mock-ups. Posters and other physical models must not exceed 30 X 48 inches. Multi-medial visuals must not exceed 10 minutes. You will submit your "Text Documentation" on Disk 1 and your "Presentation" on Disk 2 in addition to one (1) printed version of your entire project. Keep in mind, the judges must be able to view your team's entire creative presentation within a 10 minute time period! Additional materials will not be considered. **Remember to think green: Limit your usage of paper, resources and plastic with everything you do!**

○ **Portfolio Checklist / Project Summary:** These documents record the details of your lesson plan, community service project, research proposal with your environmental solution, and the team reflections. Both the Portfolio Checklist and the Project Summary **MUST** be on the "Text Documentation" Disk 1 and printed (See Portfolio Checklist for details).

6. Deliver Presentation of the Project: The project materials must be received by mail (not just postmarked) or delivered to the University of Southern California's Wrigley Institute for Environmental Studies by 5:00 pm on February 13, 2009.

These overall project guidelines, along with information and examples of past competition projects, are available on the QuikScience Challenge website at www.usc.edu/quikscience. The COSEE-West website at www.usc.edu/org/cosee-west may also be a helpful resource as you work on your projects. It includes links to curricular material that is available online and resources from partner organizations that may be of interest. While this site may serve as a starting point, please feel free to use whatever web or print-based resources you would like. As always, make sure you cross check information as much as possible for scientific validity! In addition, if your team needs feedback on your ideas or further assistance in getting started on any of the competition components, we are available to consult with your team.

Prizes:



First Place Prize this year is a weeklong, all expenses paid expedition to the USC Wrigley Marine Science Center (WMSC) on Catalina Island! Your winning team will explore areas of the island very few people will ever get to experience. Snorkeling, kayaking, hiking, and lab explorations are among the many cool-learning opportunities waiting for you! In addition, you will get to meet the students of Avalon and learn what it is like to live on an island. This trip is tentatively scheduled for April 24 to May 1, 2009. More information about the marine lab can be found at www.wrigley.usc.edu



Second Place Prize is an extended weekend expedition to the USC Wrigley Marine Science Center on Catalina Island! This trip is tentatively scheduled for May 15-18, 2009.



The teachers of winning teams will also receive a cash prize for classroom supplies or professional development.

First place: \$500 Second place: \$250 Third - Fifth place: \$150



Every team that submits a final project by the deadline will be entered into a raffle to win a free field trip (bus included) to a local aquarium or science center for ***their whole class*** (*some limitations apply*). The destination and exact date of the field trip will be arranged according to the needs of the team and availability of resources.



All participating teams who submit a final project by the deadline will receive cool gifts!