Lesson Plan

Grade: Five	**Subject:** Science	**Term:** 3rd	**Time:** 40min
Teacher's Name: _____		**Week:** 6	**Day:** 1
Chapter 9: Space and Satellites		**Topic:** Geostationary Satellites	

Objective(s):

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

- Describe the uses of various satellites in space i.e. geostationary, weather, communication and Global Positioning System (GPS).

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook

Warm-up Activities — 5mins

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

Ask them: What do you know about communication satellites? What do you know about weather satellites? Wait for their responses.

Teaching and Learning Activities: — 25mins

- Write the topic name 'Geostationary satellites' on the board.
- Tell the students today we will learn about geostationary satellites.
- Tell students geostationary satellites orbit the Earth at the same speed as the spinning of Earth.
- When viewed from earth, they are appearing to be at fixed point in space. They orbit earth from west to east over equator at a height of 36000 km.
- They move with Earth's spinning. That's why they appear to be stationary.
- They are used for telecommunication.

Review: — 3mins

Explain the main points about geostationary satellites.

Evaluation: — 5mins

To check the understanding of students, ask them:

- What are geostationary satellites?
- What are the uses of geostationary satellites?

Homework: — 2mins

Ask students to learn the topic.

Lesson Plan

Grade: Five	**Subject:** Science	**Term:** 3rd	**Time:** 40min
Teacher's Name: _____		**Week:** 6	**Day:** 2
Chapter 9: Space and Satellites		**Topic:** Global Positioning System (GPS)	

Objective(s):

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

- Describe the uses of various satellites in space i.e. geostationary, weather, communication and global positioning system (GPS).

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 geostationary satellites? Wait for their responses.

Teaching and Learning Activities: — 30mins

- Write the topic name 'Global Positioning System (GPS)' on the board.
- Tell students today we will learn about GPS.
- Tell students in 1960s United States launched a Global Positioning System (GPS) satellite.
- A global positioning system is a network of satellites and receiving devices used to determine the location of something on Earth.
- Position of stars in the sky has been of paramount importance for the travelers to find their way at night, right since the creation of humans.
- Now we can use GPS on devices such as cell phones for this purpose.
- There are more than 30 satellites orbiting the earth.

Review: — 0mins

Explain the main points about Global positioning system (GPS).

Evaluation: — 5mins

To check the understanding of students, ask them:

- What are the purposes of GPS?

Homework: — 5mins

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

Worksheet

Q1. Answer the following questions.

i. Describe three uses of geostationary satellites.

_____
_____
_____
_____

ii. What are the geostationary satellites?

_____
_____
_____
_____

iii. How many communication satellites orbit the Earth?

_____
_____
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_____

iv. What are the uses of GPS?

_____
_____
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_____

v. What do you know about GPS?

_____
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_____

Lesson Plan

Grade: Five	**Subject:** Science	**Term:** 3rd	**Time:** 40min
Teacher's Name: _____		**Week:** 6	**Day:** 3
Chapter 9: Space and Satellites		**Topic:** Uses of Satellites	

Objective(s):

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

- Describe the uses of various satellites in space i.e. geostationary, weather, communication and global positioning system (GPS).

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook

Warm-up Activities — 5mins

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

Teaching and Learning Activities: — 25mins

- Write the topic name 'Uses of Satellites' on the board.
- Tell students there are various uses of satellites. They are used for communication, monitoring weather and climate, etc.
- Now write 'Communication satellites' on the board.
- Tell students communication satellites are used for communication between different parts of the Earth. It has two main parts. Receiver that receives information and transmitter that sends signals.
- Now write 'Weather satellites' on the board.
- Tell students weather satellites are used to monitor and predict weather.

Review: — 3mins

Explain the main points about uses of satellites.

Evaluation: — 5mins

To check the understanding of students, ask them:

- What are weather satellites?
- What are communication satellites?
- What are the uses of satellites?

Homework: — 2mins

Ask students to learn the topic.

Lesson Plan

Grade: Five	**Subject:** Science	**Term:** 3rd	**Time:** 40min
Teacher's Name: _____		**Week:** 6	**Day:** 4
Chapter 9: Space and Satellites		**Topic:** Key Milestones	

Objective(s):

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

- Recognize the key milestones in space technology.

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook

Warm-up Activities — 5mins

Before beginning the lesson, ask students to say "Tasmiya".
Ask them: What are the uses of satellites? Wait for their responses.

Teaching and Learning Activities: — 25mins

- Write the topic name 'Key milestones' on the board.
- Tell students about a few milestones of space.
- **First human to orbit Earth:** The first human that orbited the Earth was Yuri Gagarin in 12th April 1961. Write the details on the board.
- **First step on Moon:** The first human to step on the Moon were Neil Armstrong and Edwin Aldrin on 20th July 1969 and write it on the board.
- **First images of other planets:** A series of spacecraft, Mariner, was sent near different planets-such as Mercury, Venus, Mars-to observe their temperature, atmosphere, etc. Mariner 4 took first pictures of Mars on 14th July 1965 and write it on the board.
- Ask students to search internet and make a chart of key milestones in space and present it to class. Let them respond. Check their work.

Review: — 3mins

Explain the main points about key milestones.

Evaluation: — 5mins

To check the understanding of students, ask them:

- Who was the first human to orbit the Earth?
- Who first step on Moon?
- What was Mariner?

Homework: — 2mins

Ask students to learn the topic.

Worksheet

Q1. Match column A with column B.

A	B
Everything beyond Earth	Natural Satellite
Moons and planets	NASA
Sputnik 1	Space
Agency to study Space	Artificial Satellite

Q2. What are the key achievement in space technology?

_____
_____
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Lesson Plan

Grade: Five	**Subject:** Science	**Term:** 3rd	**Time:** 40min
Teacher's Name: _____		**Week:** 6	**Day:** 5
Chapter 9: Space and Satellites		**Topic:** Exercise	

Objective(s):

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

- Solve Exercise

Resource Materials:

Chalk/marker, white/blackboard, Science Textbook

Teaching and Learning Activities: 30mins

- Before beginning the lesson, ask students to say "Tasmiya".
- Tell students they are going to solve the exercise of chapter 9.
- Briefly explain all topics and ask questions related to them. Wait for their responses.
- Ask students to open their textbooks and solve MCQ's. Help them in their work. Check their work.

Review: 0mins

N/A

Evaluation: 5mins

To evaluate the understanding of students, check their work.

Homework: 5mins

Ask students to revise the exercise of chapter 9.