Secondary Science SBE
Lesson Plan Framework

Lesson Title: Always Moving and Mixing 2

Group: 7_0 Location: M21 Date/Time: 4th June 9h10 to 10h10

Learning Objectives: Pupils should learn:

- to understand what gas pressure is and how it is affected by temperature.

Learning Outcomes: Most Pupils should be able to:

- 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.

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

Ks3, Sc3, Exploring Science Text book, topic about gas pressure, page 86 and 87, 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 what gas pressure is.	Small white board books	-
10	Setting the starter activity.	As a starter activity pupils will have per bench 2 or 3 pieces of paper to write on a concept balloon, (developing thinking skills) what they think gas pressure is? Sharing some ideas with class and teacher.	Worksheet White board Felt tips paper	Developing science and literacy thinking skills. Assessing pupils on task.
10	Making a demonstration (collapsing can demo)	Pupils will pay attention to teacher making a demonstration with an air bump and a can to pupils be able to understand what gas pressure is. Hopefully pupils will predict the results interacting with the teacher.	Practical material (see risk assessment attached)	Q+A Assessing pupils developing predictions in science experiments.
10	Going over brief explanation with power point.	Pupils need to be paying attention to teacher explanation and learn the main ideas of the topic.	White board Computer Projector	-

10	Setting a practical worksheet task.	Pupils need to answer some questions about the practical demo. Going over the answers.	Worksheet White board	Worksheet
10	Setting plenary activity	Giving pupils opportunity to make a revision worksheet puzzle. Going over the answers for learning.	Computer Worksheet White board	Assessing pupils' answers, being aware by questioning pupils that struggle with the topic. ***Note: Pupils will also cross linking with last lesson about mixing gases and liquids.***
5	Handing in last lesson homework and setting instructions to pupils pack away.	Pupils will clean their desks and move to next lesson.	-	-

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. air bump	**6.**
2.	**7.**
3.	**8.**
4.	**9**
5.	**10.**

Hazardous procedure or item of equipment.

Items: air bump and a metal can

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	Practical demo made by the teacher. Pupils will know about health and safety issues as well how to use a air bump.