

<p><i>True or False</i></p>  <p>Many appliances continue to draw a small amount of power when they are switched off.</p> <p><b>True</b></p>	<p><i>True or False</i></p>  <p>Electronic equipment such as copiers and fax machines last longer if they are never turned off.</p> <p><b>False</b></p>
<p><i>True or False</i></p>  <p>If left inactive, Energy Star computers enter a low-power mode and use 15 watts or less.</p> <p><b>True</b></p>	<p><i>True or False</i></p>  <p>Using throw-away batteries for laptops, PDAs and cordless phones is more cost effective than rechargeable batteries.</p> <p><b>False</b></p>
<p><i>True or False</i></p>  <p>Schools can save energy on lighting by using only dark colors on classroom and hallway walls.</p> <p><b>False</b></p>	<p><i>True or False</i></p>  <p>Schools spend more on energy than on computers and textbooks.</p> <p><b>True</b></p>
<p><i>True or False</i></p>  <p>It costs more to maintain, heat and cool a school building over its lifetime than it cost to construct the school when new.</p> <p><b>True</b></p>	<p><i>True or False</i></p>  <p>Energy Star copiers can save up to 5% over standard copy machines.</p> <p><b>False (40%)</b></p>

<p><b>Multiple Choice</b> </p> <p>The biggest chunk of a school utility bill is for</p> <ul style="list-style-type: none"> <li>a. lighting</li> <li>b. computers</li> <li><b>c. heating</b></li> </ul>	<p><b>Multiple Choice</b> </p> <p>Schools built prior to 1970 exhibit major heat loss in winter because of inefficient</p> <ul style="list-style-type: none"> <li><b>a. windows</b></li> <li>b. doors</li> <li>c. roofing</li> </ul>
<p><b>Multiple Choice</b> </p> <p>Which type of computer uses the least energy?</p> <ul style="list-style-type: none"> <li>a. mainframe</li> <li>b. desktop</li> <li><b>c. laptop</b></li> </ul>	<p><b>Multiple Choice</b> </p> <p>Which uses the most energy in the classroom?</p> <ul style="list-style-type: none"> <li>a. overhead projector</li> <li>b. dry erase board</li> <li><b>c. computer w/projection system</b></li> </ul>
<p><b>Multiple Choice</b> </p> <p>Most of the energy used to run your computer is for the</p> <ul style="list-style-type: none"> <li>a. CD-ROM drive</li> <li>b. speakers</li> <li><b>c. monitor</b></li> </ul>	<p><b>Multiple Choice</b> </p> <p>Most of the energy consumed by schools is supplied by</p> <ul style="list-style-type: none"> <li><b>a. electricity and natural gas</b></li> <li>b. nuclear and natural gas</li> <li>c. electricity and nuclear</li> </ul>
<p><b>Multiple Choice</b> </p> <p>Fuel that uses soy products in place of gasoline is called</p> <ul style="list-style-type: none"> <li>a. hybrid</li> <li><b>b. biodiesel</b></li> <li>c. natural gas</li> </ul>	<p><b>Multiple Choice</b> </p> <p>Natural daylighting in schools is a great source. One 3x5 window will let in more light than _____ standard 60 watt bulbs.</p> <p>a. 5      <b>b. 30</b>      c. 140</p>

*Fill in the Blank*



The major energy user in your school is the HVAC system. HVAC stands for \_\_\_\_\_

**Heating Ventilation Air Conditioning**

*Fill in the Blank*



Most schools use \_\_\_\_\_ light bulbs in the halls and classrooms.

**fluorescent**

*Fill in the Blank*



Occupancy sensors in classrooms reduce the amount of \_\_\_\_\_ the lights are on throughout the school day.

**Time**

*Fill in the Blank*



Carefully designed overhangs and windows with reflective coatings are both parts of \_\_\_\_\_ solar design.

**Passive**

*Fill in the Blank*



A branching network of metal tubes in the walls, floor, and ceilings to carry air is called the \_\_\_\_\_ work or system.

**duct**

*Fill in the Blank*



Using a \_\_\_\_\_ instead of a window air conditioner saves energy.

**fan**

*Fill in the Blank*



Energy efficient schools are often referred to as " \_\_\_\_\_ " buildings.

**Green**

*Fill in the Blank*



Recycling paper cuts energy usage in \_\_\_\_\_.

**half**



**Multiple Choice**

Your hot water heater should be lowered to \_\_\_\_\_ for maximum energy efficiency.

- a. 100°F    b. 120 °F    c. 180 °F



**Multiple Choice**

Standard light bulbs with a filament that glows white hot are called

- a. fluorescent  
b. halogen  
c. **incandescent**



**Multiple Choice**

You can save as much as \_\_\_\_\_ % on your utility bill by reducing air leaks in your home.

- a. **10%**    b. 50%    c. 70%



**Multiple Choice**

This accounts for 13% of a typical utility bill.

- a. heating  
b. **water heating**  
c. refrigeration



**Multiple Choice**

What fuel is used by more than half of U.S. households to heat their homes?

- a. heating oil  
b. electricity  
c. **natural gas**



**Multiple Choice**

One of the most cost-effective ways to make your home more comfortable year-round is to add insulation to your

- a. **attic**  
b. chimney  
c. interior walls



**Multiple Choice**

To prevent solar gain, window coverings should be kept closed during the day in what season?

- a. **summer**    b. fall    c. winter



**Multiple Choice**

An incandescent bulb transforms only about \_\_\_\_\_% of the energy it receives into light.

- a. 2%    b. **10%**    c. 25%

<p><i>True or False</i></p>  <p>Lighting and appliances account for about <math>\frac{1}{4}</math> of our utility bill.</p> <p><b>True</b></p>	<p><i>True or False</i></p>  <p>Over the life of an appliance an energy efficient model is always a better deal than a low cost appliance.</p> <p><b>True</b></p>
<p><i>True or False</i></p>  <p>Taking a shower uses more energy and hot water than taking a bath.</p> <p><b>False</b></p>	<p><i>True or False</i></p>  <p>Keeping your fireplace damper open saves energy by avoiding heat loss.</p> <p><b>False</b></p>
<p><i>True or False</i></p>  <p>Homeowners should clean or replace filters on furnaces once a month or as needed.</p> <p><b>True</b></p>	<p><i>True or False</i></p>  <p>Refrigerators with the freezer on top are more energy-efficient than side-by-side models.</p> <p><b>True</b></p>
<p><i>True or False</i></p>  <p>Keeping the refrigerator door open to help lower air conditioning costs is a good way to save money.</p> <p><b>False</b></p>	<p><i>True or False</i></p>  <p>An oven uses less energy to heat food than a microwave.</p> <p><b>False</b></p>

*Fill in the Blank*



\_\_\_\_\_ thermostats can automatically control temperature for time of day and season for maximum efficiency.

**Programmable**

*Fill in the Blank*



Insulation is rated using \_\_\_\_\_-value indicating the resistance of the material to heat flow.

**R**

*Fill in the Blank*



When you shop for new appliances, look for the \_\_\_\_\_ label, your assurance that the product saves energy.

**Energy Star**

*Fill in the Blank*



CFL stands for \_\_\_\_\_

**compact fluorescent bulb**

*Fill in the Blank*



A room-by-room inspection and study of your energy use is called an energy \_\_\_\_\_.

**audit**

*Fill in the Blank*



A \_\_\_\_\_ photograph of your house can show areas of greatest heat loss as different colors.

**thermal or infrared**

*Fill in the Blank*



The material placed in walls, attics, and crawl spaces to prevent heat loss is called \_\_\_\_\_.

**insulation**

*Fill in the Blank*



You should caulk and weatherstrip \_\_\_\_\_ and \_\_\_\_\_ that leak air.

**doors, windows**

<p><i>True or False</i> </p> <p>America is a "throw-away" society. The average citizen produces about 100 pounds of trash per year.</p> <p><b>False (1000 lb)</b></p>	<p><i>True or False</i> </p> <p>Recycling aluminum cans saves 95% of the energy required to produce new cans.</p> <p><b>True</b></p>
<p><i>True or False</i> </p> <p>During the summer, trees and landscaping can block 70-80% of the sun's radiation to help keep temperatures down.</p> <p><b>True</b></p>	<p><i>True or False</i> </p> <p>Trees that lose their leaves in the fall are the best at reducing heating and cooling costs.</p> <p><b>True</b></p>
<p><i>True or False</i> </p> <p>In the summer, you will save energy by wearing layers of clothing and lowering your thermostat.</p> <p><b>False</b></p>	<p><i>True or False</i> </p> <p>One 100w light bulb uses less energy and produces more light than two 60w bulbs.</p> <p><b>True</b></p>
<p><i>True or False</i> </p> <p>Cars do not produce carbon dioxide gas emissions.</p> <p><b>False</b></p>	<p><i>True or False</i> </p> <p>Lighting in store parking lots uses more energy than lighting inside the store.</p> <p><b>True</b></p>

*Fill in the Blank*



The U.S. Department of Energy divides energy use into three categories: Residential/Commercial, Industrial, and \_\_\_\_\_.

**Transportation**

*Fill in the Blank*



KWH is the abbreviation for \_\_\_\_\_.

**kilowatt hour**

*Fill in the Blank*



Consumers can help reduce energy waste by practicing the "3 R's" which stand for Reduce, Reuse, and \_\_\_\_\_.

**Recycle**

*Fill in the Blank*



Some utilities offer rebates for installing solar electric systems or PVs. PV stands for \_\_\_\_\_.

**photo-voltaic**

*Fill in the Blank*



The risk from air pollution in your community is reported on a scale called the Air Quality \_\_\_\_\_.

**Index**

*Fill in the Blank*



Buying larger quantities of an item instead of smaller quantities that are individually wrapped is called "buying in \_\_\_\_\_".

**bulk**

*Fill in the Blank*



Burning coal makes steam which causes the \_\_\_\_\_ to turn.

**turbine**

*Fill in the Blank*



One-fifth of all wood harvested in the world goes to producing \_\_\_\_\_.

**paper**

**Multiple Choice**



With less than 5% of the world's population, the United States uses about what percent of the world's energy sources?

- a. 10%
- b. **25%**
- c. 50%

**Multiple Choice**



Energy sources that power heating and cooling systems emit more than 500 million tons of what gas into the air?

- a. **carbon dioxide**
- b. oxygen
- c. ammonia

**Multiple Choice**



To help your car get more miles per gallon, you should

- a. **inflate the tires to the proper pressure**
- b. wash the car
- c. start and stop quickly

**Multiple Choice**



Most household electrical appliances require \_\_\_\_\_ volts to operate.

- a. 9
- b. 240
- c. **120**

**Multiple Choice**



A fuel cell produces what fuel?

- a. gasoline
- b. **hydrogen**
- c. methane

**Multiple Choice**



Which country needs the most improvement in energy efficiency?

- a. Russia
- b. England
- c. **United States**

**Multiple Choice**



The best sites for wind farms are on

- a. **hilltops, open plains**
- b. large bodies of water
- c. tops of city buildings

**Multiple Choice**



Greenhouse gases include

- a. oxygen and nitrogen
- b. **carbon dioxide and methane**
- c. air and hydrogen

<p><i>True or False</i></p>  <p>Solar water heating is the most cost effective use of solar energy.</p> <p><b>True</b></p>	<p><i>True or False</i></p>  <p>A well-placed building admits low-angle sun in winter and rejects overhead summer sun.</p> <p><b>True</b></p>
<p><i>True or False</i></p>  <p>Batteries turn chemical energy into electrical energy.</p> <p><b>True</b></p>	<p><i>True or False</i></p>  <p>Water flowing at Niagara Falls is an example of solar energy.</p> <p><b>False</b></p>
<p><i>True or False</i></p>  <p>Windmills are used in some parts of the U.S. to produce electricity.</p> <p><b>True</b></p>	<p><i>True or False</i></p>  <p>Propane is used mostly in rural areas.</p> <p><b>True</b></p>
<p><i>True or False</i></p>  <p>Geothermal energy can be used for home heating.</p> <p><b>True</b></p>	<p><i>True or False</i></p>  <p>Hydropower is the most common method for generating electricity in Ohio.</p> <p><b>False</b></p>

**Multiple Choice**



Transportation accounts for \_\_\_\_\_ percent of U.S. oil use.

- a. 34%
- b. 99%
- c. **66%**

**Multiple Choice**



Replacing a 100 watt incandescent bulb with a fluorescent bulb will save burning \_\_\_\_\_ pounds of coal.

- a. 100
- b. 300
- c. **600**

**Multiple Choice**



What is a major disadvantage of wind energy?

- a. **it's not available all the time**
- b. it messes up your hair
- c. it is non-renewable

**Multiple Choice**



What do you call the area around the Pacific where most of the geothermal activity in the world occurs?

- a. Hills of Texas
- b. **Ring of Fire**
- c. Middle East

**Multiple Choice**



Which fuel is used most in the U.S. to generate electricity?

- a. **coal**
- b. petroleum
- c. nuclear

**Multiple Choice**



Which of the following is a type of biomass?

- a. plastic
- b. **wood**
- c. uranium

**Multiple Choice**



A symbol that means recyclable is shaped like a

- a. circle
- b. **triangle**
- c. diamond

**Multiple Choice**



Which recyclable material comes from petroleum?

- a. **plastic**
- b. glass
- c. paper

*Fill in the Blank*



\_\_\_\_\_ is the process in which plants convert solar energy into chemical energy.

**Photosynthesis**

*Fill in the Blank*



Natural gas is transported mainly by \_\_\_\_\_.

**pipeline**

*Fill in the Blank*



Coal fired power plants install scrubbers to remove \_\_\_\_\_ from the smoke and emissions.

**sulfur**

*Fill in the Blank*



Landfills can generate useful amounts of \_\_\_\_\_ gas.

**methane**

*Fill in the Blank*



Fossil fuels are considered \_\_\_\_\_ because we use them at a faster rate than the earth can produce them.

**non-renewable**

*Fill in the Blank*



The most widely used renewable energy source is \_\_\_\_\_.

**hydropower**

*Fill in the Blank*



The element used as the fuel in nuclear reactors is \_\_\_\_\_.

**uranium**

*Fill in the Blank*



An electrical current can be used to separate water into hydrogen and oxygen in the process called \_\_\_\_\_.

**electrolysis**







