

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

## Alternative Sources of Energy: Web Quest

**\*\*Please Turn-In\*\***

**Directions:** Complete the table on your homework page using the following websites or others of your choosing:

**Alternative Energy Website #1:** <http://www.darvill.clara.net/altenerg/index.htm>

**Fuel Cells Website #2:** [http://www.altenergy.org/renewables/fuel\\_cells.html](http://www.altenergy.org/renewables/fuel_cells.html)

### Helpful Tips!

This website is designed for the United Kingdom, but the principles are the same as here in the USA!

Pros is another way of saying *Advantages*

Cons is another way of saying *Disadvantages*

Under *Biofuels* for Website #1 choose *other biofuels* as the subcategory

*Wave Power* is the same thing as *Tide Power*

Alternative Sources of Energy for North Carolina **\*\*Computer Lab Activity\*\*** Complete the table below

Name	Description	Pros	Cons
Solar			
Wind			
Biofuels	<b>Complete on Homework Page!!</b>		
Fuel Cells			
Wave Power			
Geothermal			

**Directions:** Go to Website #1 listed above and select the "Quizzes." And complete the following blanks. You can have the article open while you work on the quizzes as a review. Use the website to check your answers before you record them on this page.

### Solar Power Quiz

Solar power is \_\_\_\_\_, and does not produce any \_\_\_\_\_ when in use.

If you install solar power at home, it may be \_\_\_\_\_ cells to help your electricity bill, or solar \_\_\_\_\_ heating.

PV cells are \_\_\_\_\_ to make compared to the amount of \_\_\_\_\_ they'll produce in their lifetime.

### Wind Power Quiz

Wind power is \_\_\_\_\_, does not need any \_\_\_\_\_ and does not produce any \_\_\_\_\_.

However, you need a lot of \_\_\_\_\_ to make a large amount of power, and you must put them where the winds are \_\_\_\_\_ and \_\_\_\_\_.

Wind farms can be \_\_\_\_\_ if you live close. Most wind farms in the UK are in \_\_\_\_\_ and \_\_\_\_\_.

## Biofuels Quiz

Biofuels for vehicles include \_\_\_\_\_ and bioethanol. Biodiesel can be made from the \_\_\_\_\_ in crops such as \_\_\_\_\_. \_\_\_\_\_ can be made by fermenting \_\_\_\_\_.

Producing biofuels from \_\_\_\_\_ means less land for growing food. Biofuels can also be made from \_\_\_\_\_, which does not need as much land.

## Tidal Power Quiz

There is a great deal of energy in tides. To use it, we can build a large dam, called a tidal \_\_\_\_\_, across an \_\_\_\_\_ where the tides are strong. There are proposals to build one across the river \_\_\_\_\_ in the UK.

Tidal energy is \_\_\_\_\_, needs no \_\_\_\_\_ and produces no \_\_\_\_\_. However, such a huge dam is very \_\_\_\_\_ to build and will affect the environment over a \_\_\_\_\_ area. The largest one in the world so far is in the Rance estuary, in \_\_\_\_\_.

An alternative is 'offshore \_\_\_\_\_', like an underwater wind farm. This will not have such a dramatic effect on the surrounding area.

It will only generate power when the tide is going \_\_\_\_\_ or \_\_\_\_\_, but we know when this will be so we can easily plan for it.

## Geothermal Quiz

Geothermal power means getting \_\_\_\_\_ from \_\_\_\_\_ rocks underground. This is \_\_\_\_\_ so long as we don't take too much energy out and cool the rocks too much.

Hot \_\_\_\_\_ comes up out of the hole we've drilled and usually "flashes" into \_\_\_\_\_. This can drive turbines and generators, to make \_\_\_\_\_.

At some sites we have to \_\_\_\_\_ water down, at others hot water comes up anyway. Sometimes poisonous \_\_\_\_\_ come up too.

Geothermal power can occasionally be unreliable, and there are not many suitable \_\_\_\_\_ because there needs to be the right type of \_\_\_\_\_ at a \_\_\_\_\_ we can reach, underneath rock which isn't too hard to \_\_\_\_\_ through.

**Directions:** Save the world! Go to the following website and come up with alternative energy solutions for the following regions. Record the percentage of each region in the table below. You are successful when you make the battery reach full capacity.

**Website #3:** <http://www.wonderville.ca/asset/save-the-world>

Region	Tidal %	Wind %	Solar %	Geothermal %	Hydro %
Canada					
USA					
Norway					
France					
India					
Japan					
New Zealand					

**Finish Early?** Explore more games on Wonderville or work on your Countdown Folder.