JIMINY CRICKET'S ENVIRONMENTALITY™ CHALLENGE

BEHOLD...

THE JIMINY CRICKET'S ENVIRONMENTALITY™ CHALLENGE HANDBOOK

To Keeping the Planet Free From
The *GALACTIC DESTROYERS!!!*

JIMINY CRICKET'S ENVIRONMENTALITY™ CHALLENGE

Dear Friends,

Thank you for helping me on my adventure as an Environmental Super Hero. I can't do my job without you as we fight the "Galactic Destroyers" together.

This JCEC Handbook contains all the information you need to conduct a successful Pledge Campaign and a Class Project with your students. Having your students take the Pledge is an easy way to remind them that they are citizens of the world and that each of us can make a difference in our local community. Having students conduct the Class Project is more time-consuming, but the benefits far outweigh the effort. The Class Project is a perfect opportunity to increase student content knowledge, extend their communication skills, and develop a love of learning.

This handbook should answer most of your questions. If you still need assistance please contact me at www.jceckids.org or 1-800-290-0299.

With Environmentality™,
Jiminy Cricket

Thank You from JIMINY

JCEC HANDBOOK
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* Use the enrollment form whether you are Taking the Pledge only or Taking the Pledge and Doing the Class Project.

PART ONE:
Taking the Pledge

THE SLUDGER

JIMINY CRICKET'S ENVIRONMENTALITY™ CHALLENGE

2005-2006 ENTRY FORM

My class would like to participate in the following:

(please check one)

○ Environmentality™ Pledge only

○ Environmentality™ Pledge and Class Project Competition

YOU WILL NEED TO ENROLL AGAIN EVEN IF YOU SIGNED UP PREVIOUSLY.

Pledge gift will be sent out upon receipt of Entry Form

Please enter all information.

Please Print Legibly: ○ Mr. ○ Mrs. ○ Ms. ○ Miss ○ Other_____

Fifth Grade Teacher's Name: _____

School Name: _____School District:_____

School Mailing Address: _____

City: _____ ZIP Code: _____ County: _____

School Telephone: _____ School Fax: _____

E-mail Address: _____ Principal's Name: _____

Number of Students Participating: _____ (Maximum of 40 students - one class per form)

○ Traditional School Year

○ If "year-round," circle "off-track" months:

Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sept. Oct. Nov. Dec.

Where did you learn about Jiminy Cricket's Environmentality™ Challenge? (Please specify)

○ School District: _____ ○ CREEC Network: _____

○ Newsletter: _____ ○ K-12 Alliance: _____

○ Conference: _____ ○ State Agency/Department: _____

○ Other: _____

All Entry Forms must be postmarked or received by October 15, 2005

Jiminy Cricket's Environmentality™ Challenge
P.O. Box 7516
Burbank, CA 91510-7516
OR
Fax (818) 553-7270 or enter online @ www.jceckids.org

By entering Jiminy Cricket's Environmentality™ Challenge, schools, students, teachers, principals, and adult chaperones from the winning classes are consenting to the use of their names and likenesses for marketing and advertising purposes without additional compensation. The Class Project, including any supporting documents, will become the property of the State of California and will not be returned. Only California fifth grade, fifth grade combination (fourth/fifth or fifth/sixth) classes or fifth grade school clubs (up to 40 students) are eligible to participate.

For more information or questions, please visit our Web site @ www.jceckids.org or call (800) 290-0299.

Disney's Environmentality

Printed on recycled paper

Please Fold on dotted line

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 151 BURBANK, CA

POSTAGE WILL BE PAID BY ADDRESSEE

JIMINY CRICKET'S ENVIRONMENTALITY™ CHALLENGE
PO BOX 7516
BURBANK CA 91510-9823

Please Fold on dotted line

SAMPLE LESSON PLAN
For Taking the Pledge

PURPOSE:

To provide students with an awareness of the need for a healthy environment and encourage students to take responsibility by selecting three local actions as their pledge to the environment.

OUTCOMES:

Students will apply content knowledge and use their communication and decision making skills to discuss ways to incorporate Environmentality™ into their daily lives.

STANDARDS:

Various standards from the California Content Standards for English-Language Arts, Mathematics, and Science.

DAY 1

- Conduct a discussion about the need for a healthy environment and ways to help the environment, both at home and at school.
- Discuss the importance of a commitment or pledge.
- Distribute a Jiminy Cricket Environmentality™ Challenge Pledge form to each student and explain the home work assignment.

Homework Assignment

- Ask students to share the pledge sheet with their families and discuss three ways they will commit to think and act responsibly with the environment. Ask them to record their actions on the pledge form and return the sheet to class the next day.

DAY 2

- Ask students to write their pledges on sentence strips (one pledge activity per strip).
- Ask students to post and share their pledge with the entire class.
- As a class discussion, decide how to categorize the sentence strips. Have students clump the strips based on the criteria. Tally the number of pledges in each category.
- Ask students to make a bar graph to represent the class's pledges. Discuss what the graph indicates: what is the most common pledge? The least common? Are any pledges dependent on other pledges? What would be the impact of what the whole class has committed to do?
- Remind students to implement their pledges for one week.

one week later...

- Ask students to review their individual pledge form. Which ones did they complete? What was the impact of their completion (e.g., how much was saved in recycling?) Which one(s) are they still working on? What do they need to complete this part of their pledge?
- Have students share their completed pledges. What was the impact of the entire class of their completion?
- Reinforce the students' progress and give each student who has kept his/her pledge the provided gift in recognition of his/her success in honoring a pledge commitment. REMIND STUDENTS THAT THEY SHOULD CONTINUE THE PLEDGE BEYOND THE ASSIGNMENT.

Share the Learning

- Have students decide how best to share their learning. Examples: make a school bulletin board; write an article for the school newsletter; write a letter to a local government representative about what they did to help the environment; tell their family.

Take the Next Step

- Conduct a brainstorming session with your students to discuss environmental actions they can do for their Jiminy Crickets Environmentality™ Challenge Class Project (see Part II of the JCEC Handbook: The Project Planner).

PART TWO:
Doing the Class Project

Project Overview

THE CLASS PROJECT

is an opportunity for students to identify an environmental issue/problem in their local area (school, community); investigate ways to address the issues; and develop and take action to improve the environment. Through the Class Project, students develop content knowledge and understandings that align with the California Content Standards in English-Language Art, Mathematics, Science, History/Social Science, and Visual and Performing Arts.

STUDENTS have an opportunity to build confidence and self esteem in developing and completing a long-term project, as well as developing their senses as a problem solver and decision maker.

USING THE PROJECT PLANNER

- Use the TEACHER PAGES and the suggestions to help guide your students in conducting the Class Project.
- Use TEACHER PAGES as a place for you to record your notes.
- Use the STUDENT PAGES for students to record their ideas, findings, progress, reflections, etc., on the Class Project.
- Select from appropriate STUDENT PAGES to document the Class Project in the Portfolio.

PLEASE NOTE:

Teacher Pages have white headers with blue type!

Student Pages have blue headers with white type!

TEACHER ROLE

- **HELP** students create a list of potential topics.

  Examples of possible projects include the following:
  - Organize a School Recycling Program
  - Develop a Project to Protect the Habitat of an Endangered Species in your Area
  - Develop an Energy Conservation Program
  - Organize a Creek, Trail or Beach Cleanup
  - Conduct a Water Quality Study in a Local Area and Develop Strategies to Improve the Quality
  - Start a Native Plant Garden at Your School

- **HELP** students select a goal, and **DEVELOP** an action plan and a timeline.
- **ASSIST** students in securing needed resources and materials.
- **HELP** students put their plan into action.
- **FACILITATE** classroom discussions about the project, its progress, and student learning.
- **FACILITATE** reflection throughout the project.
- **ENCOURAGE** student ownership, cooperation, compromise, and comprehension.
- **CONNECT** project to appropriate 5th Grade California Content Standards.
- **MAKE** sure the Class Project Portfolio is received **BY MARCH 1, 2006.**

STUDENT ROLE

- BRAINSTORM possible topics.
- RESEARCH topics.
- EVALUATE and SELECT a project.
- Set GOALS and OBJECTIVES.
- DEVELOP an action plan.
- CREATE and DISPLAY a project timeline.
- DEVELOP a strategy to obtain needed materials.
- CONDUCT a fund raising effort.
- KEEP records/documents; TAKE pictures and/or videos; MAKE charts and graphs.
- CREATE a Class Project Portfolio to describe the full effort of your project.
- PUBLICIZE your project to a variety of audiences (e.g., school, local community).
- EVALUATE the effectiveness of your project.
- POSE strategies to sustain your efforts.

Choosing the Project
Teacher Notes for Brainstorming Issues/Topics

Divide class into small working groups.

Have students use page 13 for their group carousel brainstorm. Ask each student to add their idea to the page, then pass the paper to the next student to record his/her idea.

Continue the carousel brainstorm until the groups have exhausted their ideas.

Ask groups to review their list and star their top 2 choices.

Ask groups to share their top 2 ideas; tally duplicates.

Have class vote from the list of topics and select their top choice.

Notes

WAYS TO SEED THE BRAINSTORM:

- Have students do a THINK-PAIR-SHARE of possible environmental problems in their COMMUNITY.
- Ask students to do a QUICK WRITE on a topic of THEIR CHOICE. Ask them to include a rationale for their choice.
- INTERVIEW a parent, school official, and/or community members to get ideas.
- CONTACT one of the state and/or federal agencies (SEE RESOURCE SECTION) about a project they might be conducting in your area.

Carousel Brainstorming Issues/Topics
Student Page

WHAT TOPICS WOULD YOU LIKE TO INVESTIGATE.

IN A CAROUSEL BRAINSTORM, LIST ALL THE THINGS YOUR GROUP IS INTERESTED IN.

REMEMBER!
In brainstorming, all ideas are *IMPORTANT.* Think of as many ideas as you can ...

STAR
your top 2 IDEAS to *SHARE* with the class!

Choosing the Project
Teacher Notes for Selecting Questions to Investigate

Using a KWL chart, have students discuss what they know about their selected topic.

Have student groups research/discuss and report on possible questions they could address in the project (student page 15).

HAVE GROUPS SHARE their questions and as a class select the questions that are most appropriate for the project. Write the questions in the "W" part of the KWL.

Notes

THINGS TO CONSIDER:

- The project should consist of SEVERAL QUESTIONS the students want to answer ABOUT THE TOPIC.
- Select several questions that PROVIDE students with an OPPORTUNITY to "GO DEEP" in their understanding.
- If appropriate, include a question(s) that can be explored through a SCIENTIFIC EXPERIMENT.

Selecting Questions for our Project
Student Page

Do your RESEARCH and use your imagination to determine questions you would like to INVESTIGATE.

Here are our questions:

Record the questions the class decided to include in the project

Choosing the Project
Teacher Notes for Determining a Goal

HELP STUDENTS determine the ***GOALS*** of the project!

What do they want **TO ACCOMPLISH?**

What **EVIDENCE** will they use to analyze the **IMPACT** of the project?

How will the **IMPACT** of the project **AFFECT** the issue/topic the students selected?

Notes

Things to Consider:

- Keep the goal **REALISTIC, MEANINGFUL** and **RELEVANT** to the project.
- The project needs a **SPECIFIC FOCUS** and a **LONG-TERM IMPACT.**
- The project should be more than a **ONE-TIME** event.
- **INVOLVE** others in the project.
- Make sure the project is **DOABLE** in a reasonable amount of time, noting if it needs to be done on a **REGULAR BASIS.**

Reflections

1. Our environmental goal is

2. The evidence we will use to know that we met our goal is

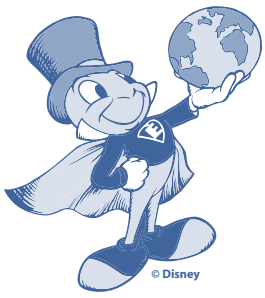
3. Explain how meeting this goal can make a difference

Planning the Project
Teacher Notes

Things to CONSIDER

- Review student goals and determine objects that can be supported by an action plan.
- Help students determine what needs to be done (student page 19).
- Help students develop an action plan and timeline (student pages 20-21).
- PROVIDE STUDENTS WITH TOOLS AND RESOURCES TO PLAN AND CONDUCT THEIR PROJECT.
    - *Books, magazines, newspapers*
    - *Internet*
    - *Interviews*
    - *Field trips*
    - *Local agencies (e.g., CEEIN, CREEC, Utilities)*
- Form student action committees such as publicity, funding, research, historian, materials, and artwork.

Developing a Class Action Plan
Notes



Decide when in the course of the Class Project students should STOP AND REFLECT on their progress. Have students do QUICK WRITES throughout to help them with their final reflection.

Planning
Student Page

SLUDGE

Things to Do ...

Resources to Use ...

Equipment ...

People to contact

Other ...

ACTION PLAN

Planning the Project, Student Page

ACTIVITY	Persons Responsible	Materials Needed	DUE DATE

Planning the Project
Student Page

Personal, Group, or Class TIMELINE

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Implementing the Project
Teacher Notes

Things to CONSIDER

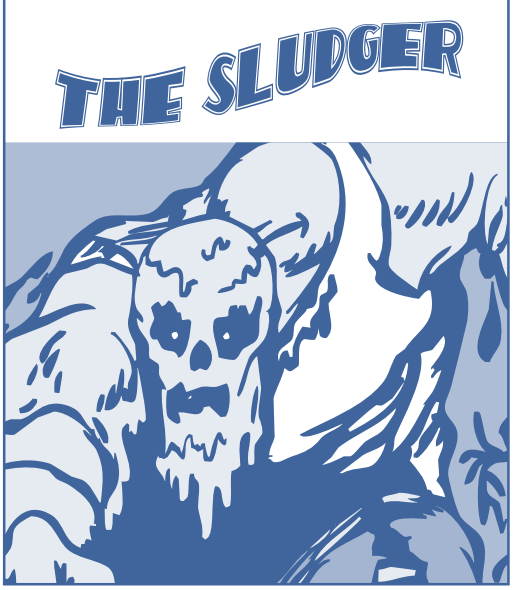
- Have students enter their activities and projected outcomes on student page 23. As an activity is completed, ask students to fill in the last column.
- Make sure students conduct a pre-project observation to collect baseline data (student page 24) and conduct post-project observations to see the impact of their project (student page 29).
- Use student reflection prompts throughout the project (student page 33).
- Keep school informed of progress on the project.
- Help students gather and record their data.
- Help students organize the data in ways that show the impact of their project (e.g., charts, graphs, tables, pictures, video, surveys, interviews).
- Help students analyze data to look for measurable changes from beginning to end (e.g., observable change, cause-and-effect relationships, long-term changes).

Notes

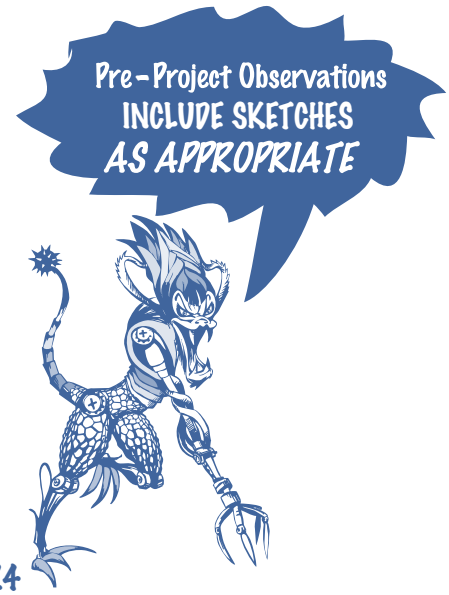
If students CONDUCT EXPERIMENTS as part of their project, use student pages 27-28 for them to record their information. DUPLICATE for as many experiments as the students conduct.

Implementing the Project
Student Page
ACTIVITY RECORD LOG

ACTIVITY	Projected Outcome	Actual Outcome



Pre-Project Observations



SLUDGE

Student Page
Information You Want to REMEMBER !!!

Conducting Experiments
Teacher Page

If students are CONDUCTING an EXPERIMENT, use student pages 27-28.

- Help students develop a testable question.
- Have students gather and record their data in a chart or table.
- Have students select an appropriate graph and graph the data.
- Have students develop a summary statement(s) based on their graph.

Notes

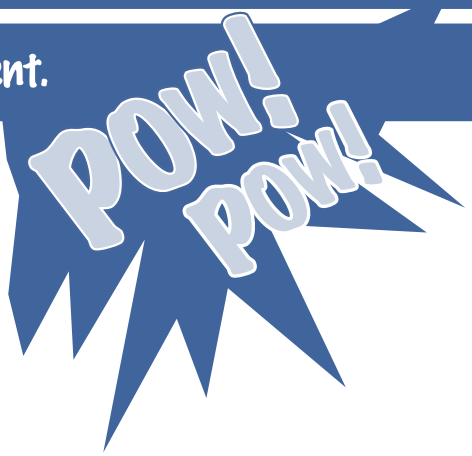
Student Page

(Experimental Information)

Testable Question:

Student Page
(Experimental Information)

CONSTRUCT a graph to display the data from your experiment.



Use the data from the experiment to make a *SUMMARY STATEMENT.*

Post-Project Observations

Evaluate the Project
Teacher Notes

HELP students review their information and data; organize their findings in a manner that others can understand.

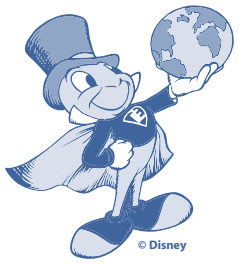
HELP students document their results (e.g., amount of money raised, energy saved, cans recycled). Remember to complete the activity log on page 23.

ASK students throughout the project to do reflective QUICK WRITES.

ASK students to gather their reflective QUICK WRITES and summarize their learning so far.

HELP students decide how to publicize their results to the school and to the community.

Notes



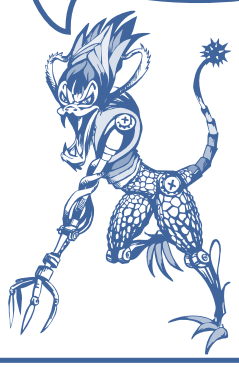
Spread the Word:

- Invite the local press and the media to share your class's accomplishments.
- Involve your entire school, family members, friends and the community.
- Share your project with another school.
- Share your project with other 5th grade classes at your school.

Evaluate the Project
Student Notes

WORK IN GROUPS to review all your data, your notes, and your research.

COMPARE AND CONTRAST your pre-observations with your post observations.



EVALUATE YOUR WORK: What are 3-5 major things your learned that you think others would want to know?

BRAINSTORM ideas and list them on this page.

Teacher Reflection
Teacher Notes

Get ready for the PORTFOLIO!

Write Your REFLECTIONS on another piece of paper.

WHEN WRITING YOUR FINAL REFLECTIONS OF THE PROJECT, INCLUDE THE FOLLOWING:

DESCRIBE the project goal(s) and the overall **EFFECTS.**

Write about some of the **CHALLENGES** and **SUCCESSES** that you observed through this project.

How did you go about ***ALIGNING*** the Environmentality™ Project with the California Content Standards (i.e., how were you able to modify your current curriculum to do this activity) ?

What are some of the ***EDUCATIONAL BENEFITS*** of doing this project ?

How have your students ***GROWN/CHANGED*** over the course of this project ?

What are some possible "NEXT STEPS" for your ***CONTINUATION*** in this project?

Reflections Student Page

Student Name

School

REFLECTION #1: THE BEGINNING
What is the environmental goal? How has your research and discussion helped you to understand the goal?

REFLECTION #2: NEW LEARNINGS
Write about your experience so far. How are you participating? What new expectations do you have?

REFLECTION #3: MIDWAY
Write about a memorable experience you had during this project. How has your understanding of the goal increased during this process?

Reflection #4: The End (and another beginning)

What are three major accomplishments of your project?	**How did your Class Project make a DIFFERENCE?**
How did you personally make a DIFFERENCE?	**How will you keep the project's goals alive at your school, in your community, and/or in your own life?**

Assemble the Class Portfolio
Teacher Notes

Things to Consider

- The Portfolio is to be generated and created by the students. Encourage creativity, include photos, articles, student communications.
- Share the scoring rubric with students so that they understand how their work will be judged.
- Help students select a variety of artifacts and student pages from the Handbook to include in the Portfolio.
- Assign different Portfolio tasks to student groups.
- Make copies of everything!
- Visit the JCEC Web site (www.jceckids.org) for examples of Class Project Portfolios.
- Use the checklist on page 35 to assemble the Portfolio.
- Help students analyze data to look for measurable changes from beginning to end (e.g., observable change, cause-and-effect relationships, long-term changes).

Notes

Portfolio Specification Checklist

☐ COMPLETE CLASS PROJECT COVER SHEET (page 36)

INCLUDE THE FOLLOWING IN YOUR DOCUMENTATION:

- ☐ • Description of the Class Project (16 single-sided or 8 double-sided pages in 12 point font)
- ☐ • *HOW* the Project was selected
- ☐ • WHAT was the GOAL and what did the class hope to ACCOMPLISH
- ☐ • How the project was IMPLEMENTED
- ☐ • Evaluation of the PROJECT'S IMPACT
- ☐ • Visuals to represent the PROCESS (photos, student drawings, video). Note: if you choose to use a video (VHS or DVD it must be less than five minutes long)
- ☐ • ATTACH the following (not included in your page limitation)
  - ☐ • Samples of the STUDENT REFLECTIONS (Page 33)
  - ☐ • Completed TEACHER REFLECTION (questions on Page 32)
- ☐ • Make sure the Portfolio is NO larger than 12 inches by 15 1/2 inches

Mail the complete Portfolio to:

JIMINY CRICKET'S
ENVIRONMENTALITY™ CHALLENGE

c/o Corporate Environmental Policy
The Walt Disney Company
500 South Buena Vista Street
Burbank, CA 91521-9758
818-553-7260

Class Project Portfolios *MUST BE RECEIVED BY*
MARCH 1, 2006

CELEBRATE
YOUR HARD WORK

JIMINY CRICKET'S ENVIRONMENTALITY™ CHALLENGE

2006 Class Project Cover Sheet

Please complete, sign and attach this cover sheet to the front of your Class Project Portfolio.
All Class Projects must be received by March 1, 2006.

School name: _____ County: _____

School mailing address: _____

City: _____ ZIP Code: _____ Phone number: (____)_____

Teacher's name: _____ Best time to call: _____

Principal's name: _____ Spring break dates: _____

Number of students in class: _____ Number of students reached by project: _____

Number of community members reached by project: _____

Project title: _____

Unique school characteristics: _____

_____

_____

_____

Project goal(s): _____

_____

_____

Project summary: _____

_____

_____

_____

_____

_____

_____

Explain the significance, impact, or benefit of your project to the environment:

_____

_____

_____

_____

We certify that the attached Portfolio was created by and reflects the work of 5th grade students at our school.

_____ _____

Principal's Signature **Teacher's Signature**

CLASS PROJECT: Guiding Questions

total possible 40 points

- Why did the class choose to do this project? What is the need for this project?
- Why would this project be important to your community/school?
- How did this project improve upon or enhance student learning above the regular classroom curriculum?
- How did outside resources add to the project goals?
- In what ways were students actively involved in reaching project goals?

	10	5	3
VALUE of Project to Students	• Project clearly demonstrates in-depth understanding and research of one key environmental issue or concern in students' school/community. • Project extends over an appropriate period of time. • Project clearly demonstrates that it is an integral part of the regular classroom curriculum.	• Project demonstrates some understanding of one key environmental issue. • Project may extend several weeks, but is limited in its value to the school/community. • Project makes some curricular connections but is not an integral part of the regular curriculum.	• Project demonstrates limited understanding or research of one key environmental issue or concern in students' school/community. May include multiple projects that do not connect to one another. • Project is short term and does not have a lasting value to the community. • Project is not an integral part of the regular classroom curriculum.
INTEGRATION	• Project clearly demonstrates integration with science, reading, writing, math and other subjects. • Project aligns with appropriate California State Content Standards for 5th grade; alignment is noted in the project.	• Project demonstrates some integration of science, reading, writing, math or other subjects. • Project attempts to align appropriately with California State Content Standards for 5th grade; alignment may or may not be noted in the project.	• Project has limited integration of science, reading, writing or math activities. • Project does not align with California State Content Standards for 5th grade, nor is it noted in the project.
Use of RESOURCES	• Project clearly demonstrates use of quality educational materials, community resources, and/or speakers.	• Project demonstrates some use of additional educational materials, community resources, and/or speakers.	• Project demonstrates limited or no use of additional educational materials, community resources, and/or speakers.
STUDENT Participation	• Project clearly demonstrates evidence it was selected, researched, designed, implemented, evaluated, and written by the students.	• Project has some evidence it was selected, researched, designed, implemented, evaluated, and written by the students.	• Project demonstrates limited evidence that students were involved in the selection, research, design, implementation and evaluation or that it was written by students.

Long Term Environmental Impact: Guiding Questions

total possible 20 points

- How was this project important to students, the school, and/or community?
- Will we see the effects of this project in 5 years? What is the enduring aspect of this project?
- How did students move from awareness to responsible action?

	10	5	3
ACTION	• There is clear evidence that the project leads students from an awareness of environmental concepts and current issues to a deeper understanding and responsible action.	• There is some evidence that the project leads students from an awareness of environmental concepts and current issues to a deeper understanding and responsible action.	• There is limited evidence that the project leads students from an awareness of environmental concepts and current issues to a deeper understanding and responsible action.
Long-Term BENEFIT	• There is clear evidence of long-term impact of environmental benefits with students and within the school and/or community.	• There is some evidence of long-term impact of environmental benefits with students or within the school and/or community.	• There is some evidence of long-term impact of environmental benefits with students or within the school and/or community.

REFLECTION: Guiding Questions

total possible 20 points

- How do I know this project was successful and making a difference?
- What evidence of student learning do I have?
- How did this project improve upon or enhance student learning over the regular classroom curriculum?

	10	5	3
Student REFLECTION	• Project clearly demonstrates that all students have reflected on areas of successes or improvements of project goals.	• Project provides some student reflections on areas of successes or improvements of project goals.	• Project has little or no meaningful student reflections on areas of successes nor improvements of project goals.
Teacher REFLECTION	• Project clearly demonstrates that the teacher has reflected on the benefits and challenges of meeting project goals.	• Project provides some teacher reflection on the benefits and challenges of meeting project goals.	• Project provides limited or no teacher reflections on the benefits or challenges of meeting project goals.

Portfolio Presentation: Guiding Questions

Total Possible 20 Points

- Can someone who knows nothing about your project understand the goals and outcomes of project from the presentation?
- How does the presentation of the project demonstrate originality and creative efforts of the students and teacher?
- How were students involved in completing the presentation of the project?

	10	5	3
COMPLETENESS of Project	• All materials submitted are complete and demonstrate student involvement in conducting the project and preparing the Portfolio. • Goals and objectives of the project are clearly articulated.	• Partial materials are submitted which demonstrate some student involvement in conducting the project and preparing the Portfolio. • Goals and objectives of the project list, but not clearly articulated.	• Materials submitted are incomplete and demonstrate no student involvement in conducting the project and preparing the Portfolio. OR • Project goals are not related to the materials shown in the Portfolio.
Overall QUALITY of presentation	• Overall presentation of Portfolio is original, creative, and artistic, showing sustained effort and quality attention to detail.	• Overall presentation of Portfolio shows good effort and quality in its originality, creativeness, or artistic value.	• Overall presentation of Portfolio is not original, creative, or artistic in nature. Little effort in presentation of project.

PART THREE:
ADDITIONAL RESOURCES

EXTINCTOR

ACTIVITY AND STANDARDS MATCH

ACTIVITY: Initiate a school or community recycling and/or clean-up program.

Standards Match – Math:

Number Sense (NS)

1.2 Interpret percents as a part of a hundred. Find decimal and percent equivalents for common fractions and explain why they represent the same value. Compute a given percent of a whole number.

2.1 Add, subtract, multiply, and divide with decimals. Add with negative integers. Subtract positive integers from negative integers. Verify the reasonableness of the results.

2.5 Compute and perform simple multiplication and division of fractions and apply these procedures to solving problems.

SDAP

1.1 Know the concepts of mean, median, and mode; compute and compare simple examples to show that they may differ.

1.2 Organize and display single-variable data in appropriate graphs and representations (e.g., histogram, circle graphs) and explain which types of graphs are appropriate for various data sets.

1.3 Use fractions and percentages to compare data sets of different sizes.

Mathematical Reasoning (MR)

1.0 Students make decisions about how to approach problems. Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.

2.0 Students use strategies, skills, and concepts in finding solutions.

2.1 Use estimation to verify the reasonableness of calculated results.

2.3 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models to explain mathematical reasoning.

2.6 Make precise calculations and check the validity of the results from the context of the problem.

3.3 Develop generalizations of the results obtained and apply them in other circumstances.

Standards Match – English Language Arts:

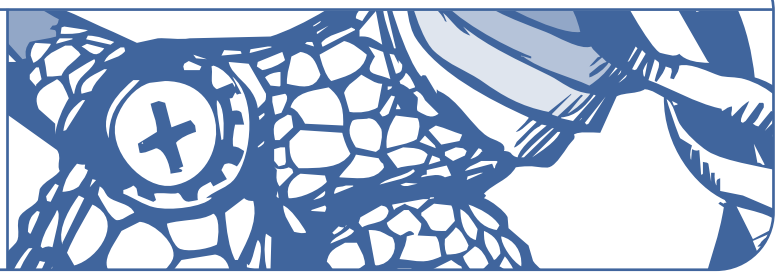
Writing Application (WA)

2.3 Write research reports about important ideas, issues, or events by using the following guidelines:

a. Frame questions that direct the investigation.
b. Establish a controlling idea or topic.
c. Develop the topic with simple facts, details, examples, and explanations.

2.4 Write persuasive letters or compositions:

a. State a clear position in support of a proposal.
b. Support a position
c. Follow a simple organizational pattern.
d. Address reader concerns.



Speaking Applications (SA)

Students deliver well organized, formal presentations employing traditional rhetorical strategies (e.g., narration, exposition, persuasion, description). Student speaking demonstrates a command of standard American English and the organizations and delivery strategies outlined in Listening and Speaking Standard 1.0

CONTINUED ...

Speaking Applications (SA)

2.1 Deliver narrative presentations:
- a. Establish a situation, plot, point of view, and setting with descriptive words and phrases.
- b. Show, rather than tell, the listener what happens.

2.2 Deliver informative presentations about an important idea, issue, or event by the following means:
- a. Frame questions to direct the investigation.
- b. Establish a controlling idea or topic.
- c. Develop the topic with simple facts, details, examples, and explanations.

2.3 Deliver oral responses to literature:
- a. Summarize significant events and details.
- b. Articulate an understanding of several ideas or images communicated by the literary work.
- c. Use examples or textual evidence from the work to support conclusions.

Listening and Speaking (LS)

LISTENING AND SPEAKING STRATEGIES

1.0 Students deliver focused, coherent presentations that convey ideas clearly and relate to the background and interests of the audience. They evaluate the content of oral communication.

COMPREHENSION

1.1 Ask questions that seek information not already discussed.

ORGANIZATION AND DELIVERY OF ORAL COMMUNICATION

1.4 Select a focus, organizational structure, and point of view for an oral presentation.
1.5 Clarify and support spoken ideas with evidence and examples.
1.6 Engage the audience with appropriate verbal cues, facial expressions, and gestures.

RESEARCH AND TECHNOLOGY

1.3 Use organizational features of printed text (e.g., citations, end notes, bibliographic references) to locate relevant information.
1.4 Create simple documents by using electronic media and employing organizational features (e.g., passwords, entry and pull-down menus, word searches, the thesaurus, spell checks).
1.5 Use a thesaurus to identify alternative word choices and meanings.

EVALUATION AND REVISION

1.6 Edit and revise manuscripts to improve the meaning and focus of writing by adding, deleting, consolidating, clarifying, and rearranging words and sentences.

Standards Match – **SCIENCE:**

Physical Science

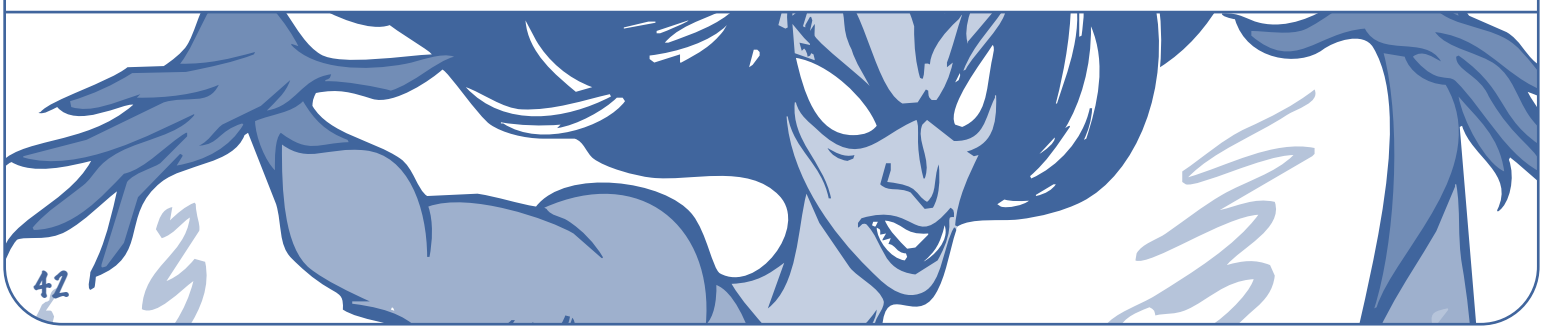
1. Elements and their combinations account for all the varied types of matter in the world. As a basis for understanding this concept:
   - C. STUDENTS KNOW metals have properties in common such as high electrical and thermal conductivity. Some metals, such as aluminum (Al), iron (Fe), nickel (Ni), copper (Cu), silver (Ag), and gold (Au), are pure elements; others, such as steel and brass, are composed of a combination of elemental metals.

Earth Science

3. Water on Earth moves between the oceans and land through the processes of evaporation and condensation. As a basis for understanding this concept:
   - A. STUDENTS KNOW that the amount of fresh water located in rivers, lakes, underground sources, and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.
   - B. STUDENTS KNOW the origin of the water used by their local communities.

Investigation and Experimentation

36. Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:
   - A. Classify objects (e.g., rocks, plants, leaves) in accordance with appropriate criteria.
   - B. Develop a testable question.
   - C. Plan and conduct a simple investigation based on student-developed questions and write instructions others can follow to carry out the procedure.
   - D. Identify the dependent and controlled variables in an investigation.
   - E. Identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment.
   - F. Select appropriate tools (e.g., thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations.
   - G. Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.
   - H. Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.
   - I. Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.



CEEIN EDUCATIONAL RESOURCES

Air Pollution

Air Pollution Fact Sheets/Brochures and Videos	http://www.arb.ca.gov/html/fslist.htm
Kids' and Teachers' Site for Air Pollution Education	http://www.arb.ca.gov/knowzone/knowzone.htm
Indoor Air Quality	http://www.arb.ca.gov/research/indoor/indoor.htm
What is Air Pollution?	http://www.arb.ca.gov/ch/educational/understanding_air_pollution.htm
Outdoor (Ambient) Air Quality	http://www.arb.ca.gov/research/aaqs/aaqs.htm
What You Can Do to Help Reduce Air Pollution	http://www.arb.ca.gov/html/cando.htm
Community Health Programs	http://www.arb.ca.gov/ch/educational/understanding_air_pollution.htm
Air Quality, Indoor and Outdoor	http://www.oehha.ca.gov/air.html

California State Parks

Adventures in Learning: Parks Interpretive Program	http://www.parks.ca.gov/?page_id=735
For Kids: Litter Getters, Junior Ranger, Online Adventures	http://kids.parks.ca.gov/
For Schools: History and Culture in the State Parks	http://www.parks.ca.gov/?page_id=21696
Brochures and other Information on Park Programs	http://www.parks.ca.gov/?page_id=21700

Energy and Conservation

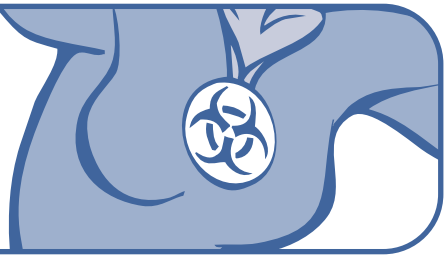
National Energy and Conservation Section	http://www.need.org/
CA School Energy Efficiency Program	http://www.schoolenergyefficiency.com
Kids' Site - All About Energy Quest	http://www.energyquest.ca.gov/index.html
Energy and Environmental Resources for Parents, Teachers	http://www.energyquest.ca.gov/teachers_resources/index.html
Oil, Gas and Geothermal Resources for Kids and Educators	http://www.consrv.ca.gov/DOG/kids_teachers/index.htm

Environmental Health Hazards

Air Quality, Indoor and Outdoor Education Links	http://www.oehha.ca.gov/air.html
List of Hazardous Art Supplies	http://www.oehha.ca.gov/education.html

Fire Safety and Prevention

Fire Safety Education	http://www.fire.ca.gov/php/education.php
Fire and Emergency Response	http://www.fire.ca.gov/php/fire_er.ph

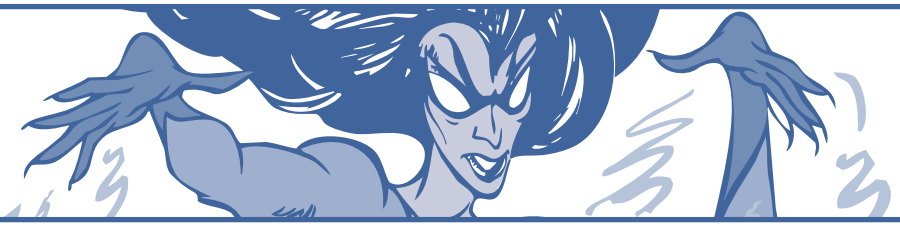


Forests

Project Learning Tree	http://www.plt.org
Urban & Community Forestry Grant Program	http://www.ufei.org/files/grantinfo/LITUgrants.html
Forest Ecology and Natural Resource Management	http://www.forestryinstitute.org
California Forest Products Commission	http://www.calforests.org/tools_for_teachers.html
Education Resources on Urban Forests and Natural Ecosystems	http://www.caltrees.org/teacher.html

General Environmental Links

General Environmental Education Links	http://www.cde.ca.gov/pd/ca/sc/oeeintrod.asp
Kids Page: Links on Various Topics	http://www.cdfa.ca.gov/kids/
Links to Environmental Education Programs	http://www.calepa.ca.gov/Education/ceein/resources/
Links to Educational Resources by age (Projects, games, ecosystems, waste)	http://www.epa.gov/epahome/educational.htm
A to Z Index of all USEPA Kids Topics	http://epa.gov/region5/students/atozindex.htm
State Architect's Sustainable Schools Website	http://www.sustainableschools.dgs.ca.gov/SustainableSchools/
Search for Information on Environmental Topics by Theme (Natural Resources, Natural Environment, or Human Environment)	http://www.ceres.ca.gov/search/index.epl
Links for Teachers on Various Environmental Topics	http://www.creec.org/stories/storyReader$39
ARKive Images of Life on Earth	http://www.arkive.org/
BioScience Literacy	http://www.actionbioscience.org/
Curriculum Resources	http://www.creec.org/stories/storyReader$42
Science and Nature	http://www.earthsky.org
Kids GeoZone Free Educational Material	http://www.consrv.ca.gov/CGS/information/free_educational_material.htm



Nutrition and Food Safety

5-a-Day Nutrition Homepage	http://www.5aday.com/
Food Safety Links for Students of All Ages	http://www.cdfa.ca.gov/ahfss/ah/student.htm

Plants and Animals

Fish and Game Education Homepage	http://www.dfg.ca.gov/coned/index.html
Living with Wildlife	http://www.dfg.ca.gov/coned/living.html
California's Plants and Animals	http://www.dfg.ca.gov/hcpb/species/species.shtml
Watchable Wildlife	http://www.dfg.ca.gov/watchable/index.html
City Bugs	http://www.cnr.berkeley.edu/citybugs/
Links to "Bug Questions"	http://www.cdpr.ca.gov/docs/factshts/pestcont.htm
Various Electronic Field Trips with Teacher Guides	http://www.wildthingsfws.org
Habitats	http://65.36.162.167/WT2003/index.htm
Invasive Species	http://65.36.162.167/WT2001/index.htm
Wetlands	http://65.36.162.167/WT2000/index.htm
ARKive Images of Life on Earth	http://www.arkive.org/
Topics for Youth: Kelp, Whales, Marine Debris and Sand	http://www.coastal.ca.gov/publiced/pendx.html
Safe Observation of Marine Wildlife	http://www.coastal.ca.gov/publiced/wildlifeobs.html
US Fish and Wildlife Service: Education for Conservation	http://www.fws.gov/educators/

Recycling and Hazardous Waste Disposal

DTSC Environmental Education-Links	http://www.dtsc.ca.gov/Education/index.html
The "No Waste" Anthology-Teacher's Guide	http://www.dtsc.ca.gov/Education/OEA_FLY_NWA.pdf

Recycling and Resource Conservation

School Curriculum and Teacher Resources	http://www.ciwmb.ca.gov/Schools/
Recycle Rex Activities and Resources	http://www.consrv.ca.gov/DOR/rre/index.htm

Water as a Natural Resource: Rivers, Streams and Oceans

Managing Fish and Water Supply	http://www.calwater.ca.gov/Newsroom/NewsroomFactsheets.shtml
Bay-Delta in the News	http://www.calwater.ca.gov/Newsroom/NewsroomNewsClips.asp
Waves, Wetlands and Watersheds: A Teacher's Guide	http://www.coastal.ca.gov/publiced/pendx.html
Oceanography and Coastal Processes	http://www.coast-nopp.org/toc.html
Topics for Youth: Kelp, Whales, Marine Debris and Sand	http://www.coastal.ca.gov/publiced/pendx.html
The Problem with Marine Debris	http://www.coastal.ca.gov/publiced/marinedebris.html
Become a Coastal Steward	http://www.coastal.ca.gov/publiced/steward/pledge_form.html
Sustainable Seafood	http://www.coastal.ca.gov/publiced/seafood.html

Water Pollution Prevention from Lawn Care and Pest Control

Guide to Healthy Lawns	http://www.ipm.ucdavis.edu/TOOLS/TURF/
Less-Toxic Pest Control	http://www.sacstormwater.org/wise/index.html
Master Gardeners Online	http://www.mastergardeners.org/
Consumer Pesticide Information	http://www.cdpr.ca.gov/docs/factshts/factmenu.htm
Home and Garden Checklist to Prevent Mosquitoes	http://www.cdpr.ca.gov/docs/factshts/checklist.pdf
Pesticides and Human Health Information	http://www.cdpr.ca.gov/docs/quicklinks/humanhea.htm
Tips for Homeowners to Prevent Water Pollution	http://www.swrcb.ca.gov/education/public/homeowner.html
Lawn and Garden	http://cfpub.epa.gov/npdes/stormwater/menuofbmps/edu_6.cfm
Pet Waste	http://cfpub.epa.gov/npdes/stormwater/menuofbmps/edu_8.cfm
Household Hazardous Waste	http://cfpub.epa.gov/npdes/stormwater/menuofbmps/edu_5.cfm
Links for Kids and Teachers	http://www.swrcb.ca.gov/education/school/index.html

Water Quality

Public Safety-River Conditions, Dams, Weather Forecasts	http://www.water.ca.gov/nav.cfm?topic=Public_Safety
Water Conditions-Surface Water, Reservoirs, Groundwater	http://www.water.ca.gov/nav.cfm?topic=Water_Conditions
Water Quality and Water Pollution Prevention	http://www.swrcb.ca.gov/education/public/index.html
Household Hazardous Waste	http://cfpub.epa.gov/npdes/stormwater/menuofbmps/edu_5.cfm
Tips for Homeowners to Prevent Water Pollution	http://www.swrcb.ca.gov/education/public/homeowner.html

Water Supply and Conservation

School Education-Water Facts and Fun Catalog	http://www.publicaffairs.water.ca.gov/education/

Water Safety and Boating

Water Safety and the State Water Project Catalog	http://www.publicaffairs.water.ca.gov/swp/brochures/safety.cfm
Boating Recreation, Rules and Safety	http://www.dbw.ca.gov/Publications.asp
Aqua Smart Kids' Pages: Teacher's Resources/Kids Activities	http://www.dbw.ca.gov/AquaSmart/index.html
Boater Education and Safety	http://www.dbw.ca.gov/Teach.asp
Public Safety-River Conditions, Dams, Weather	http://www.water.ca.gov/nav.cfm?topic=Public_Safety
Water Conditions-Surface Water, Reservoirs, Groundwater	http://www.water.ca.gov/nav.cfm?topic=Water_Conditions

SOME NOTES

Jiminy Cricket

Environmentality™ Super Hero!

Developed in conjunction
with the
K-12 Alliance
A WestEd Science and Mathematics Program

Editor: Kate DiRanna
Graphic Designer: Mariya Stepanyan

Disney's Environmentality™

Printed on recycled paper