Year 7 revision List: Topic 1: Introduction/ Map Skills

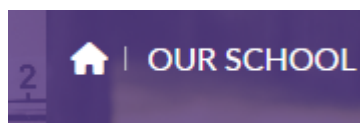| Question	Answer
1. What do physical and human geography mean?	**Physical geography** is concerned with the study of the natural features and processes of Earth's surface, including landforms, climate, ecosystems and natural hazards. **Human geography** is the study of how people and their activities are distributed across Earth's surface and how they interact with their environment.
2. What are the key features of a map?	Key, Label, Title, Compass, Scale
3. What are the 8 points on a compass?	North, North-East, East, South-East, South, South-West, West, North-West
4. What are eastings?	Numbers that run from west to east on an OS map
5. What are northings?	Numbers that run from south to north on an OS map
6. How do you find a 4-figure grid reference on a map?	Go along the corridor to the bottom left corner of your grid square, and then go up the stairs to the same point.
7. What is relief?	Relief is the differences in height between locations
8. What is altitude?	Altitude is the height above sea level.
9. What is contour line?	A contour line is a line on a map used to show changes in altitude. They are always 10 meters of altitude apart. The closer together they are, the steeper the land. The further apart they are, the flatter the land.
10. What is a continent?	any of the world's main continuous expanses of land.
11. What are the 7 continents?	North America, South America, Europe, Asia, Africa, Oceania, Antarctica
12. What are the 5 oceans?	Pacific, Atlantic, Indian, Arctic, Southern
13. What is a line of latitude?	A line that runs from East to West on a map, showing how far north or south a place is from the equator.
14. What is a line of longitude?	A line that runs from North to South on a map, showing how far east or west a place is from the prime/ Greenwich meridian.
15. What are the key lines of latitude and longitude?	Latitude: Arctic circle, tropic of cancer, equator, tropic of Capricorn, Antarctic circle Longitude: prime meridian

KS3 (Year 7)

Revision List

Please use this revision list to revise for everything you have studied during Term 1.

If you have any questions regarding this pack come and see Mr.Darazkan or send an email to mdarazkan@firvale.com
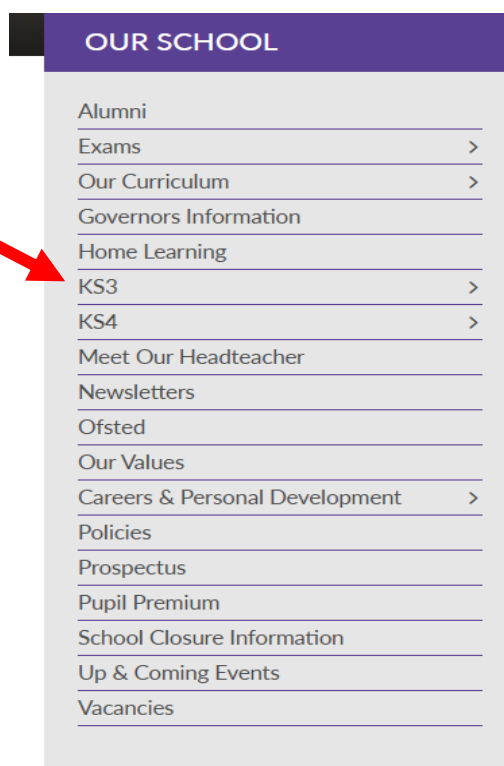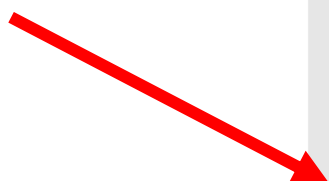
How to find your subjects Knowledge Organisers on Fir Vale School Website

1- Go to https://www.firvale.com/

2- Click on the tab 'Our School'.

OUR SCHOOL

3- Click on 'KS3' tab

OUR SCHOOL

Alumni
Exams   >
Our Curriculum   >
Governors Information
Home Learning
KS3   >
KS4   >
Meet Our Headteacher
Newsletters
Ofsted
Our Values
Careers & Personal Development   >
Policies
Prospectus
Pupil Premium
School Closure Information
Up & Coming Events
Vacancies

4- Click on 'Knowledge Organisers'.

OUR SCHOOL

KS3

Fir
Knowledge Organisers
School

5- Click on the relevant Knowledge organiser for your year group.

OUR SCHOOL
KNOWLEDGE ORGANISERS

UNITED LEARNING KNOWLEDGE ORGANISER YEAR 7	📄
UNITED LEARNING KNOWLEDGE ORGANISER YEAR 8	📄
UNITED LEARNING KNOWLEDGE ORGANISER YEAR 9	📄

6- Once you open the file then you will need to find the subject that you would like to revise for.

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Y7 Knowledge Organiser
Name:
Tutor Group:
Tutor & Room:

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Y8 Knowledge Organiser
Name:
Tutor Group:
Tutor & Room:

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Y9 Knowledge Organiser
Name:
Tutor Group:
Tutor & Room:

7- Find the subjects that you would like to revise for in the content table and then scroll down to find the relevant Knowledge Organiser.

Contents ___

01.	English
11.	Maths
20.	Science
33.	History
39.	Geography
44.	French
51.	Spanish
58.	RE
62.	Music
66.	PE

REVISION TIPS

A handy guide for
HOW

to revise

Fir Vale Academy

The best in everyone™

Revision Tips

2, 3, 5, 7

1. **Initial Session (Day 1):** Learn a new topic or review your notes for the first time.

2. **Day 2:** Look at the material again, this time on the second day after your first revision session.

3. **Day 3:** Look at the information for a third time.

4. **Day 5:** Revise the topic again, this time on the fifth day from your first revision session.

5. **Day 7:** Conduct a final review on the seventh day.

This will be a useful revision strategy for me because:

Subjects I will use this for will be:

Revision Tips

Postcards

- Write a key topic or question on one side of a postcard.
- Write a detailed answer, definition, example, or mnemonic on the other side.
- You could use visuals or short phrases to summarise information.

This will be a useful revision strategy for me because:

Subjects I will use this for will be:

Revision Tips
Dual Coding

Learning information through visual images and language.

Using diagrams and illustrations.

Using flow charts and timelines.

Increases your ability to understand and remember information needed for your exams.

This will be a useful revision strategy for me because:

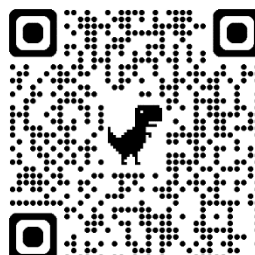Subjects I will use this for will be:

Revision Tips
Mind-maps

- Visualises ideas and concepts, providing a clear and structured way to capture and organise thoughts.

for me

Revision Tips
Spacing

- Breaking up revision sessions with time in between.
- Do not cram all of your revision into one session.
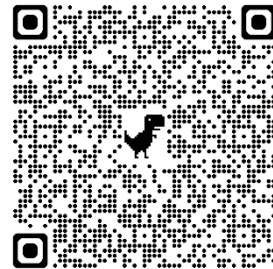- This will improve your long-term memory retention.

This will be a useful revision strategy for me because:

Subjects I will use this for will be:

Revision Tips

A good study partner

- Work with another student to test each other or to ask questions to.
- Make sure this student is as motivated as you are.
- Don't study with someone who will distract you from your revision.

This will be a useful revision strategy for me because:

Subjects I will use this for will be:

Revision Tips
Retrieval Practice

- Involves recalling (retrieving) information from your memory.
- This strengthens your long-term memory and learning.
- Could involve quizzing, practice papers, or re-writing what you have learned.

This will be a useful revision strategy for me because:

Subjects I will use this for will be:

Week commencing: _____

My Weekly Revision Timetable

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
8:00 am							
9:00 am							
10:00 am							
11:00 am							
12:00 am							
1:00 pm							
2:00 pm							
3:00 pm							
4:00 pm							
5:00 pm							
6:00 pm							
7:00 pm							
8:00 pm							

Tip 1: Stay positive - if you work hard and practise effectively, you will succeed!

Tip 2: Test yourself, don't just read. Use practice questions and mark them or re-write notes from memory.

Tip 3: Be disciplined - stick to your plan! You can change/move it, but make sure you stick to it!

Maths Year 7 Revision Topics Term 1		Sparx Codes
Numerical Skills	Understand and use place value for decimals. Calculations with negative numbers. Estimate calculations by rounding.	M763, M704, M522, M527, M135, M111, M431, M878
Order of operations	Solve calculations requiring understanding of B-I-DM-AS (know that the inverse of squaring is 'square rooting')	M521
Introduction to Algebra	Introduce the concept of algebra, simplify expressions, manipulate expressions through simple one step rearranging, substitute positive and negative integers into expressions, solve siimple one step equations. Substitute and solve.	M106, M830, M813, M795, M531, M417, M327, M208, M979
Primes, Factors and Multiples	Use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple	M227, M823, M698, M322, M829
Expanding and Factorising 1	Simplify and manipulate algebraic expressions to maintain equivalence by multiplying a single term over a bracket or by taking out common factors	M288, M237, M792, M100
Addition and Subtraction	Use Addition and Subtraction, including formal written methods, applied to integers, decimals	M928, M429, M347, M152, M899
Perimeter	Calculate and solve problems involving perimeters of rectangles and compound shapes (not circles). Converting metric units of length.	M920, M635, M690

Maths Year 8 Revision Topics Term 1		Sparx
Powers and Roots	Use integer powers and associated real roots (square, cube and higher), recognise powers of 2, 3, 4, 5 and distinguish between exact representations of roots and their decimal approximations	M135, M608
Prime Factorisation	Use the concepts and vocabulary of prime numbers, factors (or divisors), common factors, prime factorisation, including using product notation and the unique factorisation property (HCF and LCM with large numbers taught in 9.04)	M322, M823, M108, M365, M227, M698
Rounding	Round numbers and measures to an appropriate degree of accuracy [for example, to a number of decimal places or significant figures]	M111, M431, M994, M131, M878
Fractions	Multiply and divide fractions and mixed numbers	M939, M410, M671, M601, M835, M931, M157, M197, M110, M265
Solving Equations 1	Use algebraic methods to solve linear equations in one variable (including all forms that require rearrangement). Model situations or procedures by translating them into algebraic expressions or formulae and by using graphs	M707, M509, M387, M554, M813, M795, M531, M957
Coordinates and basic graphs	Coordinates and developing algebraic relationships	M618, M622, M797
Units of measurement	Use standard units of mass, length, time, money, and other measures, including with decimal quantities	M892, M627, M515, M772, M530, M761, M728
Angles in parallel lines	Understand and use the relationship between parallel lines and alternate and corresponding angles	M818, M163, M606, M351, M679, M393
Circumference	Calculate and solve problems involving perimeters of 2-D shapes (including circles) and composite shapes	M595, M169

Important Topics from Year 7		Sparx Codes
Numerical Skills	Understand and use place value for decimals. Calculations with negative numbers. Estimate calculations by rounding.	M763, M704, M522, M527, M135, M111, M431, M878
Order of operations	Solve calculations requiring understanding of B-I-DM-AS (know that the inverse of squaring is 'square rooting')	M521
Introduction to Algebra	Introduce the concept of algebra, simplify expressions, manipulate expressions through simple one step rearranging, substitute positive and negative integers into expressions, solve siimple one step equations. Substitute and solve.	M106, M830, M813, M795, M531, M417, M327, M208, M979
Primes, Factors and Multiples	Use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple	M227, M823, M698, M322, M829
Addition and Subtraction	Use Addition and Subtraction, including formal written methods, applied to integers, decimals	M928, M429, M347, M152, M899
Multiplication and Division	Use Multiplication and Division, including formal written methods, applied to integers, decimals	M113, M911, M187, M803,

		M462, M354, M873, M262

Maths Year 9 Revision Topics Term 1		Sparx
Decimal Manipulation	Apply all four operations using non calculator methods when working with decimals, this includes both dividing a decimal by an integer and dividing a number by a decimal.	U417, U478, M462, U735, U127, U293, U453, U868, U976
Estimation and Limits of accuracy	Use rounding in order to complete estimations (rounding to both one significant figure and applying sensible rounding), using inequality notation to write error intervals from both rounding and truncation.	U480, U298, U731, U965, U225, U657, U587, U108, U301
Related Calculations	Recognise and use relationships between operations in order to write down the answer to a related calculation from a given calculation.	U735
HCF & LCM of large numbers	Use prime factor decomposition and Venn diagrams in order to find the HCF and LCM of large values.	U211, U751, U529, U236, U739, U250
Fraction Calculations	Apply all four operations using non calculator methods when working fractions and mixed numbers involving different denominators, finding the fraction of an amount, writing one number as a fraction of another and to find the reciprocal of an integer, decimal or fraction.	U736, U692, U793, U475, U224, U544, U538, U881, U916, U163
Algebraic Manipulation	Collecting like terms and simplifying expressions involving all four operations, the identity symbol, adding fractions with algebraic numerators, multiplying and dividing simple algebraic fractions.	M795, U613, M830
Index Laws	Working with the laws of indices, this includes negative and **fractional** indices, using index notation for integer powers of 10, including negative powers.	U105, U622, U103, U437, U685, U457, U824
Standard Form	Converting between ordinary numbers and standard form. Calculating with standard form including multiplication, division, addition and subtraction.	U330, U534, U264, U290, U161
Expanding & Factorising 2	Expanding double brackets, factorising quadratics (where the coefficient of x^2 is 1), difference of two squares.	U179, U365, U768, U178, U963

Important Topics from Year 7 and Year 8		Sparx Codes
Numerical Skills	Understand and use place value for decimals. Calculations with negative numbers. Estimate calculations by rounding.	M763, M704, M522, M527, M135, M111, M431, M878
Introduction to Algebra	Introduce the concept of algebra, simplify expressions, manipulate expressions through simple one step rearranging, substitute positive and negative integers into expressions, solve siimple one step equations. Substitute and solve.	M106, M830, M813, M795, M531, M417, M327, M208, M979
Addition and Subtraction	Use Addition and Subtraction, including formal written methods, applied to integers, decimals	M928, M429, M347, M152, M899
Multiplication and Division	Use Multiplication and Division, including formal written methods, applied to integers, decimals	M113, M911, M187, M803, M462, M354, M873, M262
Rounding	Round numbers and measures to an appropriate degree of accuracy [for example, to a number of decimal places or significant figures]	M111, M431, M994, M131, M878
Fractions	Multiply and divide fractions and mixed numbers	M939, M410, M671, M601, M835, M931, M157, M197, M110, M265
Fractions, decimals, and percentages	Converting between fractions, decimals, and percentages.	M267, M958, M264, M553
Primes, Factors and Multiples	Use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple	M227, M823, M698, M322, M829

English - KS3 Revision Topics

Y7 have studied Treasure Island and The Wolves of Willoughby Chase (both novels).

Y8 have studied Dracula (novel) and Richard 3rd (Shakespeare).

Y9 have studied The Crucible (play script) and Relationship and Identity Short stories.

KS3 Exam Topics ; Mid Year Tests Jan 2026

Year 7	Year 8	Year 9
7.01 Particles, substances and mixtures	7.08 Life cycles	9BE Ecology
7.02 Fundamentals of Physics	8.01 Heating and cooling	9PF Forces in action
7.03 Cells and Organisation	8.02 Earth and atmosphere	9CR Reactivity
	8.03 Forces and Motion	9PE Electricity
	8.04 Plants and their processes (photosynthesis, starch testing a leaf, plants as organisms)	

KS3 ICT & Computer Science Revision -January 2026

Year 7	Revision Topics-Comics 7.2	Revision Completed
	- Audience and Purpose - Comics-Panels and layout - Storyboard- - Speech in comics - Type of shots and angles-Wide, medium and close up - Analysing comics - Scenes and backgrounds - Cyberbullying- definition and how to prevent	
Year 8	Revision Topics- Photoshop	
	- Understand how to use Photoshop-Layers, image sizes, cropping, paint bucket - Editing images-Brush, magic wand, paint brush tool - Manipulating images together - Adding features text, black and white options, filters - Producing marketing banners-Logo, professional branding	
Year 9	Revision Topics-Algorithms	
	- Basic algorithms-Key functions - Sequence an algorithm- - Selection - Sorting an algorithm - Iteration-	

RELIGIOUS STUDIES:

Y7: Origins of Abrahamic Faith	
• Abraham	
• Moses	
• The Golden Calf	
• Atonement	
• Jesus' Sermon on the Mount	
• Jesus' Death	
• Ibrahim in Arabia	
• The Prophet Muhammad	

Y8: ISLAM	
• The Origins of Islam	
• The Night of Power	
• The Hijrah	
• The Prophet Muhammad's Final Sermon	
• The Five Pillars	
• Ramadan and Eid-ul-Fitr	
• Sharia Law	
• Gender Equality	
• Clothing – Culture and choice	

Y9: EQUALITY	
• Why is equality important?	
• Religion and equality	
• Racism and scripture	
• The fight for racial equality	
• Gender equality and scripture	
• Women in worship	

KS3 Revision lists

Year 7	Year 8	Year 9
Name and age (yours and your siblings')	Holidays in the past (where, how you got there, who you went with, where you stayed)	Your family (physical and personality description)
Where you are from and what languages you speak	Holiday activities in the past	Who you get along or not get along with and why
Birthdays (yours and your siblings')	Usual holidays (where, how you get there, who you go with and what you like to do)	Ideal partner or friend
Activities you like or don't like to do	Plans for future holidays (where, how you will get there, who you will go with and what you will do)	Activities you normally do
Family members, their names and ages	Activities you like or don't like to do	What you did last weekend
Physical description	Going to a party (what you will wear and bring)	Your plans for next weekend
Personality description	TV programmes and films that you like or don't like	Different types of food you like to eat for different mealtimes
Pets (opinions and descriptions)	Music you prefer	Spanish festivals
	Activities (in the past, usual and plans for the future)	Talk about a festival you attended in the past
		Talk about a festival you would like to attend in the future

Music

KS3 Music	Topic	Revision Completed
The Elements of Music	1.1 The 8 elements	
	1.2 Listening to and appraising music	
Singing	2.1 Vocal skills	
	2.2 Key words and definitions (singing)	
Keyboard Skills	3.1 Keyboard note names (letters)	
	3.2 Score reading (key terms & symbols)	

You will be given knowledge organisers for these topics. Please collect these from your music teacher and check Class Charts.

YEAR 7 HISTORY - Topic 1: Empires East and West c.1000

Key Vocabulary

Caliph	(n) the ruler of the Islamic Empire.
dynasty	(n) a sequence of rulers from the same family.
empire	(n) a group of countries ruled by a single ruler.
innovation	(n) the process of improving something or creating something that is a new technology.
madrasa	(n) Muslim school or college.
monarch	(n) king or queen.
pilgrim	(n) a person who makes a journey, often a long and difficult one, to a special place for religious reasons.

Chronology

A	chronology	(n) the arrangement of events, or dates, in the order of occurrence.
B	millennium	(n) a period of 1,000 years.
C	century	(n) a period of 100 years.
D	decade	(n) a period of 10 years.

Key Content

		Themes and Threads
1. Chinese Dynasties *Ruled by the Song Dynasty between 960-1279.*	Compass, gunpowder and moveable type printing were all inventions which came from Ancient China	Connectivity - Innovation
	Women were expected to help farming in the rice paddies, marry, have children and look after the household.	Identity- Role of Women
	People in China followed Buddhism.	Identity- Beliefs
2. Byzantine Empire *The City of Constantinople was the centre of the Byzantine Empire.*	People in Constantinople were Christians	Identity- Beliefs
	Constantinople was connected to China through the Silk Road	Connectivity- Trade
	Empress Zoe was a woman who ruled Constantinople.	Identity- Role of Women
Islamic Empire *Baghdad was the centre of the Islamic Golden Age*	The City of Baghdad was built in AD762 and was the centre of the Islamic Empire	Power- Empire
	The Centre of Knowledge was the House of Wisdom	Connectivity- Knowledge
	Caliphs ruled the Islamic Empire	Power- Empire
Holy Roman Empire *Rome was the centre of the Christian world.*	The main religion of Europe was Christianity	Identity- Beliefs
	The head of the Christian Church was the Pope	Identity- Beliefs
	Medieval Monarchs helped promote Christianity in the countries they rules	Identity- Beliefs

Place

The **Silk Road** was an important trading route for spices, silk and knowledge. The Silk Road connected China with European countries.

YEAR 7 HISTORY - Topic 2: Norman Conquest

Key Vocabulary

cavalry	(n) a group of soldiers who fight on horses.
claimant	(n) a person who believes they have a right to something.
conquer	(v) to take control of a place or people by force.
feudalism	(n) system where someone who held land gave land to others on the condition that they serve them.
inherit	(v) to receive something from a person who has died.
interpretation	(n) This is an opinion about what the past was like.
invade	(v) to enter an area by force to take control.
migration	(n) the movement of people from one place to another.
Motte and Bailey Castle	(n) a simple castle with a man-made hill surrounded by a clear defensive area.
heir	(n) The person who will become the next monarch
primogeniture	(n) being the first-born child.
source	(n) Things that people made or wrote during the time in history you are studying.
succession	(n) the order of taking over an official title or position.

Key Content

		Themes and Threads
1. Migration to England	Britons, Romans, Angles, Saxons, Jutes and Vikings all migrated to England before 1066	Connectivity- migration
	Migration is the movement of people from one place to another	Connectivity- migration
	The 'medieval period is between 500-1500AD	Chronology
2. Anglo-Saxon England	The King and his Witan ran the country	Power- monarchy
	Most Anglo-Saxons were Christian	Identity- beliefs
	Anglo-Saxon women were expected to marry and become mothers.	Identity- role of women
3. Death of Edward Confessor	Edward the Confessor died January 5th 1066	Power- succession
	Edward the Confessor did not have an heir so it was not clear who should be the next King.	Power- succession
	The 3 main claimants were- Hardrada, Godwinson and William of Normandy.	Power- succession
4. 1066 and the Conquest	The Battle of Hastings was on 14th October 1066	Power- warfare
	William of Normandy won the Battle of Hastings	Power- warfare
	William won because of Luck, Leadership and Tactics	Power- warfare
5. Norman Control- Castles and Ter	The Normans built motte and bailey castles for protection	Connectivity- innovation
	The North of England rebelled against William in 1068	Power- protest
	William responded with the harrying of the North- land, villages and food sources were destroyed.	Power- protest
6. Norman Control- Peaceful Methods	The Feudal System was an order/ hierarchy of people introduced by the Normans	Power- class system
	Each group received land	Power- class system
	Each group paid the group above them taxes	Power- class system
7. Changes under the Normans- Political and Economic	Primogeniture means the first born son will become the next King	Power- succession
	The Murdrum fine was the punishment introduced by the Normans	Power- crime and punishment
	The practice of slavery stopped during Norman rule	Power- crime and punishment
8. Changes under the Normans- Social	The official language of the King's court became French	Connectivity- knowledge
	The Normans introduced stone churches and Motte and Bailey Castles	Connectivity- knowledge
	Women had less opportunities and were no longer able to own land	Identity- role of women

Battle of Hastings
25th December 1066
William crowned King of England

exist in 1066.

Topic 1: Introduction to geographical skills

Maps and symbols

OS maps use symbols to show human and physical features. Maps have a **title, labels,** a **compass rose,** a **scale** and a **key.**
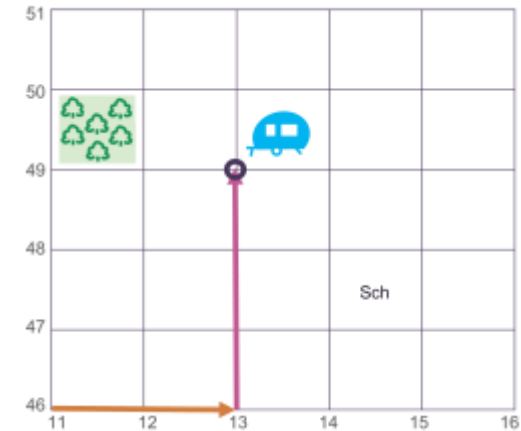
Key vocabulary

- **Continent** – One of the seven large land masses on Earth
- **Longitude** – The lines down the earth showing east or west
- **Latitude** – The lines across the earth showing north and south
- **Eastings** – The grid reference along the bottom
- **Northings** – The grid reference up the side
- **Contour lines** – Brown lines on a map that show height
- **Relief** – The height of the land
- **Topography** - The shape and physical features of an area
- **Altitude** - Height above sea level (measured in metres).
- **OS map** – Ordnance Survey is a map of areas of the UK

Four-figure grid references

Four-figure grid references are used to describe locations on an OS map.

1. Look at the bottom-left corner of the square.
2. Find the **easting.**
3. Find the **northing.**
4. Write down the four-figure grid reference.
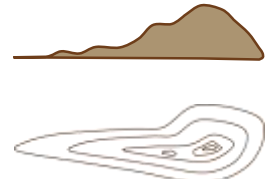
Relief

Height on a 2D map can be shown using three methods:

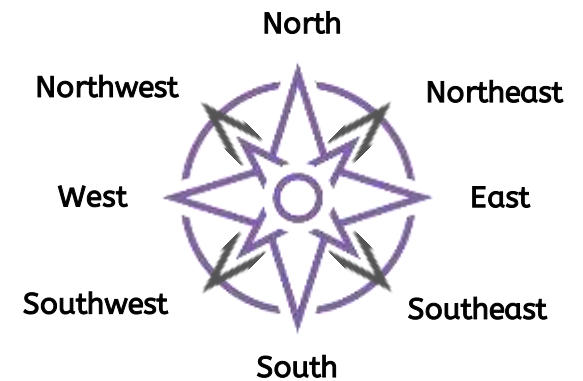Spot heights – a dot giving the exact height of a specific point.

Colour layering - different heights are shown by bands of different colours.
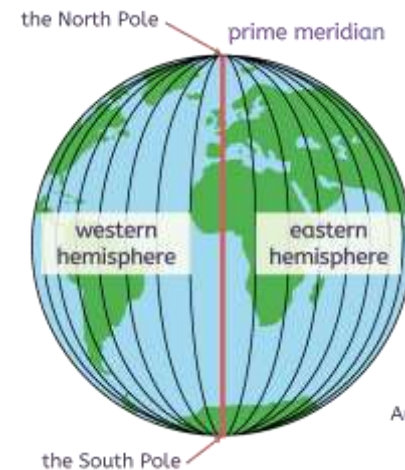
Contour lines – brown lines connecting areas of the same height.
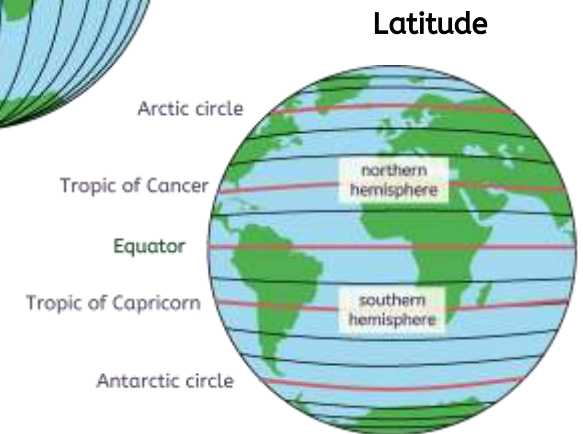
Topic 1: Introduction to geographical skills

Continents, oceans and countries in the UK

Arctic Ocean
North America
Europe
Asia
Atlantic Ocean
Africa
Pacific Ocean
Pacific Ocean
South America
Indian Ocean
Oceania
Southern Ocean
Antarctica

Atlantic Ocean
North Sea
Irish Sea
Celtic Sea
English Channel

Scotland
Edinburgh
Northern Ireland
Belfast
England
Wales
Cardiff
London

North
Northwest
Northeast
West
East
Southwest
Southeast
South

Longitude and latitude

the North Pole
prime meridian
Longitude
western hemisphere
eastern hemisphere
the South Pole

Latitude
Arctic circle
Tropic of Cancer
northern hemisphere
Equator
Tropic of Capricorn
southern hemisphere
Antarctic circle

Topic 2: Introduction to global climate

Climate zones

tropical A
arid (dry) B
temperate C
continental D
polar E

Climate zones are areas in the world that have a similar climate. There are several major climate zones in the world, and the main six are shown on this map. The climate zones generally group together horizontally, following lines of latitude.

Biomes

tundra
taiga
temperate forest
tropical rainforest
savanna grasslands
Mediterranean
hot deserts
cold deserts
alpine shrublands

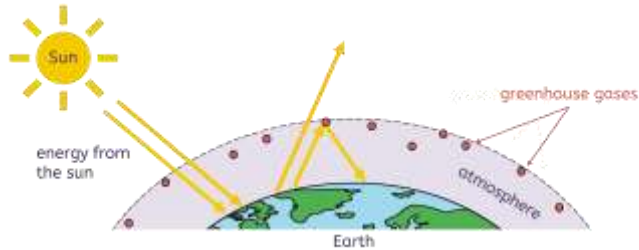Biomes are areas of the world that, because of similar climates, have similar landscapes and wildlife. Biomes are shown on the map.

- **greenhouse gases** – gases such as carbon dioxide that trap heat within the atmosphere
- **the greenhouse effect** – the natural warming of the planet to its habitable temperature, caused by trapping heat in the Earth's atmosphere
- **the enhanced greenhouse effect** – the unnatural warming of the Earth due to increased greenhouse gases in the atmosphere
- **global warming** – the increase of average temperatures on Earth; this happens naturally but happens faster due to the enhanced greenhouse effect
- **climate change** – the change in the Earth's long-term weather patterns, including precipitation, wind and temperature
- **fossil fuel** – a (chemical) store of energy formed over millions of years from dead plants and animals
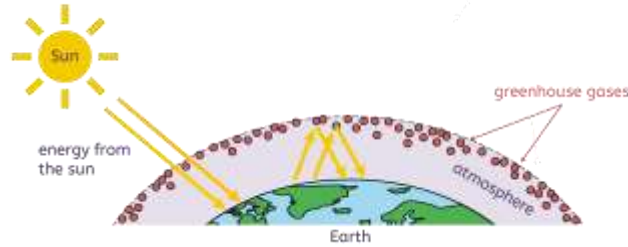
Topic 2: Introduction to global climate

Global warming

The **greenhouse effect** is the **natural process, which** has always taken place, that keeps the Earth warm. Without it, the Earth would be too cold to live on.

The light and heat energy are trapped in the atmosphere by greenhouse gases, such as carbon dioxide. This warms the Earth.

The **enhanced greenhouse effect** causes an **unnatural increase in temperature**. Human activities (such as burning fossil fuels, transport, waste, agriculture, deforestation) increase the amount of greenhouse gases in the atmosphere. The Earth warms more quickly, and global warming increases.
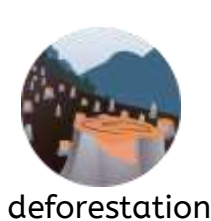
Accelerated global warming can also lead to other changes in the Earth's long-term weather patterns, such as precipitation, wind and storms. The changes to the Earth's wider climate – not just temperature – are called **climate change**.

The causes of climate change

Climate change is caused by:
- burning fossil fuels for transport and electricity generation, which releases greenhouse gases
- deforestation, which reduces the absorption of greenhouse gases
- agriculture and waste disposal, which release greenhouse gases

deforestation
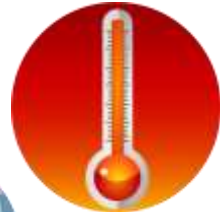
electricity generation

transport

agriculture

waste

The effects of climate change

Climate change can cause:
- more extreme weather events, such as heatwaves
- melting sea ice and ice caps
- rising sea levels and flooding of coastal areas

Topic 3: Development

Background

Across the world, the standard of living and quality of life can be very different.

A	Countries therefore have different classifications based on the quality of life within them.
B	How developed a country is can be measured in different ways.
C	Development levels can vary within and between countries. There are many reasons why some countries are more developed than others.
D,E	Countries can become more developed in many ways, including through economic growth from tourism, top-down development projects and bottom-up development projects.

A) Country classification

1	developed	(n) countries with high standards of living, advanced infrastructure and strong economies.
2	emerging	(n) countries transitioning between developing and developed, showing rapid improvements in infrastructure.
3	developing	(n) countries with lower standards of living, less advanced infrastructure and economies that are growing but not yet strong.

B) Measuring development

1	GNI per capita	(n) the average income of a country's citizens.
2	infant mortality rate	(n) the number of babies that do not survive to one year old per 1,000 births.
3	life expectancy	(n) the average number of years a person is expected to live.
4	literacy rate	(n) the percentage of people in a specific age group, typically aged 15 and above, who can read and write.
5	average years of schooling	(n) the average number of years of education that individuals aged 25 and older have completed.
6	Human Development Index (HDI)	(n) a composite measure of development that is used to categorise the development of countries using GNI per capita, life expectancy and average years of schooling.

C) Factors that hinder development

Human	Physical
uneven distribution of income	challenging relief
corruption	extreme climate
conflict	lack of natural resources
low-value goods and services for trade	landlocked
high levels of debt	tectonic hazards
poor education systems	extreme weather
poor healthcare systems	lack of water resources

D and E) Development Projects

D) Top-down project: The Grand Inga Dam DRC

Advantages	Disadvantages
It provides a reliable source of renewable energy for the DRC.	It would flood 22,000 hectares of land in the Bundi Valley.
It provides electricity for Kinshasa at a lost cost.	Natural habitats will be destroyed by the reservoir.
It produces electricity that the DRC can sell the other countries.	35,000 people would be displaced from their homes by the dam reservoir.
It produces electricity to power more coltan and copper mines.	Electricity will be sold to other countries, and many people in rural DRC will still be without electricity.

E) Bottom-up project: WECAN DRC

Advantages	Disadvantages
It protects the habitats of 100,000 species of animals and plants.	It is small scale, so it has limited reach.
It empowers indigenous women.	It does not stop illegal logging.
Women earn money from selling fruit and herbs from the trees planted.	The project currently supports only 700 women.
It reduces the impact of climate change through reforestation.	It takes a long time for the full benefits to be achieved.