

WORKSHEET

Use your notes and answer the following questions and complete the following charts.

1. What is the difference between a renewable energy source and a non-renewable energy source? Give two examples of each.

Renewable Energy:

A renewable resource is any resource taken from the earth that can be replaced over a short period of time.
For example: wind, water, solar, sun, biomass

Non Renewable Energy:

A non-renewable resource is any resource taken from the earth that cannot be replaced
For example: coal, natural gas, oil, nuclear energy

2. Fill out the chart, outlining the advantages and the disadvantages for renewable energy.

Advantages	Disadvantages
• Free resources such as wind, water, sun/solar	• Unpredictable - ie days no wind or sun
• Not a lot of pollution produced	• Expensive to build wind farms, dams, solar power stations
• produces electricity - • energy constantly produced by flowing water	• Windmills disturb TV & phone wave receptions • Dams cause deforestation and loss of habitats

3. Fill out the chart, outlining the advantages and the disadvantages for non-renewable energy sources.

Energy Source	Advantages	Disadvantages
Coal	useful to produce electricity	burning coal releases sulphur into the environment which produces acid rain
Natural Gas	• does not produce pollution in the air	• has a poisonous chemical called hydrogen sulphide
Oil	• used in transport vehicles	• oil spills can be very dangerous to the environment and difficult to clean up

* Fossil Fuels have a bad impact on our environment such as causing global warming

Conserving Energy

There are simple activities we can perform on a daily basis to reduce the consumption of natural resources including energy and water.

Here are a few examples:

- Automatic faucets
- Save electricity by turning off lights and unplugging items that are not being used
- Plant trees
- Ride a bike or walk instead of driving
- Carpool
- Fix a dripping tap
- Practice the 5 R's (reuse, reduce, recycle, rethink, refuse)
- Turn off the television and lights when no in use
- Install low flow shower heads
- Turn of tap when brushing your teeth
- Don't put chemicals down the drains

List at least 5 ways of conserving energy:

1. Play outside instead of using electricity to play Video games, watch TV, go on electronic devices
2. Eat one meat-free meal a week
3. Use programmable thermostats
4. Hang laundry on the clothes line to dry in the warmer months
5. Use energy-saving appliances and lightbulbs

- double-pane windows instead ~~one~~ of single-pane windows
- Outside lights with a sensor

Sort the following in the right column.

Wind, sun, oil, natural gases, plant, water, coal, water tides, fossil fuels, wood

Non-renewable Energy	Renewable Energy
<p>oil</p> <p>natural gases</p> <p>coal</p> <p>fossil fuels</p>	<p>wind</p> <p>sun</p> <p>water tides</p> <p>plants - as long as new ones are replanted.</p> <p>Wood - as long as trees are replanted.</p>