

# This half term I am studying:

Unit \_\_\_ and Unit \_\_\_



## How to guide on Dr Frost and your KO

Scan the QR code to take you to your course overview.

← Select this half terms units.

Click on the topic you wish to revise.

Revise by watching the videos, practising the key skills or completing exam questions.

### **Remember, points mean prizes!**

Every two weeks, the Dr Frost leadership board is updated with the top three students who will win 10 visas each

At the end of every half term the top five students will win the following rewards:

1st Place - £10

2nd Place - £5

3rd Place- 20 visa points

4th Place- 15 visa points

5th Place- 10 visa points

The more independent work you complete, the more points you win!

# Mathematician of the half term

Answer the questions at the bottom and take your answers to your maths teacher to win 5 visas

Sophie Germain  
1776 - 1831

A French mathematician, physicist, and philosopher. Pioneer of elasticity theory.

"It matters little who first arrives at an idea, rather what is significant is how far that idea can go."

Why did I have to pretend to be man in early career and what was my pseudonym?



Answer:

# Mathematics Careers

# WHEN WILL I EVER NEED MATHS?



Well, you might have to use it in Science...

- Explain the stages of the menstrual cycle by referring to a **graph** of oestrogen and progesterone levels.
- Compare boiling points of gases using your knowledge of **negative numbers**.
- Equate the numbers of atoms of each element when you **balance a chemical equation**.
- **Estimate** in **kilograms** the amount of household waste that a family produces.
- **Calculate** the number of units of alcohol in a certain **volume** of alcoholic drink with a given **percentage** of alcohol.
- Verify Ohm's law by **plotting a graph** of current against voltage and then **calculating the gradient**.
- **Calculate** the efficiency of an energy change and give this as a **percentage**.
- **Measure the angle** of incidence for a ray of light to investigate total internal reflection.
- Use **standard form** when comparing the **masses** of the planets in the solar system.
- **Measure accurately** when recording the **heights** of seedlings.
- **Rearrange formulae** to change the subject and then **substitute** in known values.
- **Convert** between **metric** units of **length** or **volume**.

A colorful periodic table of elements, showing various elements in different colors. The elements are arranged in rows and columns, with their symbols and names visible.

Maths has lots of applications and is a vital asset in many degrees and careers. To find out more about where maths is used and maths-related careers visit: [www.mathscareers.org.uk](http://www.mathscareers.org.uk)