Secondary Science SBE
Lesson Plan Framework

Lesson Title: Reflection

Group: 8_0 Location: M21 Date/Time: 21st May/14h15 to 15h15

Learning Objectives: Pupils should learn:

- how to carry out an investigation about how does the light reflect?

Learning Outcomes: Most students should be able to:

- that light is reflected from plane surfaces in a predictable way.
- that when light is reflected from plane surfaces in a predictable way.
- that the incidence angle it is equal to the reflected angle.

National Curriculum/Syllabus References (incl. reference to previous KS)
Ks3, Sc4 Physics, Exploring science text book , Topic about Sound and Light, NC 5

Links to other areas
Literacy, visual, verbal and kinaesthetic learning styles.

Previous assessment details informing this lesson.

Last lesson was used to introduce the reflection idea by making a practical activity using plane mirrors.

Differentiation
By questioning
By use of stimulus material
By pace of the lesson and relevant use of starters
By support
By guided 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	
10	Sharing lesson aim And introducing starter activity.	Pupils will be listening and write down the lesson aim about how does the light reflect. As a starter and in silence, each pupil needs to write the answer for the question what is reflection of light? Going over the correct answer.	Computer Books	Individual assessment by Q+A and evaluating pupils on task during the entrance activity.
10	Going over power point with a brief explanation establishing a link with the entrance activity.	Pupils will be listening to brief explanation what is reflection of light and the importance of the incidence and the reflected angle.	Computer Power point White board	Assessing pupil's communicative skills being developed.
15-20	Setting a practical investigative work.	Pupils will make a practical activity in groups), carrying out an investigation worksheet about reflection. Hopefully pupils will identify the reflected angle by starting with the incidence angle. Writing some notes about it.	Books Computer Power point Note: See material on risk assessment attached.	Assessing pupils developing investigative skills.
10	Setting a plenary activity.	Pupils will have a true and false quiz to answer it, writing some notes if necessary.	Computer quiz	Assessing pupils individually and making sure that all are on task for learning.
5	**Setting instructions to pack away.**	All pupils should clean their desk, pack away and move to next lesson.	-	-

PGCE & BSc. Secondary Science(School based Form)

Risk Assessment

Title of Practical Activity: Solids, liquids and Gases Properties

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

Substances hazardous to health - Chemicals regulated by COSHH	
1. using ray boxes	**6.**
2.	**7.**
3.	**8.**
4.	**9**
5.	**10.**

Hazardous procedure or item of equipment.

- Ray boxes, protractors, rulers and power battery.

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	Teachers will aware pupils of all risk assessment and will explain what they need to do with the ray boxes having careful with all the material.