

A. Designing ICT integrated lesson plan (25%)

The main purpose of this task is to promote the usage of ICT collaborative tools in designing ICT integrated lesson plans. So students, in groups of three or four, will prepare a 40 minute ICT integrated lesson plan on different topics from the primary school curriculum, which will be assigned by the tutor. The lesson plan should incorporate any one of the ICT integration models (SAMR, TPACK) that have been discussed in the class. All relevant resources required for the lesson activities to achieve the learning outcomes should be described and provided along with the lesson plan. The group member could use any online collaborative platform (Google doc, wiki, Facebook) for their collaboration and

the task will be assessed based on:

- 3% specific, clear and measurable learning objectives
- 4% appropriate selection and high level integration of ICT tools
- 6% well-designed activities with clear activity instructions
- 3% active participation in the online discussion following standard netiquettes
- 4% social and ethical consideration in the use of online materials for the lesson
- 5% use of ICT integration model

Group Members

Tandin Gyelden (Pink)

Pema Yangden(Brown)

Kuenzang Choden(Green)

Yeshe Lham (Red)

Dawa(Blue)

Delip Gurung (Black)

Lesson Plan (SAMR)

Subject: Science

Class: 5

Topic: Electricity and Magnetism

Time: 40 mins

No. of students: 22

TLM: PhET simulation, video links, google docs, booklet quiz and powerpoint.

Lesson Objectives:

At the end of the lesson students will be able to:

- ☐ define electricity and magnetism in their own words after the teacher's explanation.
- ☐ list down various sources of electricity accurately after the discussion.
- ☐ conduct hands-on experiments to demonstrate the principles of electricity and magnetism, such as building simple circuits and exploring the effects of magnetic forces on different materials after the activity.

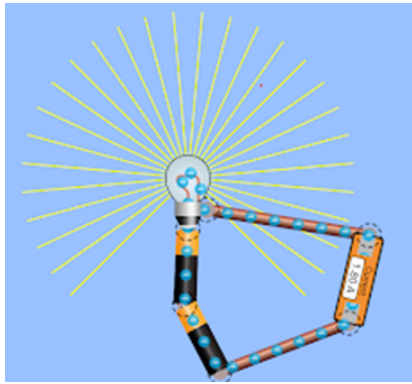
Lesson Introduction

- ❖ Exchange of greetings will take place.
- ❖ Then, we'll embark on a journey to understand these invisible forces that power our world.
- ❖ We'll explore what electricity is, how it works, and where it comes from.
- ❖ We'll also delve into the world of magnets, discovering their unique properties and how they interact with different materials.
- ❖
- ❖ Ask students to go through the link <https://www.youtube.com/watch?v=yXCeuSiTOug> and
- ❖ <https://www.youtube.com/watch?v=Dx3RpXdJw2k>
- ❖ These two links will give an idea on what is electricity and magnetism to students furthering their knowledge
- ❖ After watching the video I will ask students to go through the powerpoint presentation I have prepared.

Lesson Development (35 mins)

Activity 1 (15mins)

- ❖ We will begin this activity by tapping into students' pre-existing knowledge of electricity and simple circuits.
- ❖ Prompt them to explore the PhET simulation tool to experiment with various circuit connections using different numbers of bulbs and batteries.
- ❖ By manipulating these components, ask students to observe how the number of bulbs and batteries impacts voltage and current within the circuit.
- ❖ By engaging in these explorations, students will be motivated to delve deeper into their understanding of circuit behavior and its impact on electrical properties.
- ❖
- ❖ They will use the link below to access the phet simulation.
https://phet.colorado.edu/sims/html/circuit-construction-kit-dc-virtual-lab/latest/circuit-construction-kit-dc-virtual-lab_en.html



(Figure 1) The students should get this kind of simulation for different circuit connections.

The students will be making this type of connection using different numbers of wires, batteries and bulb in order for the bulb to glow and explore more on the connection of electricity.

Learning Activity / Monitoring

After students have experimented with various types of connections using different numbers of wires, batteries, and bulbs, I will ask them to complete the task of documenting their observations.

They will be asked to record the specific combinations of batteries and wires required for one bulb, two bulbs, three bulbs, and four bulbs to illuminate, along with documenting the corresponding voltage and current readings.

I will instruct them to enter data into a Google Docs spreadsheet, fostering a methodical and organized approach to tracking their findings.

Below is the link to the google docs.

https://docs.google.com/document/d/1VX8jzb03zwHBuBLWuqYRd7_9KbcKvQnC9MM9T0VQ3jk/edit?usp=sharing

Lesson Closure

For the lesson closure, I will use (**Reflection Circle**) activity.

I will ask the students to take turns reflecting on what they have learnt about needs and wants during the lesson.

I will comment on their reflections and add a few points if needed.

And atlas Students will also engage in a comprehensive assessment to evaluate their grasp of the concepts covered in electricity and magnetism as homework.

The assessment will take the form of a structured quiz, where each student will be required to select the correct answer from a set of multiple-choice questions thoughtfully curated to reflect the breadth and depth of their learning journey in this topic.

The quiz will also be in the form of interesting games to not get bored.

<https://play.blooket.com/play?hwId=664393050b5537bdc114957a>