

**Secondary Science SBE
Lesson Plan Framework**

Lesson Title: Revision Lesson

Group: 7_0 **Location:** M21 **Date/Time:** 8th June 13h15 to 14h15

Learning Objectives: Pupils should:

- recap all the key ideas of the particles unit.

Learning Outcomes: Most Pupils should be able to:

- to classify what a solid, liquid and a gas is.
- the properties of solids, liquids and gases.
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- the properties of solids, liquids and gases.
- to describe how particle theory can explain some phenomena.
- explain observations in terms of particles.
- explain their observations using the particle theory.
- learn how to relate particles forces and hardness.
- describe how to calculate density given equation
- identify density as that heaviness " for its size"-
- what diffusion means in particle movement terms.
- to explain diffusion in gases and liquids.
- learn what diffusion means in particle movements.
- explain diffusion in gases and liquids.
- describe the "smoke cell" experiment and explain what they see.
- apply a model to new phenomena to explain behaviour.
- learn that gas particles are moving around all the time.
- learn that gas pressure is caused by particles hitting the walls of the container.
- learn that a gas is not "weightless".

National Curriculum/Syllabus References (incl. reference to previous KS)

Ks3, Sc3, Exploring Science Text book, particles and states of matter unit. NC7.

Links to other areas

Literacy, kinaesthetic learning styles, and developing science thinking investigative skills.

Previous assessment details informing this lesson.

Last lesson main activity was useful to check if pupils can link some kinaesthetic styles with their learning, as well pupils developing science thinking skills.

Differentiation

By questioning
By support
By modelling

Health and Safety

Lesson safe for pupils but see risk assessment attached.

Lesson Development

Timing (min)	Teacher activity	Pupil activity	# Resources	Assessment Items
3	Taking the register	Pupils will pay attention to the register.	Teacher planner	
2	Sharing lesson aim	Pupils will be listening and writing the lesson aim about recapping all the key ideas of the unit.	Small white board books	-
10	Setting and moderating the starter activity . This activity will be useful to pupils as a way to introduce key concepts of the unit.	As a starter activity pupils will have a particles bingo to play.	Cards box	Assessing behaviour during the task.
10	Setting a quiz task.	Pupils will be using the traffic light cards to answer the quiz. Going over the answers.	Computer Traffic light cards	Assessing individually and class answers.
15	Setting instructions for the watching a video and doing a science taboo activity.	Pupils will be watching a TIM and Moby video on states of matter and they will need to write down sentences on their books by following all the instructions.	TIM & MOBY flash files Books Computer Projector	Assessing pupils answers. Q+A

10	<p>Setting instructions for a new task.</p> <p>Going over power point with a brief explanation.</p>	<p>Teacher will give some cards with concepts (gas pressure, expansion, diffusion and density) written to pupils give some feedback with their answers and stick on the board.</p>	<p>Blue tack Concepts cards White board</p>	<p>Assessing class but mainly pupils that struggle with the topic.</p>
5	<p>Setting plenary activity.</p>	<p>Pupils will be doing a worksheet recapping the entire entire lesson.</p> <p>Going over the answers for learning.</p>	<p>worksheet</p>	<p>worksheet</p>
5	<p>Setting instructions to pupils pack away.</p>	<p>Pupils will be cleaning their desks to move to next lesson.</p>	<p>-</p>	<p>-</p>

PGCE & BSc. Secondary Science(School based Form)

Risk Assessment

Title of Practical Activity: Always moving and mixing 2

Teachers and pupils involved: teacher, trainee teacher and 32 pupils

Substances hazardous to health - Chemicals regulated by COSHH	
1. Using the balance	6.
2.	7.
3.	8.
4.	9
5.	10.

Hazardous procedure or item of equipment.

Items: balance, can of coke cola, stop clock and rulers.

Risk estimator >10 then risk is unacceptable; rethink control measures)

Likelihood of occurrence	L Score	Severity of Outcome	O Score
Highly unlikely	1	Slight inconvenience	1
May happen but rare	2	Minor injury	2
Does happen but rare	3	Medical attention required	3
Occurs time to time	4	Major injury leading to hospitalisation	4
Likely to occur often	5	Fatality or serious injury	5

Practical Risks

Hazard	L Score	O Score	Total (Lx O)	Control Measures
1	1	1	1	Pupils need to have careful when using the balance, so they will be warn of how to use a balance and the correct position at the middle of bench.