KS3 assessment in

Science

Lesson 1

Pupils are given a booklet for the topic.

This gives an overview of what is going to be covered and also gives a PLC for the pupils to follow throughout the topic

We are currently updating booklets to have a keywords list in each topic

7.0 Introduction: Science and practical investigations

Welcome to year 7 science. In this unit you will be introduced to how you can identify possible hazards and work safely in science.

Before you start lesson 1 please look around the room and identify how science labs are different to other classrooms you have been in. Your teacher will discuss with you the rules that must be followed when working in a science lab.

PLC

The RAG column below acts as the PLC for this unit. It is an opportunity for you to assess your learning against each lesson title. Thus self-assessment will help you to identify strengths and gaps in your knowledge and understanding.

Contents

Topic	RAG	Page
1. What apparatus do we use in science?		1-2
2. What do we measure in science?		3-4
3. How can we identify hazards in the lab?		5-8
4. How do we write a method?		9-10
5. What is the difference between a pure substance and a mixture?		11-12
6. How can we separate an insoluble solid and a liquid?		13-14
7. How can we separate a soluble solid and a liquid?		15-16
8. How can we separate a mixture of liquids?		17-18
9. How can we separate a mixture of dissolved substances?		19-20

Throughout the topic, pupils self-assess their progress using RAG ratings next to the PLCs on the front cover of the booklets

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Retrieval-do now questions

Each lesson starts with a retrieval 'do now' activity which activates the prior knowledge needed for the lesson and helps assess how much they have remembered.

Pupils are encouraged to use their brains and books for this activity to help them think more effortfully.

Lesson 2 – What do we measure in science?

Key ideas
1. **What do we use to take measurements?**
2. **What are the units of measurement?**

Starter questions - in your book, just the answers
1. What piece of apparatus do we use for heating?
2. What piece of apparatus do we use for measuring a liquid?
3. How do we draw a scientific diagram of a beaker?
4. How do we draw a scientific diagram of a Bunsen burner?
5. What is freezing?
6. What is the difference between a solid and a liquid?
7. Why do people with long hair need to tie their hair up when using a Bunsen burner?

Retrieval examples
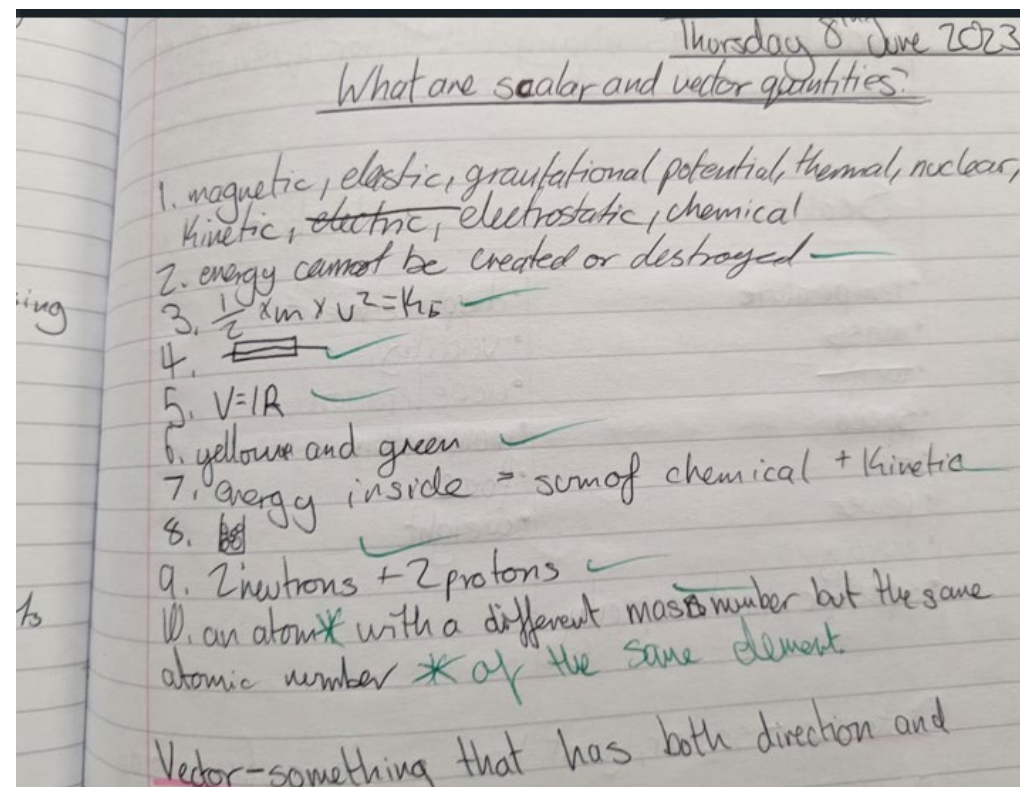
On going formative assessment examples

- Do now retrieval activities

- Low stakes questioning throughout lesson

- Each page of the booklet has questions which increase in difficulty

- *Booklets in year 7 currently being redesigned to provide more cloze passages and breaking lessons down to decrease cognitive load*

- Practical activities and write ups

- Multiple choice quizzes

- Homework-Seneca is set and monitored every week

Examples of summative assessments

- End of topic tests. Pupils go back through these to green pen papers and complete further teaching and questions on areas of general weakness in class.

- End of topic assessments are tracked as a department in a teams file.
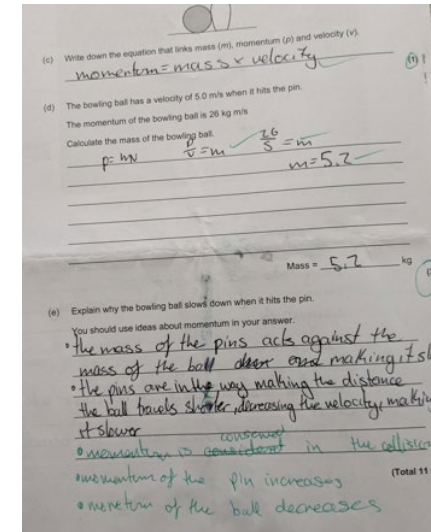
Priory Science Feedback Sheet   Date: 09/01/2024

Praise: HL EP LWA LWY TM
Presentation:
ST-excellent scientific diagram
Effort/attitude to learning:

MCQ introduction to science with extended response question

Even Better If/Target tasks:

Extended answer could be generally improve in the following areas:
- How would you use equipment to measure things in the practical? (volume, temperature)
- Instructions given clearly, given all steps required

Common misconceptions:

Difference between hazards and risks

SPaG (write out each of the following three times in box)

Equipment
Apparatus
Bunsen
Flammable
Thermometer
Goggles
gauze

Presentation (check for and improve errors relating to the following):
Diagrams drawn in pencil/not labelled

Great/excellent examples:
(6 mark question) LH YB EP LW