



Alternative Energy Sources Research Project

Names of group members _____

Alternative Energy Source: _____

Task: Your group will be assigned a form of up and coming alternative energy (wind power, solar power, nuclear energy, geothermal energy, hydroelectric, biofuels, etc). Learn what the source is, how it creates energy, how it turns into electricity as well as its efficiency. Then, convince your class why this form of energy is so important and why we should use it instead of fossil fuels. Your group will be using your research for three things:

1. Your group will be creating an iMovie trailer with information about your group's source of energy. This will be presented in class at the Alternative Energy Fair (which will include classes from 3rd-5th grade). See rubric for specifics that must be included in presentation.
2. Your group will be designing a 3D model of your specific energy source. This will be displayed during the Alternative Energy Fair. See rubric for specifics on model expectations.
3. Your group will be giving a short presentation in class, and then during the Alternative Energy Fair.

This project will account for 4 grades in Science for the 4th 9 weeks. The entire project will be worked on in class, with the exception of bringing in items that you may need to create your model. Grades will be given for iMovie trailer, 3D model, group presentation, and individual participation. See rubrics for specific assessment criteria for each category. I will be monitoring group work. Each day, you will be required to log in your contribution during class into your alternative energy journal. This will be used as part of your participation grade. If, at any point, you are off task or not participating with your group, I will come and document that in your journal and points will be deducted from your participation grade.

Possible websites: These will be a great place to START...you may find other resources based on your research.

www.eia.doe.gov/kids/

www.energy.gov/energysources/index.htm

<http://www.darvill.clara.net/altenerg/index.htm>

Alternative Energy Sources iMovie Trailer Rubric

Name _____ Period _____

Directions: You will be using your research on your alternative energy source to create an iMovie trailer as a snapshot overview of your energy source.

Your group will be graded on the following components:

- _____ Original studio name includes Riverdale (5 pts)
- _____ Students' names are in credits (5 pts)
- _____ Name of energy source is included at the beginning of trailer (5 pts)
- _____ Includes at least 4 pictures of the energy source (20 pts)
- _____ Pictures are clear (not blurry) (5 pts)
- _____ Includes at least 3 advantages of energy source (30 pts)
- _____ iMovie trailer provides a complete overview of benefits of energy source (10 pts)
- _____ Grammar, capitalization, and punctuation are correct (10 pts)
- _____ Font size and spacing is legible (able to be read quickly) (10 pts)

Total points: _____

Notes:



Alternative Energy Sources 3-Dimensional Model Rubric

Names of group members _____

Alternative Energy Source: _____

Model accurately represents alternative energy source _____/10 pts
*Must be 3-Dimensional and be able to stand alone

Model includes all parts of alternative energy source (10) _____/10 pts
*Parts do not need to be labeled or working

Model shows creativity with a variety of materials used (10) _____/10 pts

Total score _____/30 pts = _____

Alternative Energy Sources Presentation Rubric

Group Presentation includes:

- A clear, concise description of the energy source and how it works _____/10 pts
- An explanation of the energy source _____/10 pts
- An explanation of how energy source is used/data is presented _____/10 pts
- Advantages and disadvantages about energy source are presented _____/20 pts
- Group was able to answer questions and had knowledge of energy source _____/10 pts

Total score _____/60 pts = _____

Comments:

Alternative Energy Sources Participation Rubric

Names of group members _____

Alternative Energy Source: _____

Daily Contribution Log (12 Points)

*Must be filled daily and include what you worked on during the class to help your team with the project. You can also fill in any items brought in to use for poster or 3D model. Absences should be recorded. Absences do not excuse your contribution to the project. If you are out, you are expected to get with your group and find out what they need you to do.

Day 1	
Day 2	
Day 3	
Day 4	
Day 5	
Day 6	
Day 7	
Day 8	
Day 9	
Day 10	
Day 11	
Day 12	

Peer Evaluation

Total points based on number of students in each group
Range is from 60 points for groups of 5 to 72 points for groups of 6

3 = Excellent 2=Good 1=Poor 0=Unacceptable

Group Member Name (Researchers)	Contribution: Provided useful ideas and relevant information.	Working with Others: Listened, shared, and worked well with peers.	Focus: Stayed focused on the task and what needed to be done.	Preparedness: Brought needed materials and was ready to work.	POINTS EARNED
1.	3 2 1 0	3 2 1 0	3 2 1 0	3 2 1 0	
2.	3 2 1 0	3 2 1 0	3 2 1 0	3 2 1 0	
3.	3 2 1 0	3 2 1 0	3 2 1 0	3 2 1 0	
4.	3 2 1 0	3 2 1 0	3 2 1 0	3 2 1 0	
5.	3 2 1 0	3 2 1 0	3 2 1 0	3 2 1 0	
6.	3 2 1 0	3 2 1 0	3 2 1 0	3 2 1 0	

Teacher Documentation Documented of off task behavior from teacher as observed by teacher.
 3 points will be deducted for each occurrence.

Date: _____
 Date: _____
 Date: _____
 Date: _____
 Date: _____

Participation Grade

Daily Contribution Log = _____ points

Peer Evaluation = _____ points

Teacher Documentation Deductions = _____ points

Total Participation Points = _____ out of _____ = _____