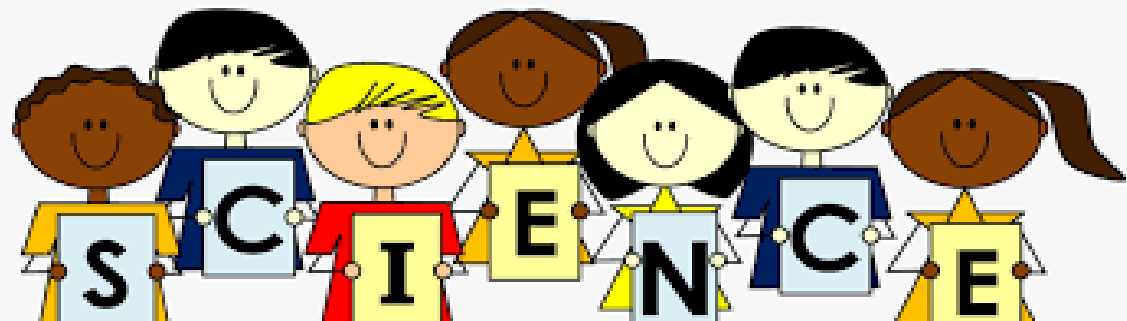


**GRADE 5
TERM 3
ADAPTED: THE RATP FOR 2021**

ENERGY AND CHANGE



ENERGY AND ELECTRICITY (3 weeks)

2. Mains electricity

New words:

Transmission lines – Transmission lines are thick metal cables through which electricity goes from power station to substations.

Pylons – Pylons are big towers that support the transmission lines.

Electricity box – The place where electricity from a substation is connected to the electrical In a building.

Plug – The part of an electrical appliance that can be connected to a wall socket.

Wall socket – The part of an wall where an electrical appliance can be connected to an Electrical circuit.

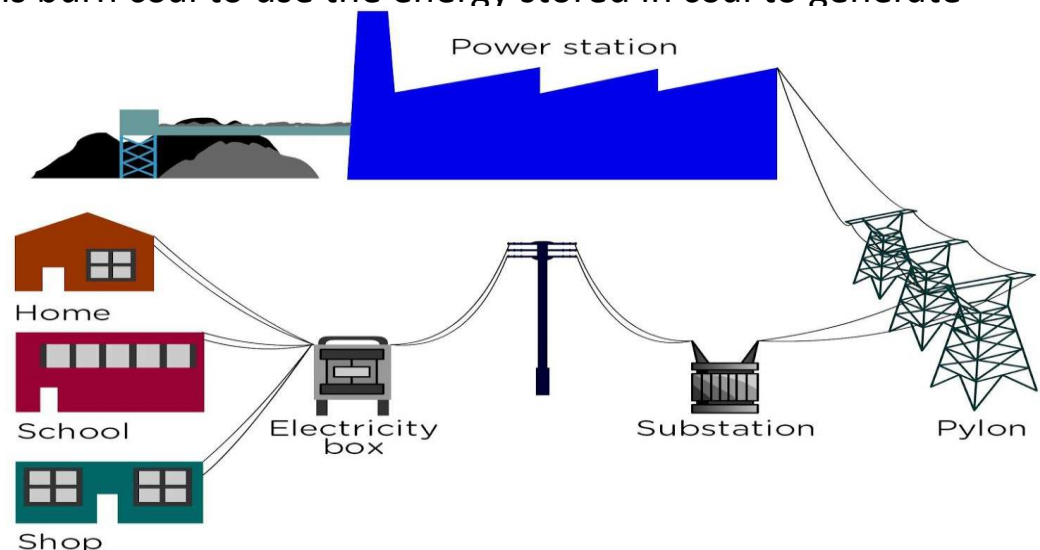
Turbine – A rod that turns, with blades arranged like a wheel around it.

Generator – A machine that produces electricity.

ENERGY AND ELECTRICITY (3 weeks) cont..

- A battery has stored energy which can provide electrical energy.
- However, our homes, schools, shops, and factories cannot run on batteries.
- We use electricity for many different things every day.
- The main source of electrical energy is from power stations. We call this 'mains electricity'.
- Mains electricity comes from power stations.
- This means that electricity flows from the power station through electrical cables to our homes like a giant circuit.
- Power stations use different ways to generate electricity.
- A power station needs a source of energy.
- In South Africa, most of our power stations burn coal to use the energy stored in coal to generate electricity.

Transfer of energy from power stations to our homes, schools and shops.



ENERGY AND ELECTRICITY (3weeks) cont...

Electricity is transferred in a huge circuit to our homes

- From a power station, electricity is transferred through transmission lines held up by pylons.
- The transmission lines are part of the circuit that connects the power stations to where we need to use the electricity.
- The transmission lines carry large amounts of electricity to substations in cities and towns.
- From a substation, electricity is carried in smaller amounts to an electricity box for our home.
- From the electricity box, electricity travels through wires to the plug points and light fittings in our homes.
- Coal is not the only source of energy for power stations, there are also other types of power stations.
- Find out what these are and write down what source of energy they each use.



Power station



Pylon

ENERGY AND ELECTRICITY (3 weeks) cont... Activities

Suggested activities.

Sources. Platinum

Refer to pg. 133-137