

Welcome to Science at Pensby High School



PENSBY
HIGH SCHOOL
Care Respect Inspire



Year 7 Science

- The aim for all our department is to allow your children to have every opportunity to gain a curiosity for the world around them and a love for science here at Pensby that we can foster throughout their 5-year journey.

What science looks like in Yr7

- Your children currently are in sets with their form groups however using the CATS / KS2 data they will be set on ability moving forward.
- We use a rotation basis where your children learn a Biology, Chemistry and Physics topic. These topics consist of approximately 8 lessons for each.

Sparking that curiosity..

- At the beginning of each unit we pose a question about the topic they are going to learn. Then throughout the unit we aim to answer that question.
- At the end of each unit students will answer a 'big question task' which will allow students to show that they have a good grasp of the unit.

Example..

Year 7 – Cells - Biology



Big Question – What makes an organism?

Knowledge / Skills	Opportunity for assessment & feedback (RAG)	RAG
Describe the seven things that all living things do	<i>Progression questions</i>	
Describe the function of the different parts of a cell	<i>Progression questions</i> <i>Self/peer marking of cell diagrams</i>	
Explain how to use a microscope and be able to use one to view different types of cells.	<i>Self-assessed drawing of a cell as viewed through a microscope</i>	
Describe what a tissue is and why they are important	<i>Progression questions</i>	

Big Question Task

Year 7 Cells Big Question Task

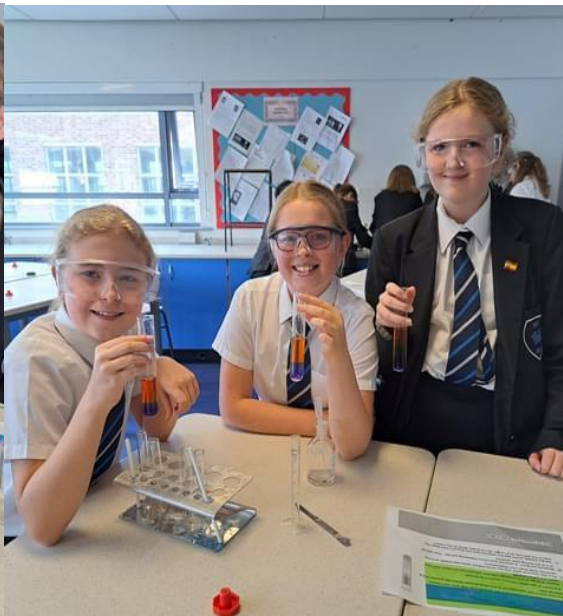
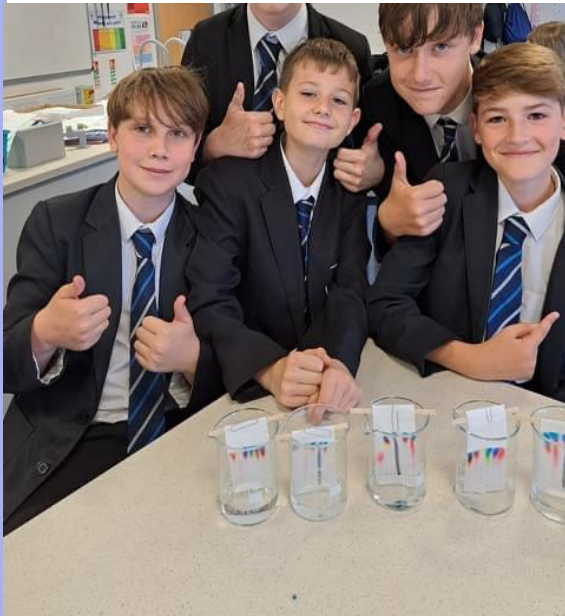
NAME

You have been asked to prepare and view a sample of onion cells. You need to describe the method you would follow to make a slide of the onion cells and how to view it under a microscope.

Include key words and labelled diagrams in your answer.

Practicals

- Throughout the course of the year students will undertake a wide variety of practical elements which will help them continue to gain the love of science but also to see the things they are learning.



Assessments

- You children will be assessed formally at three key points in the year November, March and July. Each assessment will build on the last and cover all aspects of the course so far. The website has a wealth of revision materials to help your children prepare for this exams and achieve the best possible outcomes.

Unit 1: Cells



Cells Worksheet

Download (pdf)



Cells Summary Sheet

Download (pdf)

Unit 1: Energy



Energy Summary Sheet

Download (pdf)



Energy Revision Worksheet

Download (pdf)

Unit 1: Mixtures



Mixtures Revision Worksheet

Homework

- Your children will get one homework per unit (approximately every 8 lessons). This will cover what they have been doing in lessons and they will receive feedback from this as a class.

Year 7 Food and Diet Homework

- Someone's diet is:
A what they eat to lose weight.
B what they eat.
C the amount of money they owe.
D measured in kilograms (kg).
- A nutrient found in many foods is:
A carbohydrate. C energy.
B potato. D carbon dioxide.
- Water is important for your body because:
A it is a source of fibre.
B it is a source of energy.
C it can be a solid, a liquid or a gas.
D it can dissolve substances.
- What is used to test a food for starch?
A iodine solution C a piece of paper
B Benedict's solution D sugar
- Our bodies need food as a fuel for:
A nutrition C respiration

- You have a balanced diet when:
A the mass of all the food you eat in a day adds up to 100 kg.
B the mass of all the food you eat one day is equal to the mass you eat the next day.
C you eat foods containing the right amounts of all the different nutrients.
D you only eat fish on Fridays.

- The table shows Reference Intakes for 11 year olds.

	RIs for boys	RIs for girls
energy	9290 kJ	7720 kJ
carbohydrate	275 g	230 g
protein	42 g	41 g
fat	85 g	70 g
fibre	20 g	20 g
vitamin A	600 ug	600 ug
vitamin C	35 mg	35 mg
calcium	1000 mg	800 mg
iron	11 mg	15 mg

Spellings

- Your children will also receive a task where they will be given a set of spellings to learn that are keywords related to the current topic.
- They will be given time to learn them and then quizzed on these to help promote the use of key scientific language and literacy.

How can you help

- Try to also encourage a love for science by reading books or the news.
- Ensure that your children are completing their homework.
- Use the website with your children to help them recap units or take a look at the unit they are covering now or next.
- Keep in touch.