

Solar Energy Web Quest

Go to thesciencequeen.net >students>6th grade>projects>Solar Energy WebQuest

Site 1: Energy Transfer		
Question		Answer
1.	Heat moves from ___ to _____	
2.	The area where the temperature is lower is the ___	
3.	What is convection? Give an example.	
4.	What is radiation? Give an example	
5.	What is conduction? Give an example	
6.	Name four good thermal conductors	
7.	What is an urban heat island? (Hint watch the video...) Why are scientists concerned?	
8.	Who invented the Fahrenheit scale? What is it based on?	
9.	What is the Celsius scale based on?	
10.	Why is Kelvin the most important scale in science?	
Site #2 Renewable Energy Basics		
11.	What is renewable energy?	
12.	What are the five most used renewable resources?	

13.	What five resources are grouped under the biomass resource?	
14.	What does biomass mean?	
15.	What percentage of energy consumption in the US is produced by renewable energy? How much of that is generated by solar energy?	
<i>Go back to thesciencequeen.net site. Click on Solar Energy Basics (Site #3)</i>		
16.	What is solar energy?	
17.	What is thermal energy?	
18.	Solar energy can be converted to electrical energy in what two ways?	
19.	What are the two main benefits of solar energy?	
20.	What are the two main limitations of solar energy?	
<i>Go back to thesciencequeen.net site. Click on Solar Energy Need (Site #4)</i>		
21.	What are the three main types of solar thermal power systems?	

22.	What is the difference between a passive and active solar home design?	
<i>Go back to thesciencequeen.net site. Click on Photovoltaic (Site #5)</i>		
23.	How does the sun transfer energy?	
24.	How reflective are the following objects? <ul style="list-style-type: none">• Snow• Asphalt• Light Roof• Dark Roof• Forest	
15.	What did the scientist Auguste Mouchout do in the field of solar energy?	
26.	What is the photovoltaic effect?	
<i>Go back to thesciencequeen.net site. Click on Solar Oven Design #1 (Site #6)</i>		
17.	Draw a detailed, labeled picture of the solar oven design.	

18.	How does this oven work?	
19.	How hot will this oven get?	
<i>Go back to thesciencequeen.net site. Click on Solar Oven Design #2 (Site #7)</i>		
20.	What two principles are demonstrated?	
21.	What did astronomer John Herschel do?	