Lesson Plan

Grade: Five	**Subject:** Science	**Term:** 2nd	**Time:** 40min
Teacher's Name: _____		**Week:** 9	**Day:** 1
Chapter 7: Electricity and Magnetism		**Topic:** Electric Circuit	

Objective(s):

At the end of this period, the students will be able to:

- Describe the flow of electric current in an electric circuit.
- Describe and design an electric circuit and explain its components.

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook, Worksheet

Warm-up Activities — 5mins

Before beginning the lesson, ask students to say "Tasmiya."
Ask them: What do you know about static electricity? Wait for their responses.

Teaching and Learning Activities: — 25mins

- Write the topic name 'Electric circuit' on the board.
- Tell the students today we will learn about circuit.
- Tell them about electric current.
- When charges flow continuously from one place to another, it is called electric current.
- Electric circuit: Path for transmitting electric current.
- A circuit is usually made up of a battery, wires, switch and bulb. These are called components of a circuit.
- Switch is responsible to open or close the circuit.
- A circuit is of two types, i.e., open and closed circuit.
- Open circuit: A circuit which has an off-switch that does not allow current to flow is called an open circuit.
- Bulb will not glow in an open circuit.
- Draw an open circuit on the board and explain it.
- Closed circuit: A circuit which allows current to flow is called a closed circuit. Bulb will glow in closed circuit.
- Draw a closed circuit on the board and explain it.
- Ask students to open their textbooks at and do the activity.

Review: — 3mins

Explain the main points about electric circuit.

Evaluation: — 5mins

To check the understanding of students, ask them:

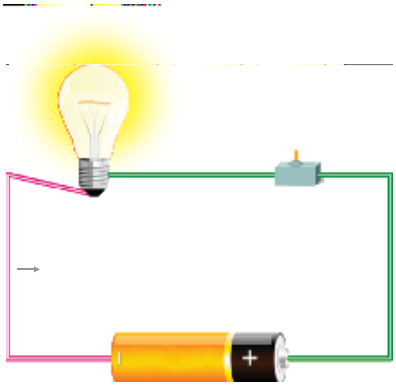
- What is electric current?
- What is electric circuit?
- What are components of a circuit?

Homework: **2mins**

Ask students to solve the given worksheet. Write the answer of Q2 (ii (b) and iv) of Exercise in their notebook.

Worksheet

Q1. Label the diagrams.



Lesson Plan

Grade: Five	**Subject:** Science	**Term:** 2nd	**Time:** 40min
Teacher's Name: _____		**Week:** 9	**Day:** 2
Chapter 7: Electricity and Magnetism		**Topic:** Insulators and Conductors	

Objective(s):

At the end of this period, the students will be able to:

- Differentiate between conductors and insulators from daily life.

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook, Worksheet

Warm-up Activities 5mins

Before beginning the lesson, ask students to say "Tasmiya."

Ask them: What do you know about electric current? Wait for their responses.

Teaching and Learning Activities: 25mins

- Write the topic name 'Insulators and Conductors' on the board.
- Tell the students today we will learn about conductors and insulators.
- Tell students all materials cannot allow to pass electricity. On this basis materials are divided into two categories:
- Conductors
- Insulators
- **Conductors:** Materials that allow electricity to pass through them are called conductors. Examples include iron, copper, gold, etc.
- **Insulators:** Materials that do not allow electricity to pass through them are called insulators. Examples include glass, wood, plastics, etc.
- Now write 'Examples from daily life' on the board.
- Metals, which are good conductors, are used for making electric wires, switches, plugs and several parts of electrical devices.
- Insulators like rubber and plastic are used to cover electric wires.
- The parts of appliances which we touch are made of insulating material to avoid risk of electric shock. For example, an iron is made of metal (conductor) but its handle is made of plastic (insulator).
- Ask students to make a list of conductors and insulators they observe in their surroundings. Check their work.
- Ask students to open their textbooks and do activity.
- Tell students to write the answer in their notebooks. Check their work.

Review: 3mins

Explain the main points about insulators and conductors.

Evaluation: 5mins

To check the understanding of students, ask them:

- What are conductors? Give some examples.
- What are insulators? Give some examples.

Homework: **2mins**

Ask students to learn the topic. And solve the given worksheet.

Worksheet 20mins

Differentiate between conductors and insulators. Also write their uses in daily life.

Conductors	Insulators

Uses of conductors and Insulators

Conductors	Insulators

Lesson Plan

Grade: Five	**Subject:** Science	**Term:** 2nd	**Time:** 40min
Teacher's Name: _____		**Week:** 9	**Day:** 3
Chapter 7: Electricity and Magnetism		**Topic:** Magnet	

Objective(s):

At the end of this period, the students will be able to:

- Recognize that magnets can be used to attract some metallic objects.

Resource Materials:

Chalk/marker, white/blackboard, magnets, iron nail, glass, wood, keys, Science Textbook

Warm-up Activities 5mins

Before beginning the lesson, ask students to say "Tasmiya."

Ask them: What do you know about insulators and conductors? Wait for their responses.

Teaching and Learning Activities: 25mins

- Write the topic name 'Magnet' on the board.
- Tell the students today we will learn about magnet.
- Magnets: Any material that has the ability to attract metal.
- Now tell them about 'Magnetism' the phenomenon by which magnets attract certain material is called magnetism.
- Tell students magnets can pull certain things towards them such as iron, steel, copper, etc. such things are called magnetic materials.
- The things which are not attracted by magnets are called non-magnetic materials. Wool, cotton, glass, etc. are non-magnetic materials.
- Now tell the students about the poles of the magnet.
- The ends of a magnet are called poles. There are two poles of a magnet i.e., North Pole and South Pole.
- Draw poles on a magnet on the board.
- Show students a magnet and ask them to observe its poles.
- The poles are indicated by two letters 'N' stands for North pole and 'S' stands for South pole.
- Usually, North pole is painted red and South pole is painted blue.
- Like poles repel each other.
- Unlike poles attract each other.
- Ask students to open their textbooks and do activity.

Review: 3mins

Explain the main points about magnet and poles of a magnet.

Evaluation: **5mins**

To check the understanding of students, ask them:

- What is magnet?
- What are poles of a magnet?
- Tell the names of poles of a magnet?

Homework: **2mins**

Ask students to learn the topic. And write the answer of Q2 (viii) of exercise in their notebooks.

Lesson Plan

Grade: Five	**Subject:** Science	**Term:** 2nd	**Time:** 40min
Teacher's Name: _____		**Week:** 9	**Day:** 4

Chapter 7: Electricity and Magnetism	**Topic:** Earth as Huge Magnet

Objective(s):

At the end of this period, the students will be able to:

- Identify earth as a huge magnet and demonstrate it with an experiment.

Resource Materials:

Chalk/marker, white/blackboard, Bar magnet, Thread, Stand, Science Textbook

Warm-up Activities — 5mins

Before beginning the lesson, ask students to say "Tasmiya."
Ask them: What do you know about poles of a magnet? Wait for their responses.

Teaching and Learning Activities: — 25mins

- Write the topic name 'Earth as a huge magnet' on the board.
- Tell students our Earth is a giant magnet. It has a huge magnetic field.
- The geographic North and South pole of the Earth acts as North and South pole of a magnet.
- Earth's magnetic field is also invisible but we can find its evidence by an experiment.
- Place the magnet on a flat surface in west-east and hang the other magnet right above it.
- The other magnet would stop in the east-west direction.
- Move the hanging magnet back and forth. The magnet moves and stops in the same direction.
- Take away the first magnet from the flat surface.
- Again, swing the hanging magnet and observe. The hung magnet will come to rest in the North-South direction. This is because the Earth's magnet forces the hung magnet to stay this way.
- Ask students to open their textbooks and do activity.

Review: — 3mins

Explain the main points about Earth as a huge magnet.

Evaluation: — 5mins

To check the understanding of students, ask them:

- How Earth behaves as a magnet?

Homework: — 2mins

Ask students to learn the topic.

Lesson Plan

Grade: Five	**Subject:** Science	**Term:** 2nd	**Time:** 40min
Teacher's Name: _____		**Week:** 9	**Day:** 5
Chapter 7: Electricity and Magnetism		**Topic:** Magnetic Compass	

Objective(s):

At the end of this period, the students will be able to:

- Describe the working of magnetic compass.

Resource Materials:

Chalk/marker, white/blackboard, Compass, Science Textbook

Warm-up Activities 5mins

Before beginning the lesson, ask students to say "Tasmiya."

Ask them: Why Earth behaves as a magnet? Wait for their responses. Appreciate them for good response.

Teaching and Learning Activities: 25mins

- Write the topic name 'Magnetic compass' on the board.
- Bring a compass to the class and show it to students. Tell them about it.
- A magnetic compass has a freely suspended tiny magnet.
- It's one end always points to the North pole.
- It helps us to know the directions, i.e., east, west and south.
- Ancient sailors used compasses to find their way in the ocean.
- Muslims also use compasses to find the direction of the Qibla.
- The needle used in compasses is made of permanent magnet.
- Now write 'Working of a compass' on the board.
- Place the compass on a horizontal surface. Its needle will point towards the north. However, the north (N) of its circular scale may not coincide with the needle. Rotate the needle such that N comes exactly under the north end of the needle. Now all the directions indicated by the scale will be correct.
- Ask the students to open their textbooks and do activity.

Review: 3mins

Explain the main points about magnetic compass.

Evaluation: 5mins

To check the understanding of students, ask them:

- What is compass?
- Why do we use compass?
- How does a compass work?

Homework: 2mins

Ask students to learn the topic. Write the answer of Q2 (vi) of exercise in their notebooks.