W: 1. What are sources of electricity? List as many as you can.

1. Where do people and other animals get energy to move around?

**Station 1: Intro**

1. Which object converts sunlight into sugars? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Which object converts wind power to electricity? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Which object converts light to electricity? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Which object converts electricity to sound? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Station 2: Energy Paths**

1. Fill in the Energy Path:

Sun → \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Fill in 4 energy paths to power a toaster.
   * 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → Toaster
     2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → Toaster
     3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → Toaster
     4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → \_\_\_\_\_\_\_\_\_\_\_\_\_\_ → Toaster
2. Where does each path begin? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What would life on Earth be like without the Sun? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Station 3: Conversion**

|  |  |
| --- | --- |
| **Energy Path** | **Energy conversion** |
| ­  \_\_\_\_**Sun**\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_ | Nuclear energy is converted to light and thermal energy. |
|  |
|  |
|  |

|  |  |
| --- | --- |
| **Energy Path** | **Energy conversion** |
| ­  \_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_ |  |
|  |
|  |
|  |

2. Where in this activity (and in real life) do the following energy conversions occur?

Chemical to thermal to electrical current: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Gravitational potential to kinetic to electrical current: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Station 4: Renewable Energy**

1. **What types of energy do not harm our environment?**

Describe: Four examples of **renewable resources** are on your cards. These resources are produced all the time, so they will not run out. Read about each energy source, and then explain how each is produced in your own words.

* 1. Wind power: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. Water power (also called **hydroelectricity**): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  3. Solar power: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  4. Ethanol: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7th Science Page 4’s Minor Assignment

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mod: \_\_\_\_ Date:\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Related image | | 1. **Circle one type of energy from each box to describe the food you eat.**  |  |  | | --- | --- | | Potential Energy  Kinetic Energy | Elastic Energy  Chemical Energy  Mechanical Energy  Thermal Energy | |
|  | 1. **When this blender turns on. FIRST, You are using \_\_\_\_ energy. Circle your answer.**  |  | | --- | | Electrical Thermal  Sound Mechanical  Light |  1. **Which is NOT a form of Kinetic Energy this blender uses ever.**  |  | | --- | | Electrical Energy Thermal Energy  Sound Energy Mechanical Energy  Light Energy | | |
| 1. **Energy flows through systems and can convert between forms. Eventually, energy ends up as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy** | | |

Science Page 4’s Minor Assignment

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mod: \_\_\_\_ Date:\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Related image | | 1. **Circle one type of energy from each box to describe the food you eat.**  |  |  | | --- | --- | | Potential Energy  Kinetic Energy | Elastic Energy  Chemical Energy  Mechanical Energy  Thermal Energy | |
|  | 1. **When this blender turns on. FIRST, You are using \_\_\_\_ energy. Circle your answer.**  |  | | --- | | Electrical Thermal  Sound Mechanical  Light |  1. **Which is NOT a form of Kinetic Energy this blender uses ever.**  |  | | --- | | Electrical Energy Thermal Energy  Sound Energy Mechanical Energy  Light Energy | | |
| 1. **Energy flows through systems and can convert between forms. Eventually, energy ends up as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy** | | |

Science Page 4’s Minor Assignment

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mod: \_\_\_\_ Date:\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Related image | | 1. **Circle one type of energy from each box to describe the food you eat.**  |  |  | | --- | --- | | Potential Energy  Kinetic Energy | Elastic Energy  Chemical Energy  Mechanical Energy | |
|  | 1. **When this blender turns on. FIRST, You are using \_\_\_\_\_\_ energy. Circle your answer.**  |  | | --- | | Electrical Thermal  Sound Light |  1. **Which is NOT a form of Kinetic Energy this blender uses ever.**  |  | | --- | | Electrical Energy Thermal Energy  Mechanical Energy Light Energy | | |
| 1. **Energy flows through systems and can convert between forms. Eventually, energy ends up as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy**   *(Hint: check out #1 on the back of page 4!)* | | |