

# Year 9 Home Learning Support Document

In this booklet you will find an outline of your PREP Learning tasks to be completed for this half term.

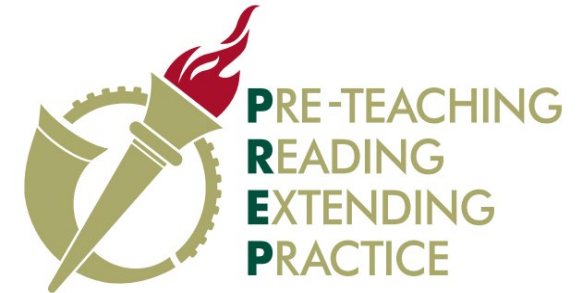
All PREP Learning tasks are essential to your learning in lessons and revolve around four principles:

**Practice** – helping you to retain and remember information

**Reading**- helping you to build your knowledge

**Extend** – helping you to secure knowledge or skills

**Pre-Learning**– preparing you for learning



Your teachers will give you further resources and put further information surrounding your assignments on Class Charts during the week they are set and all work complete will be used as part of your lesson, so it is important to complete it on time. Due date will be on Class Charts.

Remember, if you are unsure of the work you need to complete you can: seek support speak to/email your teacher or attend Home Learning Club after school.

Spring Term: February – March 2024

Decomposition, properties, event-driven programming, sequence, parameters, variables, event handler, checkbox

**Key Vocabulary**

**Websites and Resources to develop your understanding of**

1. **CoderDojo Nano** by Mark Hatter
2. **Become an app inventor** by Karen Lang and Selim Tezel
3. **A beginners guide to Coding** by Mark Scott

Code.org debugging video:  
<https://www.youtube.com/watch?v=auv10y-dN4s>

Mobile development languages:  
<https://medium.com/javarevisited/top-5-programming-languages-for-mobile-app-development-in-2021-19a1778195b8>

Day in the life of a iOS developer:  
<https://www.youtube.com/watch?v=aLccZMTLsmQ>

**KS3 books and online resources**

1. Plan of Manufacture
2. Template
3. CAMs
4. Gears
5. Evaluation



**Key Vocabulary**

**Websites and Resources  
to develop your  
understanding of**



- Stuff Matters – Mark Miodownik
- No More Plastic – Martin Dorey
- Why Materials Matter – Seetal Solanki
- Bauhaus – Magdalena Droste
- Finnish Design – Pekka Korvenmaa
- Why Shrink Wrap a Cucumber – Stephen Aldridge
- The Language of Things - Deyan Sudjic
- Change by Design – Tim Brown
- The Design Thinking Playbook – Wiley

- **Oak Academy:**  
[https://teachers.thenational.academy/subjects/design-technology?fbclid=IwAR3J6XQzHL4mUbEg1PXSJFpsrxrtgQ-FAgbrndWigf\\_n\\_oKWPWAYkGuJL3g](https://teachers.thenational.academy/subjects/design-technology?fbclid=IwAR3J6XQzHL4mUbEg1PXSJFpsrxrtgQ-FAgbrndWigf_n_oKWPWAYkGuJL3g)
- **Design and Technology student:**  
<https://technologystudent.com/>
- **BBC Bitesize:**  
<https://www.bbc.co.uk/bitesize/subjects/zvg4d2p>
- **Design and Technology Info:**  
<http://www.design-technology.info/>
- **STEM:**  
<https://www.stem.org.uk/secondary/resources/collections/home-learning-support/d-and-t-resources>

**KS3 Books to read**



1. Polymer
2. Thermoplastic
3. Thermoset
4. Plastic Memory
5. Solvent Cement
6. Mechanism
7. Assembly
8. Evaluation

**Key Vocabulary**

**Websites and Resources  
to develop your  
understanding of**

- Stuff Matters – Mark Miodownik
- No More Plastic – Martin Dorey
- Why Materials Matter – Seetal Solanki
- Bauhaus – Magdalena Droste
- Finnish Design – Pekka Korvenmaa
- Why Shrink Wrap a Cucumber – Stephen Aldridge
- The Language of Things - Deyan Sudjic
- Change by Design – Tim Brown
- The Design Thinking Playbook – Wiley

- **Oak Academy:**  
[https://teachers.thenational.academy/subjects/design-technology?fbclid=IwAR3J6XQzHL4mUbEg1PXSJFpsrxrtgQ-FAgbrndWigf\\_n\\_oKWPWAYkGuJL3g](https://teachers.thenational.academy/subjects/design-technology?fbclid=IwAR3J6XQzHL4mUbEg1PXSJFpsrxrtgQ-FAgbrndWigf_n_oKWPWAYkGuJL3g)
- **Design and Technology student:**  
<https://technologystudent.com/>
- **BBC Bitesize:**  
<https://www.bbc.co.uk/bitesize/subjects/zvg4d2p>
- **Design and Technology Info:**  
<http://www.design-technology.info/>
- **STEM:**  
<https://www.stem.org.uk/secondary/resources/collections/home-learning-support/d-and-t-resources>

**KS3 Books to read**

Spring Term: February – March 2024

**Design & Technology – Clocks**



PREP	Topic	Assignment	Completed?
Extending	Nonfiction	Task - Research the topic of your presentation	
Practice	Nonfiction	Task - Type up the first draft of your presentation	
Practice/ Extending	Nonfiction	Task - Redraft your presentation using the edits you got in lesson	
Practice/ Extending	Nonfiction	Task - Rehearse your presentation ready for your assessment	

- Rhetoric
- pathos
- Ethos
- Logos
- Persuasion
- Direct address
- anaphora

## Key Vocabulary

Learn these using the suggested activities in your vocabulary books



## Recommended Reading

- <https://www.bbc.co.uk/bitesize/articles/z4w96v4>
- <https://www.bbc.co.uk/bitesize/articles/z6c48hv>
- <https://www.bbc.co.uk/bitesize/guides/zc7nycw/revision/2>

✓ Please see the nonfiction recommendations on the [reading journey](#)

## Useful Research Sites



Spring Term: February – March 2024

Year 9

PREP	Topic	Assignment	Completed?
Practice	Describing regions	Complete week 8 in booklet (writing revision)	
Practice	Describing school	Complete week 1 in booklet (including learning Fab 15 1)	
Practice	Describing school	Complete week 2 in booklet	
Practice	Giving opinions on education	Complete week 3 in booklet (including learning Fab 15 1)	
Practice	Giving opinions on education	Complete week 4 in booklet	

**En France** – In France

**Ils étudient** – they study

**Ils font** – they do

**Il faut** – you must

**Ils doivent** – they must

**C'est plus...que** – it's more... than

**C'est moins... que** – it's less... than

## Key Vocabulary

Learn these using the suggested activities in your vocabulary books



## Recommended Reading



### Les vacances du Petit Nicholas

by Rene Goscinny

### Le Petit Prince

by Antoine de Saint-Exupéry (available in French and English)

[www.wordreference.com](http://www.wordreference.com)

[www.duolingo.com/](http://www.duolingo.com/)

[www.quizlet.com](http://www.quizlet.com)

[www.memrise.com](http://www.memrise.com)

## Useful Research Sites



Spring Term: February – March 2024

**Year 9**

# Subject: Geography

# Learning Cycle 3 – Hazards

PREP	Topic	Assignment	Completed?
Extend	Subduction	Research subduction zones online and make a detailed mind map about the characteristics of them	
Revise	Hazards	Revise the key terminology from the Hazards Knowledge Organizer in preparation for a test	
Pre-Learning	Tsunamis	Read up on the Indian Ocean from 2004 and make a fact file all about the hazard statistics	

1. Subduction
2. Volcano
3. Tsunami
4. Plate Margin
5. Ring of Fire

## Key Vocabulary

Learn these using the suggested activities in your vocabulary books

<https://www.britannica.com/event/Indian-Ocean-tsunami-of-2004>

<https://www.worldvision.org/disaster-relief-news-stories/2004-indian-ocean-earthquake-tsunami-facts>

<https://www.theguardian.com/world/2024/feb/02/2023-turkish-earthquake-then-and-now>

## Recommended Reading

1. <https://www.ucl.ac.uk/seismin/explore/subduction-zones.html#:~:text=Subduction%20zones%20are%20locations%20of,mantle%2C%20a%20process%20called%20subduction.>
2. <https://www.britannica.com/event/Indian-Ocean-tsunami-of-2004>

## Useful Research Sites

# Subject: History

## Learning Cycle 4: Why did America fight against Britain for it's Independence?

PREP	Topic	Assignment	Completed?
Practice	East India Company	Complete Microsoft forms quiz assigned by class teacher	
Practice	The British Raj to Independence	Complete Microsoft forms quiz assigned by class teacher	
Extend	In the same time period elsewhere	Meanwhile Elsewhere...	

1. Empire
2. East India Company
3. Colonisation
4. British Raj
5. Partition

### Key Vocabulary

Learn these using the suggested activities in your vocabulary books

### Recommended Reading

1. National Archives: <https://www.nationalarchives.gov.uk/education/resources/partition-of-british-india/>
2. Association for Asian Studies: <https://www.asianstudies.org/publications/eaas/archives/the-british-impact-on-india-1700-1900/>

1. BBC Bitesize <https://www.bbc.co.uk/bitesize/articles/zx8sf82>
2. Spartacus Education [https://spartacus-educational.com/British\\_Empire.htm](https://spartacus-educational.com/British_Empire.htm)

### Useful Research Sites



# Subject: Maths

# Learning Cycle: 6, 7, 8 and 9

PREP	Topic	Assignment	Completed?
Practice Extending	Rearranging and solving linear equations	<b>'Complete Maths' weekly retrieval quiz to practice your fluency and extend your problem-solving skills</b>	
Practice Extending	Rearranging and solving linear equations Geometrical Relationships and Pythagoras' Theorem	<b>'Complete Maths' weekly retrieval quiz to practice your fluency and extend your problem-solving skills</b>	
Practice Extending	Geometrical Relationships and Pythagoras' Theorem Central tendency and Spread	<b>'Complete Maths' weekly retrieval quiz to practice your fluency and extend your problem-solving skills</b>	
Practice Extending	Geometrical Relationships and Pythagoras' Theorem Central tendency and Spread	<b>'Complete Maths' weekly retrieval quiz to practice your fluency and extend your problem-solving skills</b>	
Practice Extending	Central tendency and Spread Mathematical models	<b>'Complete Maths' weekly retrieval quiz to practice your fluency and extend your problem-solving skills</b>	
Practice Extending	Mathematical models	<b>'Complete Maths' weekly retrieval quiz to practice your fluency and extend your problem-solving skills</b>	

## Rearranging and solving linear equations

### Tier 2

Expand, collect, term, variable, expression, function, represent, simplify, product, sum, rearrange, solve, formulae

Tier 3 coefficient, inverse, equation, factorise

## Geometrical Relationships and Pythagoras' Theorem

Tier 2 Variable, radius, relationship, parallel, perpendicular, area, volume, perimeter, formula, formulae, expression, alternate, corresponding, axiom, proof

Tier 3 equation, diameter, circumference, polygon, quadrilateral, rhombus, parallelogram, trapezium, square, rectangle theorem

## Central Tendency and Spread

Tier 2 Average, mean, median, mode, range, spread, measure, estimate, discrete, continuous, frequency, scale, minimum, maximum.

Tier 3 Central tendency, interquartile, quartile, grouped data, ungrouped data, raw data,

## Mathematical Models

Add, subtract, multiply, divide, product, difference, sum, total, range, quotient, expression, formula, graph, pattern, percentage, fraction, ratio, proportion, variable, constant of proportionality, direct, inverse, rate of change, origin, modelling, sequence, linear.

<https://corbettmaths.com/>

and Complete Maths

### Extend

Maths talks to blow your mind -

[https://www.ted.com/playlists/189/math\\_talks\\_to\\_blow\\_your\\_mind](https://www.ted.com/playlists/189/math_talks_to_blow_your_mind)

UKMT Papers - Ask your class teacher about these

Have a look at the website <https://parallel.org.uk/>

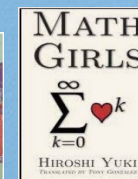
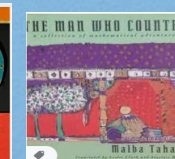
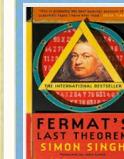
## Key Vocabulary

Learn these using the suggested activities in your vocabulary books

**Fermat's Last Theorem by Simon Singh**

**The Man Who Counted by Julio-Cesar de Mello eSouza**

**Math Girls by Hiroshi Yuki**



## Recommended Reading

## Useful Research Sites

Spring Term: February - March 2024

Year 9

Curriculum Link with Sport



## Songwriting

- Chord progression
- Root position
- Inverted Chords
- Strophic Form
- Conjunct
- Disjunct
- Hook
- Riff
- Range
- Chromaticism

## Viennese Waltz

- Waltz
- 18<sup>th</sup> Century life
- Time Signature
- Articulation
- Dynamics
- Ternary Form
- Tonic key
- Relative minor

## Key Vocabulary

## Websites and Resources to develop your understanding of

<https://www.youtube.com/watch?v=HTYrkOZ5nCs>

Axis of Awesome – 4 chords song.

[https://www.youtube.com/watch?v=fO\\_Z5TiSEBI](https://www.youtube.com/watch?v=fO_Z5TiSEBI)

<https://www.youtube.com/watch?v=LKcZL8q1eBw>

A selection of famous Waltz's to support learning

<https://www.musictheory.net>

This website is perfect for all your note lengths, rests, symbols as well as all the pitches you'll learn.

[https://resources.avid.com/SupportFiles/Sibelius/2020.1/Sibelius\\_Reference.pdf](https://resources.avid.com/SupportFiles/Sibelius/2020.1/Sibelius_Reference.pdf)

Extensive support for Sibelius that will be used all year

## Recommended listening

# Religion, Philosophy & Ethics

# Resources to support Learning Cycle 2: Crime & Punishment

- **Capital Punishment**
- **Crime**
- **Deterrence**
- **Justice**
- **Punishment**
- **Reform**
- **Retribution**

↗ **Key Vocabulary**  
Learn these to  
support your  
learning in lessons

## Websites and Resources to develop your understanding

**A Case of Murder** by Arthur Conan  
Doyle

**Lamb to the Slaughter** by Roald Dahl

**To Kill A Mockingbird** by Harper Lee

**Nineteen Eighty-Four** by George  
Orwell

**The Thursday Murder Club** by  
Richard Osman

## BBC Bitesize: Causes of Crime

<https://www.bbc.co.uk/bitesize/guides/z9c4srd/revision/5>

## BBC Bitesize: Types & Aims of Punishment

<https://www.bbc.co.uk/bitesize/guides/z9c4srd/revision/6>

## BBC Bitesize: Death Penalty

<https://www.bbc.co.uk/bitesize/guides/z9c4srd/revision/8>

## Class Clips: What are the Rights and Wrongs of the Death Penalty?

<https://www.bbc.co.uk/teach/class-clips-video/religious-studies-pshe-gcse-what-are-the-rights-and-wrongs-of-the-death-penalty/zbkg92p>

← **KS3 Recommended  
reading**

Autumn Term: February - March 2024

**Year 9 Religion, Philosophy & Ethics**



## Contact Rugby:

1. Possession
2. Range of pass
3. Drift Defence
4. Tackle
5. Go forward

## Health and related Fitness

1. Intensity
2. Heart Rate
3. RPE (Rate of Perceived Exertion)
4. Technology in fitness (GPS/Apps)

## Key Vocabulary

## Websites and Resources to develop your understanding of

### Contact Rugby:

<https://www.bbc.co.uk/bitesize/topics/zp2m7hv>

Health and related Fitness:  
BBC Bitesize

### Contact Rugby:

<https://youtu.be/FOJejnPI0p0?si=d72HQE-UIfK8UUXk>

### Health and related fitness:

[https://www.youtube.com/watch?v=Ogf0\\_QO\\_Ko](https://www.youtube.com/watch?v=Ogf0_QO_Ko)

## KS3 books and online resources



PREP	Topic	Assignment	Completed?
Practice	Cells	Knowledge organiser/Glossary	
Practice	Cells	Carousel learning	
Practice	Cells	Knowledge organiser/Glossary	
Practice	Cells	Carousel learning	
Practice	Cells	Knowledge organiser/Glossary	
Practice	Cells	Carousel learning	

1. Cell
2. Magnification
3. Specialised cell
4. Diffusion
5. Unicellular

### Recommended Reading

1. What are cells?  
<https://www.bbc.co.uk/bitesize/guides/zpqpqhvr/revision/1>
2. Microscopy  
<https://www.youtube.com/watch?v=--dlBinUdeU>

### Key Vocabulary

Learn these using the suggested activities in your vocabulary books

1. Cells  
<https://www.bbc.co.uk/bitesize/guides/zpqpqhvr/revision/7>
2. Light microscopes  
<https://www.bbc.co.uk/bitesize/guides/zpqpqhvr/video>

### Useful Research Sites

PREP	Topic	Assignment	Completed?
Practice	Periodic table	Carousel learning	
Practice	Periodic table	Knowledge organiser/Glossary	
Practice	Periodic table	Carousel learning	
Practice	Periodic table	Knowledge organiser/Glossary	
Practice	Periodic table	Carousel learning	
Practice	Periodic table	Knowledge organiser/Glossary	

- 1. Alkali metals
- 2. Halogens
- 3. Properties
- 4. Atomic model
- 5. Electron

### Recommended Reading

- 1. Arrangement of the periodic table  
<https://www.bbc.co.uk/bitesize/guides/ztrxdxs/video>
- 2. Halogens and Noble gases  
<https://www.youtube.com/watch?v=HT1zAPQIBAQ>

### Key Vocabulary

Learn these using the suggested activities in your vocabulary books

- 1. Groups in the periodic table  
<https://www.bbc.co.uk/bitesize/guides/ztrxdxs/revision/1>
- 2. Properties of metals and non-metals  
<https://www.bbc.co.uk/bitesize/guides/zwt2k2p/revision/4>

### Useful Research Sites

# Subject: Science

# Learning Cycle 3, Conservation and dissipation of energy

PREP	Topic	Assignment	Completed?
Practice	Energy	Knowledge organiser/Glossary	
Practice	Energy	Carousel learning	
Practice	Energy	Knowledge organiser/Glossary	
Practice	Energy	Carousel learning	
Practice	Energy	Knowledge organiser/Glossary	
Practice	Energy	Carousel learning	

1. Energy
2. Conservation
3. Dissipation
4. Efficiency
5. Renewable

## Key Vocabulary

Learn these using the suggested activities in your vocabulary books

1. Energy stores  
<https://www.bbc.co.uk/bitesize/guides/z8hsrwx/revision/3>
2. Conservation of energy  
<https://mmerevise.co.uk/gcse-physics-revision/conservation-of-energy/>

## Recommended Reading

1. Types of energy stores  
<https://www.bbc.co.uk/bitesize/guides/z8hsrwx/video>
2. Energy  
[https://www.youtube.com/watch?v=H6D\\_ViW0Ch4](https://www.youtube.com/watch?v=H6D_ViW0Ch4)

## Useful Research Sites

PREP	Topic	Assignment	Completed?
Practice	Describing regions	Complete week 8 in booklet (writing revision)	
Practice	Describing school	Complete week 1 in booklet (including learning Fab 15 1)	
Practice	Describing school	Complete week 2 in booklet	
Practice	Giving opinions on education	Complete week 3 in booklet (including learning Fab 15 1)	
Practice	Giving opinions on education	Complete week 4 in booklet	

**En España – In Spain**  
**Estudian** – they study  
**Hacen** – they do  
**Hay que** – you must  
**Deben** – they must  
**Es más... que**– it's more... than  
**Es menos... que**– it's less... than

## Key Vocabulary

Learn these using the suggested activities in your vocabulary books

## Recommended Reading

[www.wordreference.com](http://www.wordreference.com)  
[www.duolingo.com/](http://www.duolingo.com/)  
[www.quizlet.com](http://www.quizlet.com)  
[www.memrise.com](http://www.memrise.com)

**The Fountains of Silence**  
 by Ruta Sepetys  
**Furia**  
 by Yamile Saied Méndez  
**The Distance Between Us (Young Readers Edition)**  
 by Reyna Grande

## Useful Research Sites

Spring Term: February – March 2024

**Year 9**