LESSON PLAN FORMAT

SUBJECT	SCIENCE	**GRADE**	2ND
TOPIC	States of Matter	**LENGTH**	120 MINUTES

AIMS

MAIN AIMS

(What are the main aims of your lesson (content, language skills and language items)? What do you want your learners to have learnt by the end of this lesson?)

MAIN AIM: By the end of the lesson, learners will identify the properties and decode facts about each state of matter by comparing and contrasting the similarities and differences of each state; figuring out a solution to a problem, and conducting an experiment to inquire and infer through observation.

SUBSIDIARY AIM: Leaners will also be able to:

- Follow processes and instructions.
- Work autonomously.

TEACHING OBJECTIVES

Content *(New knowledge, skills and understanding)*	**Cognition** *(High-order thinking skills, problem-solving, challenges and reflection)*	**Culture** *(Awareness of self and other, identity, citizenship, and pluricultural understanding)*
• To learn what matter is. • To identify the three states of matter (solid, liquid and gas).	• To observe • To compare • To classify items as being solids, liquids or gases • To identify some properties of matter.	• To be aware that everything is made up of matter.

- **Communication** ***(<u>What</u>*** *and* ***<u>how</u>)***

Language of Learning	Language for Learning	Language through learning

(Key vocabulary – content- obligatory) (Key vocabulary – contenry) ● Vocabulary related to: matter and the states of matter, such as: *Matter, solid, liquid, gas, property, mass, volume, color, shape, texture, size, measure, and state.* ● English vocabulary related to: everyday, less formal language which is used in the subject (content compatible language) ● Grammar forms and structures experience: basic knowledge of present simple tense (affirmative, negative and interrogative forms)	*(Functional language e.g. language while learners participate in the lesson – thinking skills)* ***Structures:*** ● *Everything is made up of matter…* ● *Matter is anything that has mass and takes up space…* ● *How much matter something has is its mass…* ● *The color or shape of something is a property… Matter comes in three different states or forms: solids, liquids and, gases.* ● *Describe matter (A chair, juice and air)! I can see ... I can't see ... I can hold ... I can't hold ...* ● *Can you identify these objects as a solid, liquid or a gas? The chair is a solid. Orange juice is a liquid. Air is a gas.* ● *What do they have in common?* ● *Find similarities and differences between the 3 states of matter.*	*(Language progression, practice and extension – emerging language, and what you will do with this)* Teacher will monitor each pair tasks and feedback on language problems that could affect peer effective communication. T will also board any useful and well-used language for language extension. As well as to draw the unknown words and use mimics or gesture to help SS understand the meaning of a new expression or word related to the lesson without using SS mother tongue.

CRITERIA FOR ASSESSMENT

(What kind of assessment will be used in class? (teacher, peer, self?) What are you assessing, how?)

Formative Assessment	Summative Assessment

Through observation, T will assess SS participation, interaction during activities and the use of language related to talk about the states of matter. Besides T gives SS oral feedback of their progression.	At the end of the lesson, SS will take a quiz of the states of matter on Kahoot.

LESSON PROCEDURE / ACTIVITIES			
Time	**Stage**	**Procedure**	**Materials & Resources**
15 min	**Activate prior knowledge**	Students have learned the definition of matter is in the previous classes (all living and most non-living things are made of matter). First, T will ask students to sit in pairs. Next, T will give each group 3 trays labelled with the names of each state of matter and a series of items that SS will have to observe and classify into gas, liquid, and solid according to their characteristics. Moreover, SS will draw and include one object of the classroom in one of the trays.	• 3 trays per group • A series of real items, such as, rocks, bottles of water, balloons, pieces of wood, cartons of milk, etc corresponding to each state of matter • Color pencils • Piece of paper
15 min	**Lead in** **Comparing** **Using Vocabulary**	T will give a worksheet to each couple to fill out. The activity contains two exercises. In exercise 1, SS will label each picture a solid, a liquid, or a gas. Learners will tell the class how are they alike and different. In exercise 2, SS will write the word that best completes each	• worksheet #1: 1 Worksheet per couple • Pen • Pencil

		sentence	
15 min	**Task 1:**	T will present SS 3 pictures of water being pour in 3 different kind of	• worksheet #2: • 1 Worksheet per couple • Pen or pencil • Containers

	Infering	containers. SS will observe them and make inferences. Then, SS will be given different jars and water to test their answers.	• Water
20 min	**Task 2:** **Critical Thinking and Problem Solving**	T will show students an airplane and a hidden object covered with a towel. T will ask the following question to SS: If the hidden object has the same properties as the airplane. What can you tell about the hidden object? Based on the knowledge gained, SS will have to draw conclusions and share them with another group.	• Worksheet #3: • 1 Worksheet per couple • An Airplane • A towel • A rock
20 min	**Practical Task:**	T will show SS a beach ball. Next, T will will ask SS the following question: How could you use a beach ball to show a friend that air is a gas that takes up space and has mass? SS will draw and explain to another group a possible solution.	• Worksheet #4: • 1 Worksheet per couple • Beach Ball • Piece of paper • Color pencils
20 min	**Wrap up**	T will give SS a worksheet with a lesson review chart that needs to complete with the main ideas and details of the properties of the states of matter. After finishing the activity, SS will exchange their work with another group. T will ask some SS to share their peer's work with all the class. Finally, T will provide feedback in content and language.	• Worksheet #5: • 1 Worksheet per couple 1 Worksheet per pair

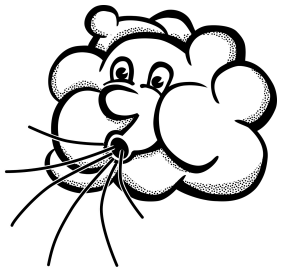
Worksheet 1- What is Matter?

1. **Inquiry Skill Practice-Compare**

Exercise 1

Instruction: Label each picture a solid, a liquid, or a gas. How are they alike or different?

Solid - **Liquid** - **Gas**



_____ _____ _____

Exercise 2

Instruction: write the words that best complete each sentence.

Matter - **Property** - **Mass**

Everything is made up of _____
How much matter something has is its _____
The color. shape of something is a _____

Worksheet 2- What Are liquids?

Task 1- Inquiry Skill Practice- Infer

Instruction: Observe the pictures. Model and tell what you can infer about the pictures.

_____

_____

_____

Worksheet 3- What Are Solids?

Task 2- Inquiry Skill Practice- Critical Thinking and Problem Solving

Instruction: Read the following case:

If the hidden object has the same properties as the airplane, what can you tell about the hidden object?

_____
_____
_____
_____

Worksheet 4- What Are Gases?

Task 2- Inquiry Skill Practice- Critical Thinking and Problem Solving

Instruction: Read the following case and reflect.

How could you use a beach ball to show a friend that air is a gas that takes up space and has mass?

_____

_____

_____

_____

Worksheet 5- Lesson Review.

Task 2- Inquiry Skill Practice- Compare and Contrast

Instruction: Use this chart with the lesson review