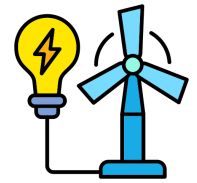


**Draw a schematic of the following:**

**Simple circuit**

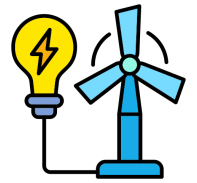
**Parallel circuit**

**Series circuit**



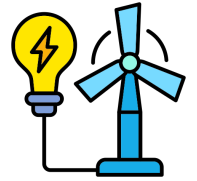
## Sustainable Energy Student Worksheets

1. What is electricity?
  - a. A type of atom
  - b. A type of energy that flows from one place to another
  - c. A type of battery
  - d. A type of resistor
2. What are atoms?
  - a. Tiny particles that make up everything in the universe
  - b. Sources of electricity
  - c. Electrons that float and spin around the nucleus
  - d. Conductors that have current electricity going through them
3. What are the three parts of an atom?
  - a. Nucleus, electrons, and neutrons
  - b. Protons, neutrons, and conductors
  - c. Electrons, resistors, and conductors
  - d. Nucleus, protons, and electrons
4. What is current electricity?
  - a. The flow of electrons from one material to another
  - b. The flow of neutrons from one material to another
  - c. The flow of protons from one material to another
  - d. The flow of conductors from one material to another
5. What are some non-renewable materials that store energy?
  - a. Wind and water
  - b. Coal, natural gas, nuclear, and oil
  - c. Sun and wind
  - d. Solar panels and dams
6. What are some renewable environmental sources of energy?
  - a. Coal, natural gas, nuclear, and oil
  - b. Wind and water
  - c. Solar panels and dams
  - d. Protons and neutrons
7. What happens when electrons flow from the negative side of a battery through a conductor to the positive side?
  - a. A short circuit is created
  - b. Electricity is wasted
  - c. Current electricity is created
  - d. The wires get really cold
8. What is a resistor?
  - a. Something that uses electricity and converts it into usable energy
  - b. Something that stores electricity



## Sustainable Energy Student Worksheets

- c. Something that conducts electricity.
  - d. Something that blocks electricity.
9. What is an insulator?
- a. Something that locks in warmth for a wire.
  - b. Something that allows electricity to flow through it.
  - c. Something that conducts electricity.
  - d. Something that stores electricity.
10. Where does electricity come from?
- a. A socket in the wall
  - b. Oil, gas, wind, water, or solar power
  - c. Solar panels and dams
  - d. Conductors and resistors



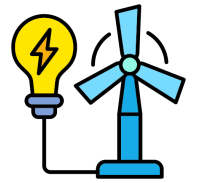
### More fun! Level 1

#### ACROSS

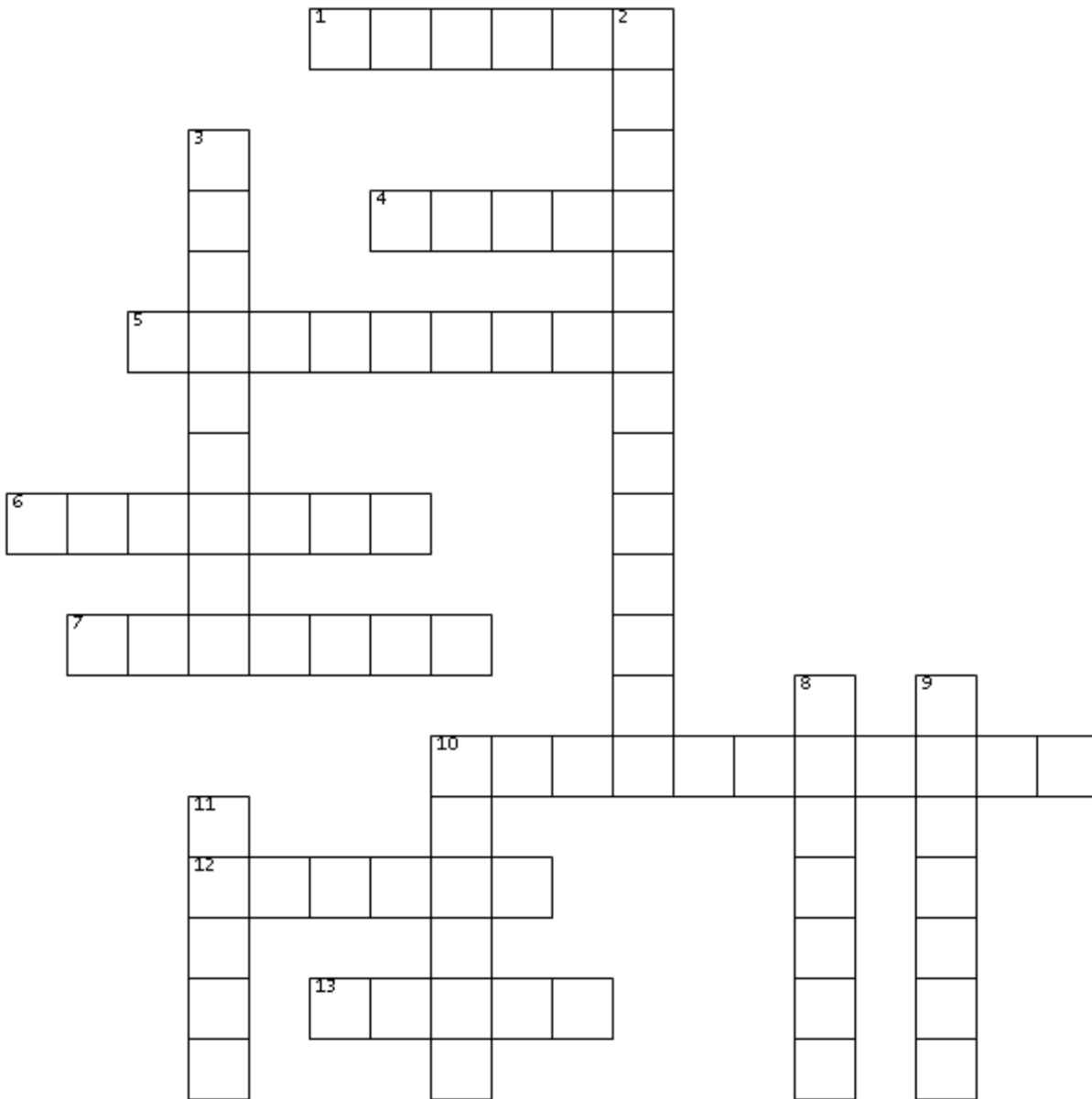
1. A device that turns a circuit on or off.
4. Energy that comes from the sun.
5. A type of energy that comes from natural sources that can be replenished over time.
6. A device that stores electrical energy.
7. The flow of electricity through a wire or circuit.
10. - A type of energy that powers lights and appliances in our homes.
12. A place on the wall where we plug in cords to get electricity.
13. bulb A device that uses electricity to make light.

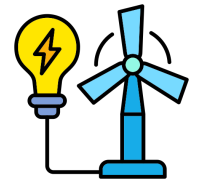
#### DOWN

2. Energy that comes from moving water.
3. A machine that makes electricity.
8. The path electricity takes as it flows through a wire.
9. Renewable energy that comes from organic matter like plants and trees.
10. - The ability to do work or make things happen.
11. The amount of energy that is used to make something work.



Level 1:





## Sustainable Energy Student Worksheets

Level 2:

### ACROSS

- A device that converts mechanical energy into electrical energy.
- Energy generated by the movement of air.
- A type of energy that can be replenished naturally.
- A closed loop of wires that allows electricity to flow through it.
- The measure of how difficult it is for electricity to flow through a material.
- Renewable energy derived from organic matter.

### DOWN

- A device that stores chemical energy and releases it as electrical energy.
- The measure of electric potential energy per unit charge in a circuit.
- Technology that converts sunlight into electrical power.
- The measure of how much input energy is converted to useful output energy.
- The rate at which energy is transferred or used.
- footprint The amount of greenhouse gases produced by an individual, organization, or activity
- A device that converts the energy of a moving fluid into mechanical energy.

