

Fundamental Knowledge Map: Geography



EDALE RISE
Primary & Nursery School

Fundamental Knowledge Map: Geography

This document captures the fundamental knowledge, both substantive and disciplinary, taught in geography at Edale Rise. The units taught at Edale Rise explore more material than this document demonstrates; however, this document states the most fundamental knowledge a child will be able to demonstrate if they are secure in the unit taught.

The purpose of this document is to ensure that:

- A. Teachers know exactly what children should be know or be able to do by the end of the unit
- B. Teachers know what knowledge should be prioritised for retrieval within and between units and years
- C. Teachers know what prior-knowledge should be assessed for before proceeding with subsequent units
- D. Leaders know exactly what knowledge children should be able to articulate during monitoring exercises

For more information regarding the content covered in each unit, please see the [long-term plan](#) available on the school website or request a meeting with a member of the curriculum team.

Understanding the World - The Natural World: F2

The Weather and Me	My Environment	My Big World
Substantive Knowledge:	Substantive Knowledge:	Substantive Knowledge:
<p>What are the main types of weather?</p> <ul style="list-style-type: none"> • I know the weather can change • I know some types of weather and can name them; sunshine, rain, wind, snow, thunderstorms and fog. <p>What is a season and what causes the seasons to change?</p> <ul style="list-style-type: none"> • I can talk about changes we see in different seasons such as weather getting warmer or colder and leaves falling off the trees, new flowers growing. <p>How to humans prepare for the weather?</p> <ul style="list-style-type: none"> • I know how to stay safe in different weathers e.g sun cream, sun hat, gloves, scarf 	<p>What is our environment?</p> <ul style="list-style-type: none"> • I know the environment is the world around me and includes my house, school and Sneinton <p>How can we look after our environment?</p> <ul style="list-style-type: none"> • I know some ways I can help the environment such as recycling, turning off electrical items, saving water <p>What might happen if we don't look after the environment?</p> <ul style="list-style-type: none"> • I know that plants and animals may be harmed if we don't look after our environment • I know that if we don't recycle and not drop litter, my town won't be clean and tidy to live in. 	<p>What is in our world?</p> <ul style="list-style-type: none"> • I know the world is made up of many countries and seas • I can begin to explore maps and globes and identify land and water <p>Are the countries all the same?</p> <ul style="list-style-type: none"> • I can talk about how some countries are hot, some are cold <p>Who lives here?</p> <ul style="list-style-type: none"> • I can identify some animals that live in warmer weather and some animals that live in colder weather
Disciplinary Knowledge	Disciplinary Knowledge	Disciplinary Knowledge
<ul style="list-style-type: none"> • I can make observations of the weather • I can talk about how different weathers affect human daily activities 	<ul style="list-style-type: none"> • I can talk about the ways in which humans can impact their environment 	<ul style="list-style-type: none"> • I can explore maps and globes to talk about my world

Geography: Y1

Weather and Seasons	My Country	Where I live
Substantive Knowledge:	Substantive Knowledge:	Substantive Knowledge:
<p>What are the main types of weather?</p> <ul style="list-style-type: none"> • I know the main different types of weather: sunshine, wind, rain, snow, thunderstorms, and fog • I know the main weather symbols: sunshine, cloudy, wind, rain and snow • I know that the weather can change across a day <p>What is a season and what causes the seasons to change?</p> <ul style="list-style-type: none"> • I know that the Earth goes around the sun • I know the seasons and the typical weather associated with each season <p>How to humans prepare for the weather?</p> <ul style="list-style-type: none"> • I know some different ways humans prepare for the weather • I know how to record the weather over a week 	<p>Where are the continents and oceans?</p> <ul style="list-style-type: none"> • I know 3 of the continents of the world <p>What is the United Kingdom?</p> <ul style="list-style-type: none"> • I know the 4 countries of the United Kingdom and can label these on a map <p>What are the capital cities and major landmarks of the United Kingdom?</p> <ul style="list-style-type: none"> • I know the that London is the capital city of England 	<p>What is a map and how do people use them?</p> <ul style="list-style-type: none"> • I know what north, east, south and west mean <p>What habitats are there near my school?</p> <ul style="list-style-type: none"> • I can name and describe some of the habitats around school • I know some of the different places humans work and live in the local area • I understand the terms: town, city, factory, house, shop and office. • I understand the terms: hill, soil and river
Disciplinary Knowledge	Disciplinary Knowledge	Disciplinary Knowledge
<ul style="list-style-type: none"> • I know the main weather symbols: sunshine, cloudy, wind, rain and snow • I can describe how weather can impact humans • I can collect and record information about the weather over a given time period 	<ul style="list-style-type: none"> • I can label 3 continents of a map of the world • I know the 3 countries of the United Kingdom and can label these on a map • I am beginning to understand scale that England is a country and is part of the United Kingdom (scale) 	<ul style="list-style-type: none"> • I can use the terms north, east, south and west to say where things are on a simple map of my school • I can identify some human and physical features of Edale Rise and Sneinton

Geography: Y2

Forests	Hot and Cold Place	United Kingdom
Substantive Knowledge:	Substantive Knowledge:	Substantive Knowledge:
<p>What is a forest?</p> <ul style="list-style-type: none"> I can explain why forests are important in terms of oxygen and animal life. <p>What lives in forests?</p> <ul style="list-style-type: none"> I know that there are different layers of the forest <p>What are the different types of forests? Where on Earth are they?</p> <ul style="list-style-type: none"> I know that there are different types of forests (rainforest, temperate and boreal). I know rainforests are usually found close to the equator <p>Why are forests so important?</p> <ul style="list-style-type: none"> I know why the forests are so important in terms of wildlife, timber, oxygen and food and medicine 	<p>Where are the world's continents and major oceans?</p> <ul style="list-style-type: none"> I can name all 7 continents I can name the 5 major oceans <p>What is life like in the polar regions?</p> <ul style="list-style-type: none"> know that the Arctic and Antarctic are the Earth's coldest zones and can locate them on a map <p>What is life like in a desert?</p> <ul style="list-style-type: none"> I know that some deserts are very hot and some are very cold. They all have strong sunshine, wind and very little water. I know that the animals and plants that do live in the desert have special ways of coping with the shortage of water 	<p>What is the United Kingdom?</p> <ul style="list-style-type: none"> I can identify the countries of the United Kingdom on a map and their capital cities <p>What is the difference between rural and urban?</p> <ul style="list-style-type: none"> I know that 'rural' means the countryside with open land. This could include forests, open grasslands, deserts and farmland I know that 'urban' means towns or cities <p>How is land used across the U.K?</p> <ul style="list-style-type: none"> I can discuss comparisons between how land is used in the city and how land is used in the countryside
Disciplinary Knowledge	Disciplinary Knowledge	Disciplinary Knowledge
<ul style="list-style-type: none"> I can locate the equator on a map of the world I understand how humans use forests I understand the impact humans have on forests 	<ul style="list-style-type: none"> I can label the 7 continents and 5 major oceans on a map I can compare the physical geography of hot and cold places on Earth 	<ul style="list-style-type: none"> I can label a blank map of the United Kingdom, labelling Scotland, England, Wales and Northern Ireland I describe how life for humans is different in rural and urban areas

Geography: Y3

Oceans and Seas	Volcanoes and Earthquakes
<i>Substantive Knowledge:</i>	<i>Substantive Knowledge:</i>
<p>What are oceans and seas?</p> <ul style="list-style-type: none"> • I know that oceans cover a lot of our planet and that some of the world's largest animals live there <p>Where are the world's major oceans and seas and what are they called?</p> <ul style="list-style-type: none"> • I know the names of the world's 5 major oceans and some seas and I can label these on a map <p>What are the different parts of an ocean?</p> <ul style="list-style-type: none"> • I know the characteristics of the different zones of the ocean <p>What are the different parts of an ocean?</p> <ul style="list-style-type: none"> • I know that plastic pollution caused by humans is having a negative impact on our oceans • I know some of the things people can do to help reduce plastic pollution in our oceans 	<p>What is the Earth made of?</p> <ul style="list-style-type: none"> • I know the Earth is divided into four main layers: the crust, mantle and outer core and inner core • I know that there are 7 continents: North America, South America, Europe, Africa, Asia, Australia and Antarctica <p>'Have there always been continents?</p> <ul style="list-style-type: none"> • I know that millions of years ago, all the continents were joined in one supercontinent, Pangaea <p>What is a volcano?</p> <ul style="list-style-type: none"> • I know that a volcano is an opening in the Earth's crust <p>What is an earthquake?</p> <ul style="list-style-type: none"> • I know that an earthquake is caused when two plates get stuck and pressure that builds up is released
<i>Disciplinary Knowledge</i>	<i>Disciplinary Knowledge</i>
<ul style="list-style-type: none"> • I can label 3 of the world's 5 major oceans on a map • I can describe ways in which humans are harming our oceans • I can describe ways in which humans could help our oceans 	<ul style="list-style-type: none"> • I can label the 7 continents on a map • I am beginning to understand the concept of plate movement and how this links to earthquakes (developed in Y6)

Geography: Y4

Rivers	Climate & Climate Change	Arctic and Antarctica
Substantive Knowledge:	Substantive Knowledge:	Substantive Knowledge:
<p>How does the water cycle work? (MFE 28-29)</p> <ul style="list-style-type: none"> I can explain how the water cycle works using the terms evaporation, condensation and precipitation (rain) <p>How are rivers formed and how do they shape the land? (MFE 30-31)</p> <ul style="list-style-type: none"> I know a river forms after fresh water runs downhill from a hill or mountain and can shape the land. A V-shaped valley is an example of this <p>Why is the Amazon so useful? (CGP 28-31)</p> <ul style="list-style-type: none"> I know the Amazon River is essential to support the millions of species that live in the Amazon rainforest <p>Case Study: The River Trent</p> <ul style="list-style-type: none"> I can describe the main physical features of the Trent and its impact on humans 	<p>What is Climate?</p> <ul style="list-style-type: none"> I know that climate is the average weather for that area over time <p>What different climates are there on Earth?</p> <ul style="list-style-type: none"> I know at least 3 climates and can describe what they are like (e.g., dry, tropical and temperate) <p>What causes Climate Change?</p> <ul style="list-style-type: none"> I can suggest at least 2 factors that contribute to climate change <p>How can we Take Care of our Earth?</p> <ul style="list-style-type: none"> I can suggest at least 3 ways in which we can help prevent further climate change 	<p>What are the polar regions and where are they?</p> <ul style="list-style-type: none"> I know the Arctic is a huge frozen ocean that surrounds the North Pole and that Antarctica is a huge continent, covered in thick ice and this is where the South Pole <p>What animals live in the polar regions?</p> <ul style="list-style-type: none"> I know some animals only migrate to the Arctic during summer; I know the polar bear is perfectly adapted for the Arctic I know that all animals except the emperor penguin migrate away from Antarctica in its winter months <p>What is the future of our polar regions?</p> <ul style="list-style-type: none"> I know that burning fossil fuels causes the planet to warm and sea ice to melt which greatly affects the animals that live in the polar regions I know that humans can protect our polar regions by using renewable energy
Disciplinary Knowledge	Disciplinary Knowledge	Disciplinary Knowledge
<ul style="list-style-type: none"> I can identify the river Nile and the Amazon River on a topographical map of the world I can describe ways in which humans use rivers 	<ul style="list-style-type: none"> Using a colour-coded climate map of the Earth, I can identify at least 2 different climates without a labelled key I can describe ways in which humans cause climate change and how we can prevent it 	<ul style="list-style-type: none"> I can identify the Arctic and Antarctic on a blank map of the world I can describe ways in which humans are negatively impacting our polar regions and how we can protect our polar regions

Geography: Y5

Volcanoes & Earthquakes	Water Security	Deserts
Substantive Knowledge:	Substantive Knowledge:	Substantive Knowledge:
<p>What are the layers of the Earth?</p> <ul style="list-style-type: none"> • I know the Earth is divided into four main layers: the crust, mantle and outer core and inner core • I know the Earth's crust is split into plates which float on the mantle <p>What are the different parts of a volcano?</p> <ul style="list-style-type: none"> • I can label the magma chamber, main vent, crater and cone of a volcano <p>What happened when Vesuvius erupted?</p> <ul style="list-style-type: none"> • I know when Vesuvius erupted it destroyed the ancient Roman city of Pompeii; many people were killed <p>What causes earthquakes?</p> <ul style="list-style-type: none"> • I know that earthquakes are caused by tectonic plates moving 	<p>How does the water cycle work?</p> <ul style="list-style-type: none"> • I can explain how the water cycle works using the terms evaporation, condensation, precipitation and transpiration <p>What is water security?</p> <ul style="list-style-type: none"> • I know that because the water cycle is a closed-system, there is a finite amount of water on Earth: water cannot be made or destroyed <p>What affects water security?</p> <ul style="list-style-type: none"> • I know there are human and physical factors that affect water security. • I can explain how climate, population, poverty, and pollution all affect water security <p>What is the impact of water insecurity on a country?</p> <ul style="list-style-type: none"> • I know that water insecurity impacts food production, availability of drinking water and can cause conflict 	<p>What is a desert and where are they found?</p> <ul style="list-style-type: none"> • I understand that the shared feature of all deserts is a lack of water • I can identify major deserts and be able to articulate their location relative to the equator, tropics or north/south pole <p>What living things can be found in the desert?</p> <ul style="list-style-type: none"> • I understand that animals and plants of the desert adapt to the desert by storing water <p>How do people live in deserts?</p> <ul style="list-style-type: none"> • I understand that indigenous people are the original people of a land and that the aboriginals are Australia's indigenous tribe. • I understand that the aboriginal's deep knowledge of the land allowed these tribes to navigate the arid landscape and efficiently manage water whilst effectively hunting and gathering
Disciplinary Knowledge	Disciplinary Knowledge	Disciplinary Knowledge
<ul style="list-style-type: none"> • I know the impact the Haiti, 2010 earthquake had on the human population through exploring a case study • I can explain how earthquakes happen referring to tectonic movement 	<ul style="list-style-type: none"> • I can distinguish between human and physical factors impacting water security • I can describe how water security impacts human populations 	<ul style="list-style-type: none"> • I can read maps and globes using longitude and latitude, coordinates, and degrees. • I can describe how humans adapt to different environments

Geography: Y6

Biomes and Conservation	Climate Change	Nottingham: How places change over time
Substantive Knowledge:	Substantive Knowledge:	Substantive Knowledge:
<p>What is a biome? Why are there different types of biomes?</p> <ul style="list-style-type: none"> I know that communities of plants and animals are different as a result of their climate. These are called biomes I know 4 major biomes of Earth and their defining characteristics <p>What is an ecosystem?</p> <ul style="list-style-type: none"> I understand the term 'ecosystem', appreciating the food chains within ecosystems <p>What is preservation and conservation and how does this affect eco-systems?</p> <ul style="list-style-type: none"> I know that preservation and conservation can cause conflict between those that want to protect the land and those that want to use it e.g., poaching I understand how poaching, farming and deforestation have impacted on big cat populations around the world 	<p>What is climate and how is it different to weather?</p> <ul style="list-style-type: none"> I can articulate the distinction between weather and climate I know an area's distance from the equator is one factor that affects its climate: places closer to the equator feel more of the sun's heat because of the Earth's tilt <p>What is climate change?</p> <ul style="list-style-type: none"> I know that greenhouse gas emissions from the increased burning of fossil fuels are warming the Earth I can describe how climate change is affecting the environment and human life <p>What is renewable energy?</p> <ul style="list-style-type: none"> I understand that fossil fuels are not a sustainable energy source I know that 'renewable energy' means sources which are not limited I know the four main sources of renewable energy: 	<p>What is urbansation?</p> <ul style="list-style-type: none"> I know that people had to move to where there were factories in order to get work. This meant cities grew much bigger (e.g Nottingham). These factories were 'pull' factors. I know that urbanisation means when people move from rural areas to urban areas <p>How did Nottingham change during the Industrial Revolution?</p> <ul style="list-style-type: none"> I know that as populations of cities grew so did rates of crime I know that the living conditions for people in these areas were not good: spaces were cramped and there was no public hygiene (sewage, refuse etc.). I know the working people of Narrow Marsh, Nottingham lived in such conditions
Disciplinary Knowledge	Disciplinary Knowledge	Disciplinary Knowledge
<ul style="list-style-type: none"> I can locate the general whereabouts of key biomes in relation to the equators and tropics of cancer and Capricorn on a map 	<ul style="list-style-type: none"> I can describe the pros and cons of each renewable energy source, with reference to impact on human, animal and plant life 	<ul style="list-style-type: none"> I can discuss 'push' and 'pull' factors to describe why people move to and from places I can describe how a place changes over time and the impact of humans on place