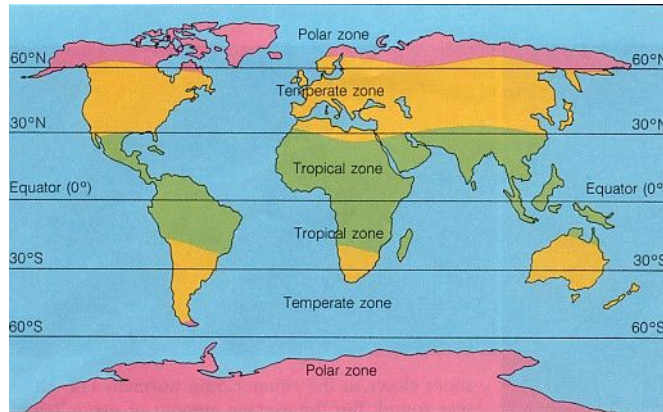




Year 4 – Autumn 2

Climate zones



SMSC Links
<p>Spiritual</p> <p>Develop a sense of fascination, curiosity and mystery when learning about the world.</p>
<p>Moral</p> <p>Children will be taught to think of others, listen well to others' points of view and try to imagine others' points of view, especially those who live in difficult circumstances.</p>
<p>Social</p> <p>Pupils will find and share stories in the news about people or animals that have survived in extreme circumstances.</p>
<p>Cultural</p> <p>Pupils will consider how communities adapt to hot or cold environments. They will investigate differences in housing, food and clothing and say why these are influenced by where they live.</p>

Trips and experiences
Celebrations
Biscuit Bake off!
British Values
<p>Democracy</p> <p>The rule of law</p> <p>Individual liberty</p> <p>Mutual respect</p> <p>Tolerance of those of different faiths</p>



Geography – What is the relationship between climate zones and biomes?

Foundations of previous learning.

KS1 – Hot and cold countries of the world and the relationship with the equator.

Climate in the UK and Italy and the relationship with the equator (Yr 3).

Overview and rationale	Skills	Knowledge
<p>In this topic, children will be investigating the relationship between climate zones and biomes. They will explore the main climate zones of the world and their key characteristics. Children will explore how climate influences the development of biomes and vegetation belts. Furthermore, they will develop an understanding of how plants and animals have adapted to their different biomes. At the end of the topic, the children will have the opportunity to investigate the effect of climate change on plants and animals.</p>	<p>Investigate patterns:</p> <ul style="list-style-type: none"> Name and locate the Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle. Describe some of the characteristics of these geographical areas. Describe geographical similarities and differences between countries. <p>Investigate places:</p> <ul style="list-style-type: none"> Ask and answer geographical questions about the physical and human characteristics of a location. Explain own views about locations, giving reasons. Use maps, atlases, globes and digital/computer mapping to locate countries and describe features. Read information from graphs and tables. 	<ul style="list-style-type: none"> Weather is something that changes daily, but climate is the average daily weather for an extended period of time at a certain location. Climate zones are areas of the world with similar climates. The main climate zones are equatorial, tropical, desert, temperate and polar. A biome is a large region of the world that has a similar climate, with similar vegetation and animals. The sun's heat is most concentrated by the equator, which means it is very hot and wet. The main biomes are: rainforests, savannah, desert, deciduous forest and tundra.
National curriculum coverage	Assessment Tasks	
<p>Describe and understand key aspects of: physical geography, including: climate zones, vegetation belts and biomes. Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</p>	<p>1 – Investigate patterns: Identify and describe the main climate zones of the world.</p> <p>2 – Investigate patterns: Describe how climate, plants and animals are connected.</p> <p>3- Investigate places: Describe the effect of climate change on plants and animals in a particular biome.</p>	
Sequenced Learning activities	Vocabulary	Big Ideas
<ol style="list-style-type: none"> To understand what and where the world's main climate zones are. To read information from climate graphs and identify patterns. & 4. To investigate the different biomes of the world. To understand how climates, plants and animals are connected. To investigate the effect of climate change on plants and animals in a biome. 	<p>Weather, climate, climate zones, biomes, equator, Tropics of Cancer and Capricorn, Arctic and Antarctic circles, rainforest, savannah, desert, deciduous forest, tundra.</p>	<p>Comparison – What are the similarities and differences between the different climate zones and biomes of the world?</p> <p>Significance – What is the significance of the equator?</p> <p>Nature – How are climates, plants and animals connected?</p> <p>Place – Where do we live? What climate zone are we in?</p>
Curriculum drivers		
<p>Emotional Intelligence - Develop empathy when exploring climate change. Ask the children to think about and label the emotions they feel when they see biomes being destroyed. What small changes can we make? How do these changes affect the plants and animals that live there?</p>	<p>Aspirations and possibilities for all – Introduce children to the role of meteorologists. Why is this an important job? What skills would you need to have?</p>	<p>Oracy - Children develop and deepen their subject knowledge and understanding through talk in the classroom. This is planned, designed, modelled, scaffolded and structured to enable them to learn the skills needed to talk effectively.</p>

Design and Technology – cooking

Foundations of previous learning:

Children have previously made pizzas in Year 3. They know some ways to prepare ingredients safely and hygienically. • Have some basic knowledge and understanding about healthy eating and The eatwell plate.
• Have used some equipment and utensils and prepared and combined ingredients to make a product.

Overview and rationale	Skills	Knowledge
<p>Bake off! In this topic, the children will continue to develop their understanding of a healthy and varied diet. They will have a better understanding of where food comes from and will be able to analyse a range of foods. The children will have an understanding of a balanced diet and will be able to make healthy choices based on this knowledge. Children will have the chance to explore different biscuits, including their flavours, textures and appearances. They will find out which biscuits are most and least popular, as well as design, make and evaluate their own yoghurt and banana biscuits.</p>	<ul style="list-style-type: none"> • Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The eatwell plate. • Know that to be active and healthy, food and drink are needed to provide energy for the body. • Prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source (controlling the temperature of the oven or hob, if cooking). • Use appropriate utensils. • Use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. • Follow a recipe. • Measure ingredients to the nearest gram accurately. • Demonstrate hygienic food preparation and storage. • Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world. 	<ul style="list-style-type: none"> • The Eatwell Guide shows how much of what we eat overall should come from each food group to achieve a healthy, balanced diet. • Eating a healthy, balanced diet is an important part of maintaining good health, and can help you feel your best. • The food groups are: Fruit and vegetables, carbohydrates, dairy and proteins. • We should eat foods high in fat, salt and sugar less often and in small amounts • Our food is caught, reared or farmed. • Biscuits come in many forms eg sweet and savoury, with a variety of shapes, textures and finishes. • 'Creaming' means combining sugar with a solid fat, such as butter or margarine. • Understand basic food safety rules.
National curriculum coverage	Assessment opportunities	
<ul style="list-style-type: none"> - Understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques - Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. 	<ol style="list-style-type: none"> 1. Investigate: Create a sensory evaluation and compare a Variety of biscuits. 2. Design: Using annotated sketches children to develop and communicate their ideas. 3. Make and evaluate: Make a biscuit and fulfil design specifications. Evaluate final product. 	
Sequenced Learning activities	Vocabulary	Big Ideas
<ol style="list-style-type: none"> 1. Investigate what makes a healthy and balanced diet. 2. To investigate and compare a variety of biscuits. 3. Focus practical tasks: Demonstrate how to measure out, cut, shape and combine. To handle food safely and hygienically. 4. To design for a particular purpose. 5 & 6. Make a biscuit and fulfil design specifications. Evaluate final product. 	<p>Taste, texture, biscuits, brand, flavour, flour, cream, sugar, eat well plate, fats, fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy</p>	<p style="text-align: center;"><i>Significance, creativity, investigation, processes and materials runs throughout all D&T units.</i></p> <p>Comparison What are the similarities and differences between different biscuits? Which one is your favourite?</p> <p>Significance – Who is Nadiya Hussain? What can we learn from her?</p>
Curriculum drivers		
<p>Emotional Intelligence - Why is eating a varied diet important? How does it make us feel?</p>	<p>Aspirations and possibilities for all – Allow the children time to investigate who Nadiya Hussain is and why she is famous.</p>	<p>Oracy - Children develop and deepen their subject knowledge and understanding through talk in the classroom. This is planned, designed, modelled, scaffolded and structured to enable them to learn the skills needed to talk effectively.</p>

	Computing – How the internet works?	Music – Ukulele
Overview and connections	In this topic, children learn what the Internet is and how it works. Acting out different processes, children gain a deeper understanding of how data is transferred and how this enables us to view and interact with different websites.	<p style="text-align: center;">Enfield Music service Ukulele class lessons – 45 minutes led by EMS specialist</p>
Key Knowledge and assessment	<ul style="list-style-type: none"> • Internet stands for Interconnected Network, which is joining of lots of networks together to share information and resources on a large scale. • The Internet is a network of networks via wires under the ground and sea. • All the devices around school are connected to each other. • The Internet was invented in 1969 and the World Wide Web (websites) wasn't invented until the 1990s. • The early Internet used telephone lines to connect different countries together. • Traceroute is a diagnostic tool used to track the pathway taken by a packet on an IP network from source to destination and the time taken for each jump that the packet makes. • Websites that are accessed more regularly should be quicker to be retrieved as the routers are more regularly asked where it is. • Websites that have a .co.uk may be hosted elsewhere (in the USA for example), so it doesn't immediately make them close to UK users. 	
Key Skills and assessment	<ul style="list-style-type: none"> • Learning about the purpose of routers. • Consolidating understanding of the key components of a network • Understanding that websites & videos are files that are shared from one computer to another • Learning about the role of packets • Understanding that computer networks provide multiple services, such as the World Wide Web, and opportunities for communication and collaboration • Understanding that websites can be altered by exploring the code beneath the site. • Recognising what appropriate behaviour is when collaborating with others online. • Recognising that information on the Internet might not be true or correct and that some sources are more trustworthy than others. 	
Key Vocabulary	Laptops, tablets, desktop computers, printers, photocopiers, server, network switch, wireless access points, submarine cables, Internet	
Big Ideas	Humankind – How do we work collaboratively with others? How does the internet connect us? How should we behave online?	<i>Creativity is evident throughout all music lessons</i>
Curriculum Drivers	<p>Emotional Intelligence - What does kind behaviour look like online? How do you feel when people are unkind? How do we manage this?</p> <p>Aspiration and possibilities for all – Explore the different jobs involved when analysing how the internet works.</p>	<p>Emotional Intelligence - How does this song make you feel? Why? How does music make you feel? How does it help us?</p> <p>Aspiration and possibilities for all – Explore with the children famous musicians and expose the children to famous orchestras from around the world.</p>
	Oracy: Children develop and deepen their subject knowledge and understanding through talk in the classroom. This is planned, designed, modelled, scaffolded and structured to enable them to learn the skills needed to talk effectively.	

	PSHE – Being Me! What is conflict?	RE – The Qur’an and the Prophet Mohamed.
Overview and connections	In this topic children begin to examine what conflict is and why it arises. They will build upon the learning in Year 3 where they began to identify and describe how they can solve problems. They will explore how conflict makes them feel, how they can voice their views respectfully and how best they can manage conflict. Children will know where to look for help, who to ask, how to do this and what will happen if they do ask for help. This learning will support children when they examine what a respectful relationship is in Year 5.	In this topic, children make connections between the Muslim belief in Allah and the part humans are required to play in protecting the pattern, order and diversity of the world Allah has created. They will make connections between the revelation of the Qur’an and the Prophet Muhammad as the messenger of Allah. The children will have the opportunity to compare their own experience of quietness for reflection with those of religious people such as Muhammad.
Key Knowledge/ skills and assessment	<ul style="list-style-type: none"> Conflict is when people have a serious disagreement. It can last for a long time and be difficult to solve. Conflict can be caused by words, gestures, symbols or actions. Conflicts can arise for many different reasons as we all have our own opinions. We all come to conflict with people, so learning how to resolve conflict is an important skill in life. We can have conflict with the people that we love and care for. During a conflict, there will a range of emotions we experience. These will change over time and can be experienced at different levels of intensity. Conflict is normal, but how we deal with conflict determines whether it is a negative or positive experience. Communication is important to manage conflicts between our family and friends. Communication also includes our body language. Being courteous and polite is important when communicating our thoughts and ideas especially when they are different to others. There are a number of ways that conflict can be lessened, avoided or resolved. Sometimes we may need help after a conflict. It is important to know where, how, why and when to seek help. 	<ul style="list-style-type: none"> Muslims use Islamic patterns to decorate their mosques and important buildings. Muslims believe that all of the world was made by Allah (God) and Allah gives everything a purpose and a pattern. Muslims try to live according to Allah’s purpose and pattern. Muslims believe that Allah has given humans responsibility for caring for the world. The Qur’an is a sacred text for Muslims. <p>Learning about religion:</p> <ul style="list-style-type: none"> Refer to religious figures and holy books to explain answers. Retell religious stories in my own words. Identify how religion and belief is expressed in different ways. Describe religious buildings and explain how they are used. <p>Learning from religion:</p> <ul style="list-style-type: none"> Describe how some of the values held by communities or individuals affect behaviour and actions. Show an understanding that personal experiences and feelings influence attitudes and actions.
Key Vocabulary	Conflict, disagreement, opinion, communication, advice, feelings, negotiates, mediates, resolution, peer mediator.	Islam, Muslim, Allah, pattern, order, diversity, Qur’an, Prophet Muhammad, reflection, mosque
Big Ideas	<p>Humankind is evident throughout all PSHE topics</p> <p>Change – How do your feelings change? Why is this?</p> <p>Place – Where can we go when we are upset or worried? Who can we approach?</p>	<p>Humankind is evident throughout all RE topics</p> <p>Comparison –How do your own values and rules for living compare? Reflect on similarities and differences between the mosque and other places of worship the children may have knowledge of.</p> <p>Significance – Why is the Prophet Muhammad important to Muslims?</p>
Curriculum Drivers	<p>Emotional Intelligence –This unit aims to give pupils a vocabulary for talking about and identifying feelings and emotions especially during a heightened event i.e. conflict.</p> <p>Aspiration and possibilities for all – Explore the role of a peer mediator.</p>	<p>Emotional Intelligence - Experience a time of stillness and reflection and understand how this can help us when we feel over whelmed with our feelings and emotions.</p> <p>Aspiration and possibilities for all – What values do we need to be successful?</p>
	Oracy: Children develop and deepen their subject knowledge and understanding through talk in the classroom. This is planned, designed, modelled, scaffolded and structured to enable them to learn the skills needed to talk effectively.	