Room Heater:

Room heaters are usually used as an extra heat source (sometimes called secondary heating), alongside a main heating system. They can be useful if you need to heat one room for a limited time or give an extra boost of warmth to someone who needs it.

Principle:

Room heater works on the principle of convection. The heater is always placed on floor. This is because the cold air is heavier than the warm air and so it is placed on the lower part of the room

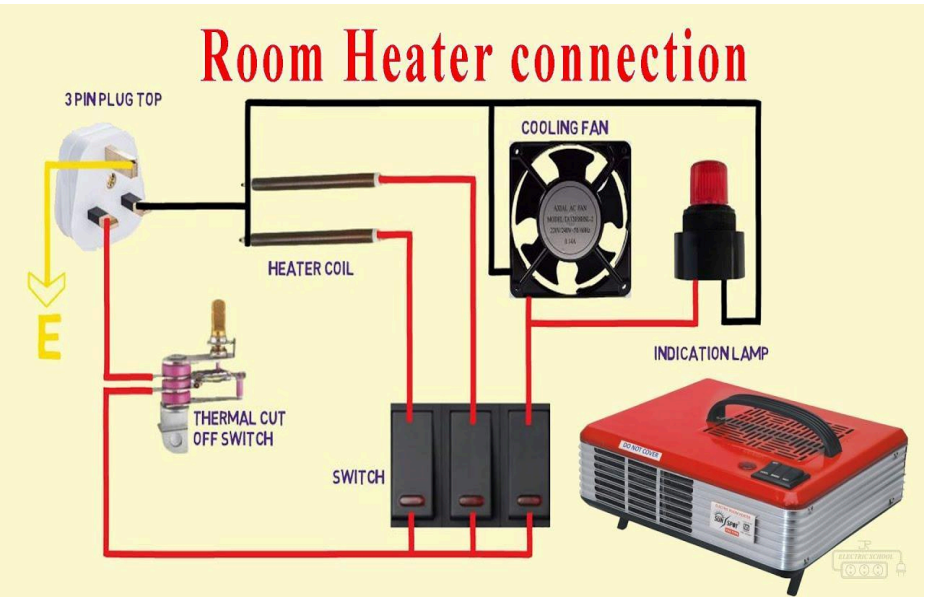
Types of Room Heaters:

There are various types of room heaters and they are there because they have specific differences in the way they work.

- **Conduction heater**
- **Convection heater**
- **Oil-filled room heater**

Working:

Most electric room heaters are equipped with a resistor that produces heat when you switch the appliance on. There are heating wires that are usually composed of Nichrome that heat up producing an adequate amount of heat to warm up the surroundings. The resistor is the medium where electricity is converted into heat and passed further on. Some room heaters like the blower room heaters draw in cold air from the surroundings while simultaneously emitting hot air. This works as the process of convection to ensure that the heating coils don't burn out, while subsequently maintaining the warmth in the space. This is achievable through a fan installed in the space heater unit.



Advantages:

Room heaters have several advantages

- Energy efficiency: Room heaters are often energy efficient and can convert almost all electricity into usable heat.
- Portability: Many space heaters are portable and have handles for easy transport.
- Low maintenance: Most electric heaters have no moving parts, so there's no need to pay for maintenance.
- Thermostat: Electric heaters with a thermostat can help save energy by avoiding needlessly heating rooms.
- Secondary heat source: Room heaters can be used as an extra heat source, alongside a main heating system. This can be useful for heating a single room for a short time or providing extra warmth to someone.
- Heats large areas: Room heaters can provide heat to a large area.

Disadvantages:

Room heaters can have several disadvantages, including:

- Fire hazard: Space heaters are a leading cause of house fires. Leaving a flammable object too close to a space heater or leaving it on when you leave the room can cause a fire.
- Carbon monoxide poisoning: Some room heaters release carbon monoxide, a deadly, colorless, and odorless gas. If the room isn't properly ventilated, sleeping with the heater on can be hazardous to your health.
- Dry air: Room heaters can reduce the humidity levels in the air, which can cause dry skin, dry eyes, and respiratory issues. This can trigger symptoms like coughing, shortness of breath, dry throat, and nasal congestion.
- Energy consumption: Electric heaters are one of the most energy-inefficient appliances.
- Electric shock: Some room heaters can cause electric shock.