



# ***WBHS INDUCTION LESSONS 2020***

***SCIENCE***

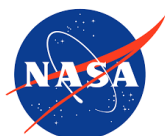


What even is science? Think about how you would answer this question if someone asked you...



Click the link and read what NASA has to say...


<https://spaceplace.nasa.gov/science/en/>



What even is science? Think about how you would answer this question if someone asked you...

asked you...

Science consists of observing the world by watching, listening, observing, and recording. Science is curiosity in thoughtful action about the world and how it behaves.



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A collection of hand-drawn sketches representing various scientific concepts:

- A flask on a stand with a Bunsen burner underneath.
- A naphthalene ring structure.
- A chemical structure of  $H_2SO_4$ .
- A Bohr-style atomic model with a central nucleus and three elliptical orbits.
- A ball-and-stick molecular model of a complex organic molecule.
- A chemical structure of an acetate ion,  $CH_3COO^-$ , with a potassium counterion  $K^+$ .
- A small snippet of mathematical formulas, including  $F = \frac{q_1 q_2}{4\pi\epsilon_0 r^2}$ ,  $\vec{E} = \sum_{i=1}^n \vec{E}_i$ , and  $\vec{L} = R \times \vec{p}$ .

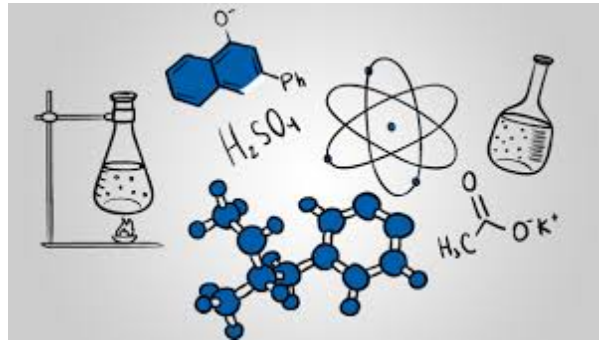




# They show the different 3 areas of science you will study...



<https://www.youtube.com/watch?v=LTXTeAt2mpg>



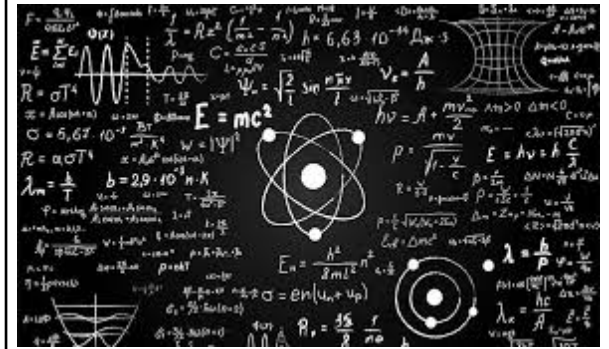
## Biology

The branch of science that studies of Living organisms (Some areas you will study at WBHS are... cells, plants, ecosystems, food webs, human anatomy, organ systems etc.)



## Chemistry

The branch of science that studies the properties of matter and how matter interacts with energy. ( Some areas you will study at WBHS are... Atoms, the periodic table, how substances react, reactions in the environment, chemistry of the atmosphere etc.)



## Physics

The branch of science that studies matter and its motion as well as how it interacts with energy and forces (Some areas you will study at WBHS are... Space, electricity, forces, energy, waves etc.)

# Science at

- At WBHS you will get 6 science lessons per fortnight – usually 3 every week (1 Biology, 1 Chemistry and 1 Physics)
- You may have 3 different teachers (one for each science) and 3 different science classrooms to enjoy 😊
- Physics classrooms are located in D Block, Chemistry upstairs in A and C Block and Biology classrooms are all downstairs in C Block – Have a look to try and find them when you get a map 😊

# How to be a good scientist? List all of the key skills you need...



# How to be a good scientist? List all of the key skills you need...

Problem  
solving

Data Analysis

Following written  
methods

Written  
communication

Time management

Team work

Verbal  
communication

Meet deadlines

Ability to work  
alone

Able to work with  
precision

Collaborate on group  
projects





What are you most looking forward to in science lessons at high school?

What do you enjoy most about science?  
Which of the 3 do you predict will be your new favourite?

What science skills do you think are your strengths?

What science skills do you think you will need to work on?

# Science has been in the news a lot recently...

It shows us how everyone needs an understanding of science to make sense of bigger worldwide events

Your next tasks will be to find out about some of sciences unsung heroes...





For each science hero below, research what they do in their job and think about how they have helped during the pandemic – there are some links on the next slides to help you ☺

**Challenge** – can you think of 2 more science based careers that have been heroic?

Science Hero	What do they actually do?	How has it been important during the pandemic?
Epidemiologist		
Immunologist		
Engineer		
Architect		
Pharmacist		
Bioanalytical Scientist		

# Unsung Superheroes of science

- Epidemiologist -  
<https://kids.niehs.nih.gov/topics/how-science-works/epidemiology/index.htm>
- Immunologist -  
<https://targetjobs.co.uk/careers-advice/job-descriptions/279813-immunologist-job-description>
- Engineer -  
<https://www.sciencekids.co.nz/sciencefacts/careers/engineer.html>
- Architect -  
<https://wiki.kidzsearch.com/wiki/Architect>
- Pharmacist -  
<https://targetcareers.co.uk/career-sectors/healthcare-and-veterinary-medicine/1014243-careers-in-pharmacy>
- Bioanalytical scientist -  
<https://edu.rsc.org/job-profiles/bioanalytical-scientist/4010851.article>



NOT  
ALL  
**SUPERHEROES**  
WEAR  
**CAPES**  
★

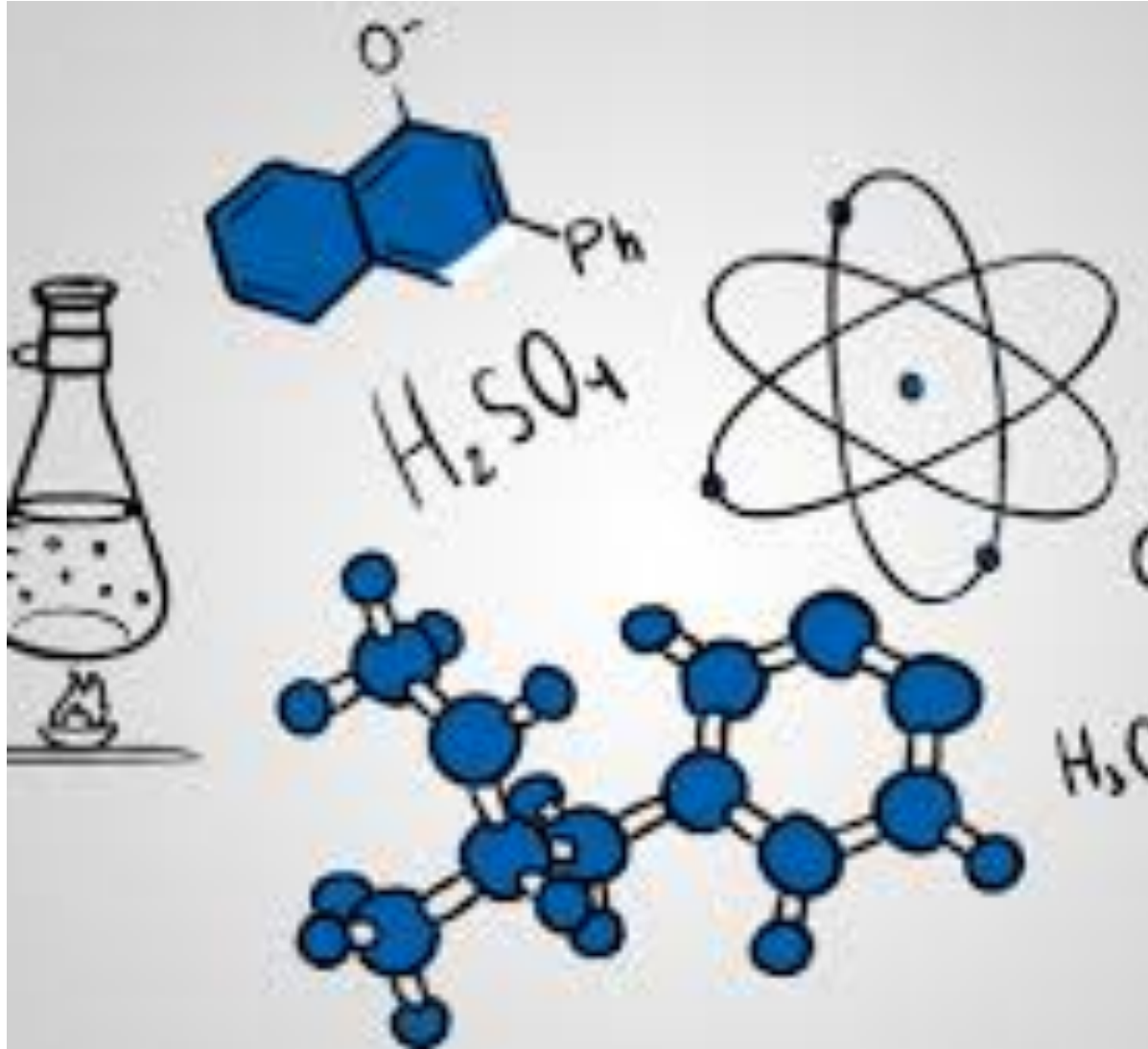


# What's next?



- In the summer holidays your science task will be to choose an area of science to research from a list of questions provided
- You will produce a scientific information poster about your chosen question
- This will let your new science teachers know a bit more about your interests and scientific ability 😊



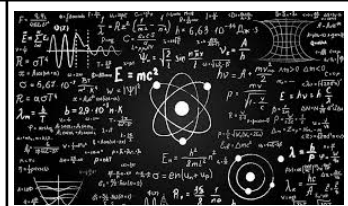
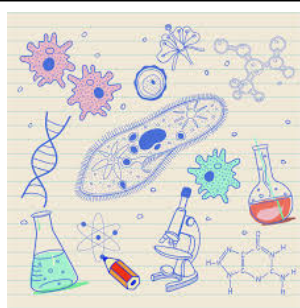
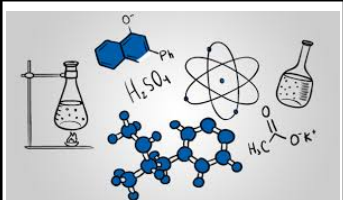


Printable  
sheets

# WBHS What is Science?

What do you think science actually is?

Below each image write a could of bullet points to describe what you think it represents



List the skills that you think you would need to be a successful scientist at WBHS...

What are you most looking forward to in science lessons at high school?

What do you enjoy most about science? Which of the 3 do you predict will be your new favourite?

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What science skills do you think you will need to work on?

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