|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #1 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What is energy?    2. What does energy do?    3. What do we use energy for in the United States?    4. What energy sources do we use in the United States?    5. What do the terms renewable and nonrenewable mean? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display items or pictures that show what energy does – a toy car, a flashlight, a small plant, a calculator, a radio, etc.    2. Pour water back and forth between two cups to show renewable energy and have some small crackers to eat to show nonrenewable.    3. Make posters of the ways we use energy and the energy sources we use. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Introduction to Energy Exhibit

|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #2 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How was petroleum formed? Where do we find it?    2. Is petroleum renewable or nonrenewable?    3. How do we get petroleum? How do we move it?    4. How do we use petroleum?    5. How does using petroleum affect the environment | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display things, or pictures of things, that are made with petroleum – plastics, clothes, medicines, etc.    2. Make a colorful graph of petroleum uses.    3. Make a diagram or model of a drilling rig. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Petroleum Exhibit

|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #3 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How was natural gas formed? Where do we find it?    2. Is natural gas renewable or nonrenewable/    3. How do we get natural gas? How do we move it?    4. How do we use natural gas?    5. How does using Natural gas affect the environment? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display pictures of things that use natural gas – stove, furnace, water heater, etc.    2. Make a colorful graph of natural gas uses.    3. Make a map of where natural gas is found in the United States. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Natural Gas Exhibit

|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #4 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How was coal formed? Where do we find it?    2. Is coal renewable or nonrenewable    3. How do we get coal? How do we move it?    4. How do we use coal?    5. How does using coal affect the environment? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display pieces of different kinds of coal.    2. Make diagrams of underground and surface mines.    3. Display pictures of coal miners and machines. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Coal Exhibit

|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #5 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How was propane formed? Where do we find it?    2. Is propane renewable or nonrenewable    3. How do we get propane? How do we move it?    4. How do we use propane?    5. How does using propane affect the environment? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display pictures of things that use propane – grill, hot air balloon, farm, etc.    2. Make two containers that show the volume of propane as a liquid and as a gas.    3. Make a list of ways to use propane safely. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Propane Exhibit

|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #6 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How was Uranium formed? Where do we find it?    2. Is uranium renewable or nonrenewable    3. How do we use uranium?    4. What is radiation? How can it help and hurt us?    5. How does using uranium in a power plan affect the environment? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Make a model of an atom showing protons, neutrons, and electrons.    2. Make a diagram showing how we use uranium.    3. Take a survey of the parents in the class o see how many think nuclear power is a good way to make the electricity we need. Display a graph of the results.    4. Make a map showing where the nuclear power plants are in the U.S. or in Michigan. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Uranium Exhibit

|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #7 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What is the water cycle?    2. Is hydropower renewable or nonrenewable?    3. How do we capture the power in moving water?    4. How do we use hydropower?    5. How does using hydropower affect the environment? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Make a water wheel to show the power in water.    2. Make a colorful diagram of the water cycle.    3. Make a diagram or model of how a hydropower dam works. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Hydropower Exhibit

|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #8 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What is biomass?    2. Is biomass renewable or nonrenewable?    3. How do we make biomass?    4. How do we use biomass?    5. How does using biomass affect the environment? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display different kinds of biomass – paper, wood, garbage, etc.    2. Make a colorful graph of biomass uses.    3. Mix some juice and yeast in a Ziploc bag to show how biomass can produce a gas. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Biomass Exhibit

|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #9 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How is solar energy made?    2. Is solar energy renewable or nonrenewable?    3. How do we harness solar energy?    4. What other energy sources depend on solar energy?    5. How does using solar energy affect the environment? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display a solar cell or a solar calculator.    2. Make a colorful poster of solar energy uses.    3. Make a simple solar oven to show how you can cook with solar energy. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Solar Exhibit

|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #10 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How is wind formed?    2. Is wind energy renewable or nonrenewable?    3. How do we capture the energy in wind?    4. How do we use wind energy?    5. How does using wind affect the environment? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display pictures of windmills and wind turbines.    2. Make a colorful diagram of how wind is made.    3. Make a pin wheel to show how wind energy works. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Wind Exhibit

|  |  |
| --- | --- |
| ENERGY SOURCE EXHIBIT #11 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How is geothermal energy made? Where do we find it?    2. Is geothermal energy renewable or nonrenewable?    3. How do we get geothermal energy?    4. How do we use geothermal energy?    5. How does using geothermal energy affect the environment? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display pictures of things that show geothermal energy – volcano, Old Faithful, hot springs, etc.    2. Make a display of the Earth out of clay, showing the Earths layers.    3. Make a diagram of how a geothermal power plant or heat pump works. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Geothermal Exhibit

|  |  |
| --- | --- |
| SAVING ENERGY EXHIBIT #1 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How much energy do we use in the U.S.?    2. How does energy consumption in the U.S. compare to that of other countries?    3. What are the sectors of the economy and how much energy do they use?    4. What are the main tasks for which we use energy?    5. What are the advantages of U.S. energy consumption? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Make graphs of U.S. population and U.S. Energy consumption.    2. Make a poster explaining the sectors of the economy and how they use energy.    3. Display objects that use energy even when they are turned off. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Energy Consumption in the U.S. Exhibit

|  |  |
| --- | --- |
| SAVING ENERGY EXHIBIT #2 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How much of each energy source does the U.S. use?    2. What is the percentage of renewable and nonrenewable energy use?    3. What are the environmental impacts of U.S. energy consumption?    4. Why is it important for the U.S. to conserve energy? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display utility bills for electricity and natural gas.    2. Make a diagram of how much of each energy source we use.    3. Draw a map showing possible impacts of global warming on low lying areas. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Why Saving Energy is Important Exhibit

Heating Exhibit

|  |  |
| --- | --- |
| SAVING ENERGY EXHIBIT #3 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. Why do we heat building sand to what temperatures should we heat them?    2. What devices do we use to heat buildings and what fuels do they use?    3. How much energy does heating buildings consume?    4. How is energy wasted when heating buildings?    5. How can we conserve energy when heating buildings? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display different types of insulation.    2. Display caulking and weather-stripping.    3. Make a poster showing where heat escapes in the typical house. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

|  |  |
| --- | --- |
| SAVING ENERGY EXHIBIT #4 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. Why do we cool building sand to what temperatures should we cool them?    2. What devices do we use to cool buildings and how are they powered?    3. How much energy does cooling buildings consume?    4. How is energy wasted when cooling buildings?    5. How can we conserve energy when cooling buildings? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display a programmable thermostat and explain how it can save energy.    2. Demonstrate how a fan and make people feel cooler.    3. Display pictures of other alternatives to air conditioners. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Cooling Exhibit

|  |  |
| --- | --- |
| SAVING ENERGY EXHIBIT #5 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. Why is lighting important?    2. What types of lighting are used in homes and schools?    3. What is the energy consumption of different lights?    4. How much light is needed for different tasks – reading, television, security?    5. How can we reduce the energy used to light homes and schools? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display the optimum light levels for different tasks.    2. Demonstrate the use of daylight to reduce artificial lighting use.    3. Compare life cycle costs of incandescent and fluorescent lights. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Lighting Exhibit

|  |  |
| --- | --- |
| SAVING ENERGY EXHIBIT #6 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. Why is hot water important?    2. What methods and energy sources do we use to heat water?    3. How hot should water be to perform different tasks?    4. How do we waste hot water?    5. How can we save energy when heating water? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Make a poster showing important uses of hot water.    2. Make a chart showing the optimum temperature for different tasks that need hot water.    3. Make a hot water DO and DON’T Chart. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Water Heating Exhibit

|  |  |
| --- | --- |
| SAVING ENERGY EXHIBIT #7 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What energy sources generate electricity in the U.S.?    2. Why is electricity important in the U.S. Economy and individuals?    3. How is electricity measured and how much does it cost?    4. How can we save energy when using electrical devices and appliances?    5. How do electrical devices and appliances waste energy? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display devices that use energy even when they are turned off.    2. Make a diagram showing how electricity is generated.    3. Make a display showing how to read Energy Guide Labels. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Electrical Devices and Appliances Exhibit

|  |  |
| --- | --- |
| SAVING ENERGY EXHIBIT #8 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. How is trash part of the energy picture?    2. How much trash does the typical American generate compared to people in other countries?    3. How do we dispose of our trash in the U.S.?    4. How is energy wasted in trash disposal?    5. How can we save energy when disposing of our trash? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display different kinds of trash and explain its energy content.    2. Make a poster showing how reducing, reusing, repairing, and recycling can save energy.    3. Show how landfills can produce methane gas for energy use. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Take care of Trash Exhibit

|  |  |
| --- | --- |
| Transportation Fuels #1 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What are gasoline and diesel fuels?    2. How are gasoline and diesel produced and distributed?    3. What are some vehicles that use the gasoline and diesel?    4. What are the environmental impacts of gasoline and diesel?    5. What is the economic impact of gasoline and diesel?    6. What challenges are there when considering the use of other fuels? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display a chart showing advantages and disadvantages of the gasoline and diesel.    2. Make a poster showing how petroleum fuels are produced.    3. Show pictures/models of vehicles that use gasoline and diesel.    4. Draw a diagram comparing petroleum fuels to other fuels. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Petroleum Fuels- Gas & Diesel Exhibit

|  |  |
| --- | --- |
| Transportation Fuels #2 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What is biodiesel?    2. How is biodiesel produced and distributed?    3. What are some vehicles that use biodiesel?    4. What is the environmental impact of biodiesel?    5. What is the Economic impact of Biodiesel?    6. What are the challenges to widespread use? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display a chart showing advantages and disadvantages of biodiesel.    2. Make a poster showing how biodiesel fuels are produced.    3. Show pictures/models of vehicles that use biodiesel.    4. Draw a diagram comparing biodiesel to other fuels. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Biodiesel Exhibit

|  |  |
| --- | --- |
| Transportation Fuels #3 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What is Ethanol (E85)?    2. How is ethanol produced and distributed? What is the difference between E10 and E85?    3. What are some vehicles that use Ethanol?    4. What is the environmental impact of Ethanol?    5. What is the Economic impact of Ethanol?    6. What are the challenges to widespread use? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display a chart showing advantages and disadvantages of ethanol.    2. Make a poster showing how ethanol is produced.    3. Show pictures/models of vehicles that use ethanol.    4. Draw a diagram comparing ethanol to other fuels. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Ethanol Exhibit

|  |  |
| --- | --- |
| Transportation Fuels #4 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What is hydrogen?    2. How is hydrogen produced and distributed?    3. What are some vehicles that use hydrogen?    4. What is the environmental impact of hydrogen?    5. What is the Economic impact of hydrogen?    6. What are the challenges to widespread use? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display a chart showing advantages and disadvantages of hydrogen.    2. Make a poster showing how hydrogen fuels are produced.    3. Show pictures/models of vehicles that use hydrogen.    4. Draw a diagram comparing hydrogen to other fuels. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Hydrogen Exhibit

|  |  |
| --- | --- |
| Transportation Fuels #5 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What is electricity?    2. How is electricity produced and distributed?    3. What are some vehicles that use electricity?    4. What is the environmental impact of electricity?    5. What is the Economic impact of electricity?    6. What are the challenges to widespread use? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display a chart showing advantages and disadvantages of electricity.    2. Make a poster showing how electricity is produced.    3. Show pictures/models of vehicles that use electricity.    4. Draw a diagram comparing electricity to other fuels. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Electricity Exhibit

|  |  |
| --- | --- |
| Transportation Fuels #6 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What is hybrid electricity?    2. How is fuel produced and distributed?    3. What are some vehicles that use hybrid electricity?    4. What is the environmental impact of hybrid electric vehicles?    5. What is the Economic impact of hybrid electricity?    6. What are the challenges to widespread use? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Make a poster showing how hybrid vehicles use both gasoline and electricity.    2. Display a chart showing advantages and disadvantages of hybrid electric vehicles.    3. Find pictures/models of hybrid electric vehicles.    4. Draw a graph comparing the number of hybrid electric vehicles on the road to other vehicles. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Hybrid Electric Exhibit

|  |  |
| --- | --- |
| Transportation Fuels #7 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What is propane?    2. How is propane produced and electricity?    3. What are some vehicles that use propane?    4. What is the environmental impact of propane?    5. What is the Economic impact of propane?    6. What are the challenges to widespread use? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display a chart showing advantages and disadvantages of propane.    2. Make a poster showing how propane is produced.    3. Find pictures/models of vehicles that use propane.    4. Draw a diagram comparing propane to other fuels. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Propane Exhibit

|  |  |
| --- | --- |
| Transportation Fuels #8 | Points |
| STEP 1: LEARN ABOUT ENERGY   1. Research your topic on line, in books, or in other related materials. Print off main ideas and make sure that you cite all of your sources (author, year published, publisher, website title, web address, etc.) 2. Highlight, underline, or star the most important facts that you want to use in your display or presentation. 3. Make a list of the facts that you want to teach others. Make sure you answer these questions:    1. What are CNG and LNG?    2. How are CNG and LNG produced and electricity?    3. What are some vehicles that use CNG and LNG?    4. What is the environmental impact of CNG and LNG?    5. What is the Economic impact of CNG and LNG?    6. What are the challenges to widespread use? | 15 points |
| STEP 2: PLAN YOUR EXHIBIT   1. Make a list of the displays you can use to make your exhibit interesting. Here are some suggestions:    1. Display a chart showing advantages and disadvantages of CNG and LNG.    2. Make a poster showing how CNG and LNG are produced.    3. Find pictures/models of vehicles that use CNG and LNG.    4. Draw a diagram comparing CNG and LNG to other fuels. | 5 points |
| STEP 3: USE YOUR TALENT   1. Write a script 2. Collect materials you will need for display 3. Make a display layout 4. Learn the script to teach others during your presentation | 10 points |
| STEP 4: CREATE YOUR EXHIBIT AND WRITE YOUR SCRIPT   1. Write a 2 minute script using the list of important facts and information gathered from Step 1. 2. Create an interesting display with posters and hands-on materials. Make sure the display and the script cover the same information. 3. Practice the script so that you do not have to read it. Use note cards with the important facts listed on them. | 50 points |
| STEP 5: PRESENTATION   1. Submit Evaluation form/Rubric 2. Give a 2 minute presentation of your exhibit to others | 20 points |
| Information taken from [www.NEED.org](http://www.NEED.org) | Total\_\_\_\_\_ |

Compressed & Liquefied Nat. Gas Exhibit