Ellison Primary Academy

Medium Term Plan/ Knowledge Organiser – Habitats (Year 2)

I. Unit Title: Why can't tigers and polar bears live in the same habitat and how have they adapted to ensure their survival?

Intent (II. Unit Overview):
Why can't all animals live in the same habitat? What adaptations have they had to make to ensure survival and the continuation of their species? How does the location of their habitat and the climate have an effect on how they have adapted and the environment in which they live? In this unit our Science learning will focus on these elements: Year Two will become familiar with different types of animals, humans and the life processes they share building on from their Year One learning of being able to identify and name animals and investigating the basic needs these animals need to survive as well as how they need to adapt to survive in their given environment. They will use the working scientifically skills of identifying and classifying and through fair testing, pattern seeking and research. In this unit our Geographical learning will focus on these elements: After being introduced to comparing in year 1 the children will continue to compare various countries in relation to the habitats of animals so will look at the differing environments. They will look beyond the human features that were the main focus of year 1 and look closely at the physical features which define each country. This will also be built upon in the fieldwork that is conducted locally to look at environment, providing a basis for the more detailed fieldwork they will conduct in key stage 2. In this unit our Art learning will focus on these elements: Within Year 1 the children were exposed to the classic, regal, elegant design of Wedgewood. Building upon their prior ceramicist knowledge, the children in Year 2 will study the creative and alternative style of Clarice Cliff. Her colourful, hand painted and unique style was admired to be the most influential ceramics of the 20th century. The children will explore **sculpture and shape** when creating a piece influenced by the artist. The children will then gain a wealth of hand painted techniques when adding an **'art deco'** style to their clay created design. How did a woman succeed in a time period when men were considered to be the superior sex?

2. Conceptual Lens

Main Concepts:	Secondary Concepts:
Variation (S) Adaptation (S) • Environment (G) • Place (G)	Processes. (S) Cause and Effect(S) Form (A) Shape (A) Significance (H) Continuity and Change (H)

3. Web Strands

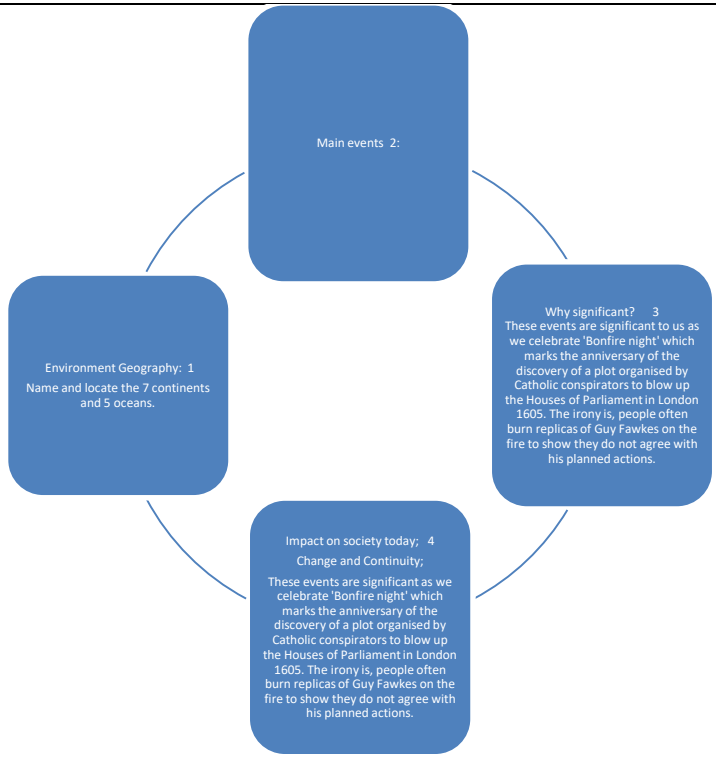
Science Geography History	Art

4. Unit Web

Include major headings in a learning sequence.

Key Strands:

- Environment
- Place
- Variation
- Adaptation



7. What we would like children to know Include: Describe significant person from the past: Clarice Cliff and the main events of her life. (H);	5. What we would like children to understand (generalisations) Take this column from the History progression map (column 5). Copy and paste the statements over.	8. What we would like children to be able to do (taken from Milestones, National Curriculum, and Chris Quigley Characteristics) Take this column from the History progression map (column 8). Copy and paste the statements over.
• <u>Significance</u> • Children will be able to describe significant people from the past. • They will explain how they have contributed to their lives now. • Why significant? • Clarice Cliff was a very famous designer of dishes and decorative household items from the early part of the 20th century. She came from a working-class family; her parents both worked in the pottery factories that were all around her hometown of Tunstall, Stoke-on-Trent, England. In 1927 Clarice was allowed to decorate some pottery with her own freehand patterns. She developed simple patterns of triangles, in a style that she called 'Bizarre`. It featured bright colors and modern shapes. Millions of pieces of pottery decorated in her first popular design, called ''Bizarre,'' were sold as they were not expensive so everyone was able to afford them. Clarice Cliff is remembered	<u>Significance.</u> **Children understand:** Children will be able to describe significant people from the past. They will explain how they have contributed to their lives now. Prior learning: This learning links to previous learning in Year 1 when children studied a significant historical figure; Josiah Wedgewood. Both Cliff and Wedgewood are local figures of interest however they had contrasting lives; one was a male potter from the industrial revolution and the other a female potter whose popularity rose in the 1950s. Children will compare the lives and recognise their impact on the local pottery industry and beyond. Children will also begin to recognise the significance of gender upon people's lives in the past .Future learning: Children will learn about Shakespeare and how he influenced other aspects of cultural life.	<u>Significance.</u> E.g. Use sources of evidence to deduce information about the past; Take this learning from the history progression map – column 8 (the previous year group and following year group). **Children will be able to:** • Recount changes that have occurred in their own lives. • Suggest future changes could happen / are likely to happen in their own life • Describe changes that have happened in their school locality. • Explain, list, describe. • Explain that people who are older will have seen more changes

as one of the most influential Art Deco designers. She succeeded in a male dominated industry and society. • Clarice Cliff born on January 20th 1899 in Tunstall, Stoke-on-Trent • Clarice started work at the age of 13 in 'The Potteries' • Moved to the AJ Wilkinson's pottery factory in 1916. • Clarice given her own studio. The famous 'Bizarre' wares launched 1927. • The factory continues to produce pottery bearing Clarice's name until 1964 • The first Clarice Cliff exhibition takes place at Brighton in 1972 • Clarice Cliff dies suddenly at Chetwynd House on 23rd October 1972.		Prior learning: Whilst studying 'Wolstanton;' a topic of our local area in Autumn 1 Year 1, Children have begun to recount changes that have occurred in their own lives. Similarly, they have had to suggest a range of future changes that could happen / are likely to happen in their own life from this. In order to help with this, they were asked to describe changes that have happened in their school locality; explaining, listing and describing in order to do this. Finally, they had to explain that people who are older will have seen more changes. These skills will all be built upon and developed this throughout this current unit. Children have learned about the events of the Gunpowder Plot and the timeline associated with this. Future learning: In the next academic year children will learn to describe changes that have happened in the locality of the school throughout history (school building, layout, lessons, town plans, buildings, expectations of children, employment). They will discover the types of questions that are needed to learn from changes that have happened answer and devise historically valid questions about change. Finally, they will be asked to suggest changes that happen linked to; technology, transport links, buildings, land use, conflict (see conflict concept)
<u>Continuity and Change:</u> • E.g. What has remained continuous and what has changed in the history of the locality of the school	<u>Continuity and Change:</u> **Children will understand:**	<u>Continuity and Change:</u> **Children will be able to:**

• How there are period in history of rapid change and times of little change. **Children will know:** Prior learning: Children studied local area of Wolstanton and the continuity and change of the area. Future learning: In Year 3 they will study Anglo Saxons and Vikings to 1066.	• that over time some things change and some things stay the same • That changes can happened in different areas of their life e.g. family, friends, technology, buildings, surrounding areas etc. • That 'change' refers to something that is obviously different from what occurred previously. Prior learning: In Year 1 children studied local area of Wolstanton in relation to how some things have changed and others stayed the same. They will use their skills to look at London and the way of life in the 1600s and how certain things have stayed the same whilst others have changed. Future learning: Future learning: Children will learn about the Anglo Saxons and Vikings in Year 4 linked with the concept of continuity and change.	• Recount changes that have occurred in their own lives. • suggest future changes could happen / are likely to happen in their own life • Describe changes that have happened in their school locality. • Explain, list, describe. • Explain that people who are older will have seen more changes • over time some things change and some things stay the same • changes can happened in different areas of their life e.g. family, friends, technology, buildings, surrounding areas etc. • 'change' refers to something that is obviously different from what occurred previously. Prior learning: In Year 1 children studied local area of Wolstanton in relation to how some things have changed and others stayed the same. They will use their skills to look at London and the way of life in the 1600s and how certain things have stayed the same whilst others have changed Future learning: Future learning: Children will learn about the Anglo Saxons and Vikings in Year 4 linked with the concept of continuity and change.

Place **Children will know:** Equator, names of all seven continents and countries on World map. Prior learning: Children should be able to locate London on a map having studied capital cities of UK in Year 1. Future learning: Children will learn about Anglo Saxons and Scots with links to UK mapping in Year 3.	Place Children will understand: Locational knowledge name and locate the world's seven continents and five oceans Place knowledge understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country Human and physical geography identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles. use basic geographical vocabulary to refer to key physical and human features, Geographical skills and fieldwork use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the	Place **Children will be able to:** • Name and locate the world's seven continents and five oceans • Understand geographical similarities and differences through studying the human and physical geography of Stoke on Trent, and of a small area in the Artic. • Identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Pole • use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage Prior learning: In Year 1 children studied capital cities of the UK so will have some existing knowledge of London and where it is in the UK. Future learning: Children will understand how the Anglo Saxons and Scots links to UK mapping in Year 3.

	countries, continents and oceans studied at this key stage Prior learning: In Year 1 children studied Africa and compared physical and human features of UK and Africa. In the term before this they also studied capital cities of the UK so will have some existing knowledge of London and where it is in the UK. Future learning: Children will understand how the Anglo Saxons and Scots links to UK mapping in Year 3.	

Key Learning	
Generalisations	Guiding Questions: F = Factual(approx. 4); C = Conceptual (approx. 3); D = Debatable (approx. 1 or 2)
Variation: The presence of differences between living things of the same species is called variation. Variation between different species is usually greater than the variation within a species. Some variation is passed on from parents to offspring, via genes, during reproduction. This is inherited variation. Some variation is the result of differences in the	• Can a polar bear live in the jungle? Why not? (F) • How does the environment affect how a species survives? (F) • Do all animals look the same? • Can different diets affect the habitats of animals? (F) • Are all animals the same? (Reptiles, mammals…) (C) • How does the environment an animal lives in cause it to change? C)

surroundings, or what an individual does. This is called environmental variation. It is important for our children to understand what this is as variation helps a species to survive, by causing individuals of a species to be genetically and physically different. If all the individuals of a species were genetically identical they would be vulnerable to the same diseases. If this were the case a single disease could wipe out an entire species!	• Is it ok for humans to change the environment to suit their own needs? (D) • Is the pollution that humans cause that affects the environment necessary? (D)
Adaptation Every animal or plant on Earth has adaptations, or specific characteristics that help it stay alive in its habitat. Examples of adaptations are fur, feather and fat (to help animals keep warm in cold habitats), long legs (to help animals escape from their predators) or camouflage (to help animals hide from their predators). We encourage our children to know the importance of adaptation because it is essential for the survival of living organisms. As the environment changes, the animals that cannot adapt die out. Our planet at the moment is undergoing worrying changes due to climate change as the Earth has warmed by 1 degrees. As temperatures rise, some areas will get wetter and lots of animals (and humans!) could find they're not able to adapt to their changing climate. This could result in extinction for many types of animals or plants which our children will inherit, therefore it is a very important concept to understand.	• How have animals adapted to suit their environment? (F) • Do animals look the same? Why not? • How do different environments cause adaptations in animals? (F) • Why do animals have to adapt? (C) • How do animals adapt to their habitat to survive? (C) • Do all animals adapt in the same way even in the same environments? (C) • If humans keep changing different environments due to climate change will all animals be able to survive? (D) • What responsibilities to humans have to the survival of all living creatures on Earth? (D) Can we reverse the effects of climate change? (D)
Place Place as a concept develops understanding of the physical and human characteristics of places.	• What is this place like? (F) • How is it different to other places?

Understanding a place relates to the opinion and meaning that people attach to a location. We may distinguish the importance of the place as a home, but the sense of place is much greater for those living there because of their attachment and experience of that place. As a concept it examines the uniqueness of a space and questions what is specific about this area. Place scrutinises the diversity, sustainability and intangibles of an area although these are often personal and subjective	• How do seasons affect the weather in different parts of the world? (F) • Is it the same as where I live? (F) • What is an ocean and what are the names of these and where are they in the world? (F) • Is the weather the same all around the world? • What makes a place a home for animals? (C) • Can humans change a place for the better? (D) • Can humans change the weather? (D) • Are all places the same? (D)
Environment. The concept of environment ponders about the natural world and how people effect the world and have the ability to change it. The environment maintains and enhances life. The concept will develop an understanding of the natural world in relation to change, systems, biodiversity, living and non-living elements, interconnections, sustainability and various processes.	• What is an environment? (F) • How does an environment maintain and sustain life? (F) • See Science questions above linked to environment.

9. Assessment – Exit Task:

What, Why and How?

Non chronological report on how animals adapt to their habitat. .

Exit task question **Why can't tigers and polar bears live in the same habitat and how have they adapted to ensure their survival?**

Use the bullet points below to ensure your exit task allows children to demonstrate;

Expected evidence:

Children can apply their knowledge;

- Knowledge is explicit and connected;
- Drawn from long-term memory, freeing working memory to consider application;
- Procedures becoming automatic;
- Sees underlying concepts between familiar contexts;
- New information is linked to prior knowledge. Schemas are strong;
- Combines searching for problem solutions with means-end analysis;
- Uses models effectively.

Greater Depth evidence:

- Reasoning with knowledge;
- Knowledge that is connected and inferred;
- Relies of long-term memory, freeing working memory to be inventive;
- Automatic recall of procedures;
- Uses conceptual understanding in unfamiliar situations;
- Readily assimilates new information into rapidly expanding schemas;
- Draws on a vast store of problem solutions;
- Prefers discovery approaches to learning.

Tier 2 Vocabulary

habitat, microhabitat,
environment;
seashore,
woodland,
ocean,
rainforest,
offspring,
survival

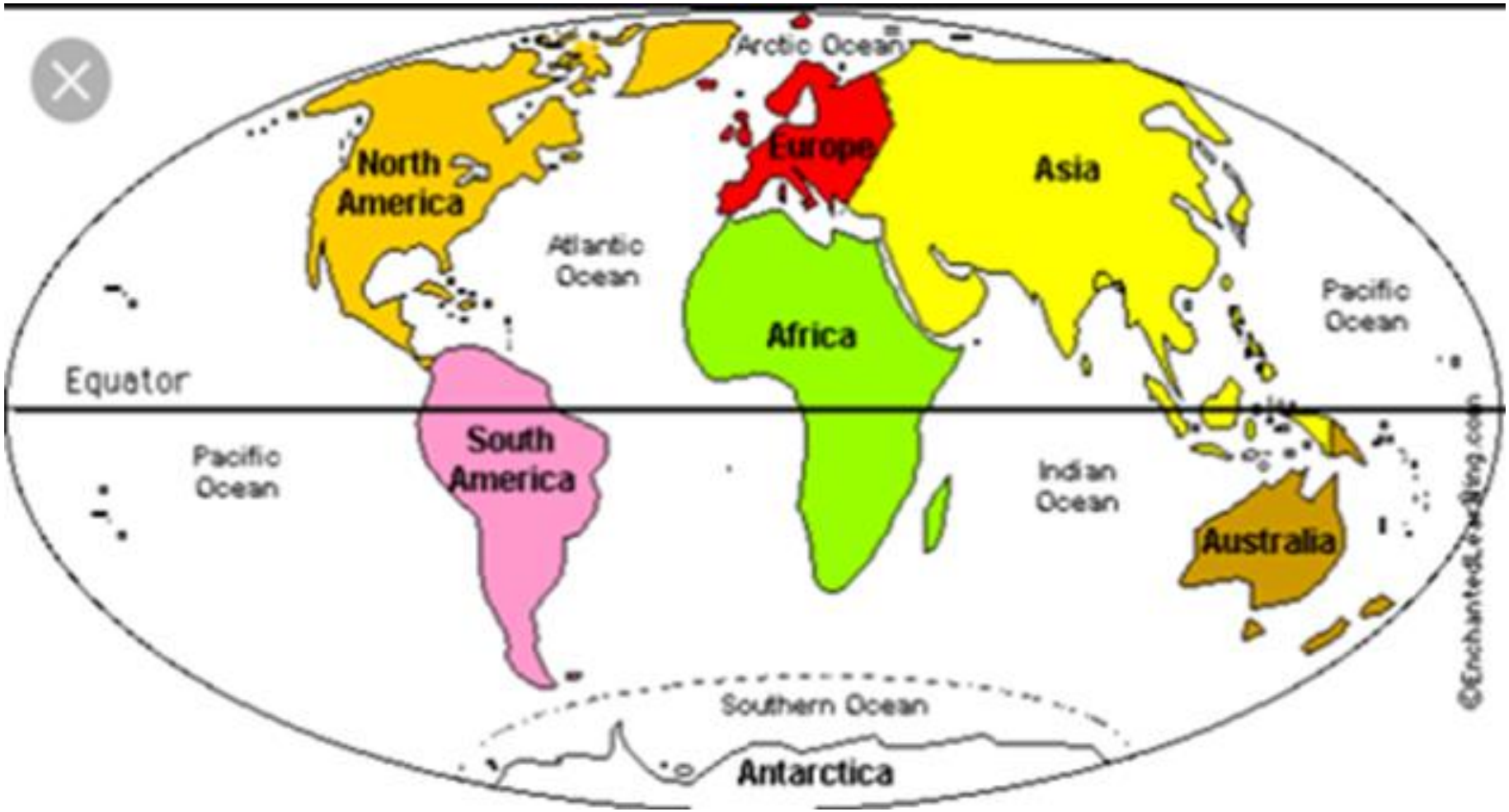
Science Tier 3

Variation Variation is the differences between individuals within a species.
Living: The term living thing refers to things that are now or once were alive.
Not living A non-living thing is anything that was never alive.
Dead No longer alive
Habitat Somewhere where a plant or animal lives.
Micro-habitat. A smaller place where plants and animals live inside a bigger area.
Minibeast Small creatures like worms, snails and insects.
Herbivore An animal that only eats plants to survive.
Carnivore An animal that eats other animals to survive.
Omnivore: An animal that can eat both plants and animals to survive.
Environment: the surroundings or conditions in which a person, animal, or plant lives or operates..
Urban Another word to describe a city or town.
Woodland: land covered with woods and forest.
Pond: A small area of water.
Coast A part of land next to the ocean.
Ocean A large area of the earth covered in salt water.
Arctic Area around the north pole
Tropical Things that happen because it's near the equator of the earth.
Desert: A very dray and sandy area of land with few or no plants.
Geography:
The seven continents: Africa, Antarctica, Asia, Australia, Europe, North America and South America.
The five oceans: Pacific Ocean, Atlantic Ocean, Indian Ocean, Southern Ocean Antarctic Ocean and Arctic Ocean
location, map, atlases, globes, seasons, weather, compass points, north, south, east, west, near, far, routes, location, grid references.

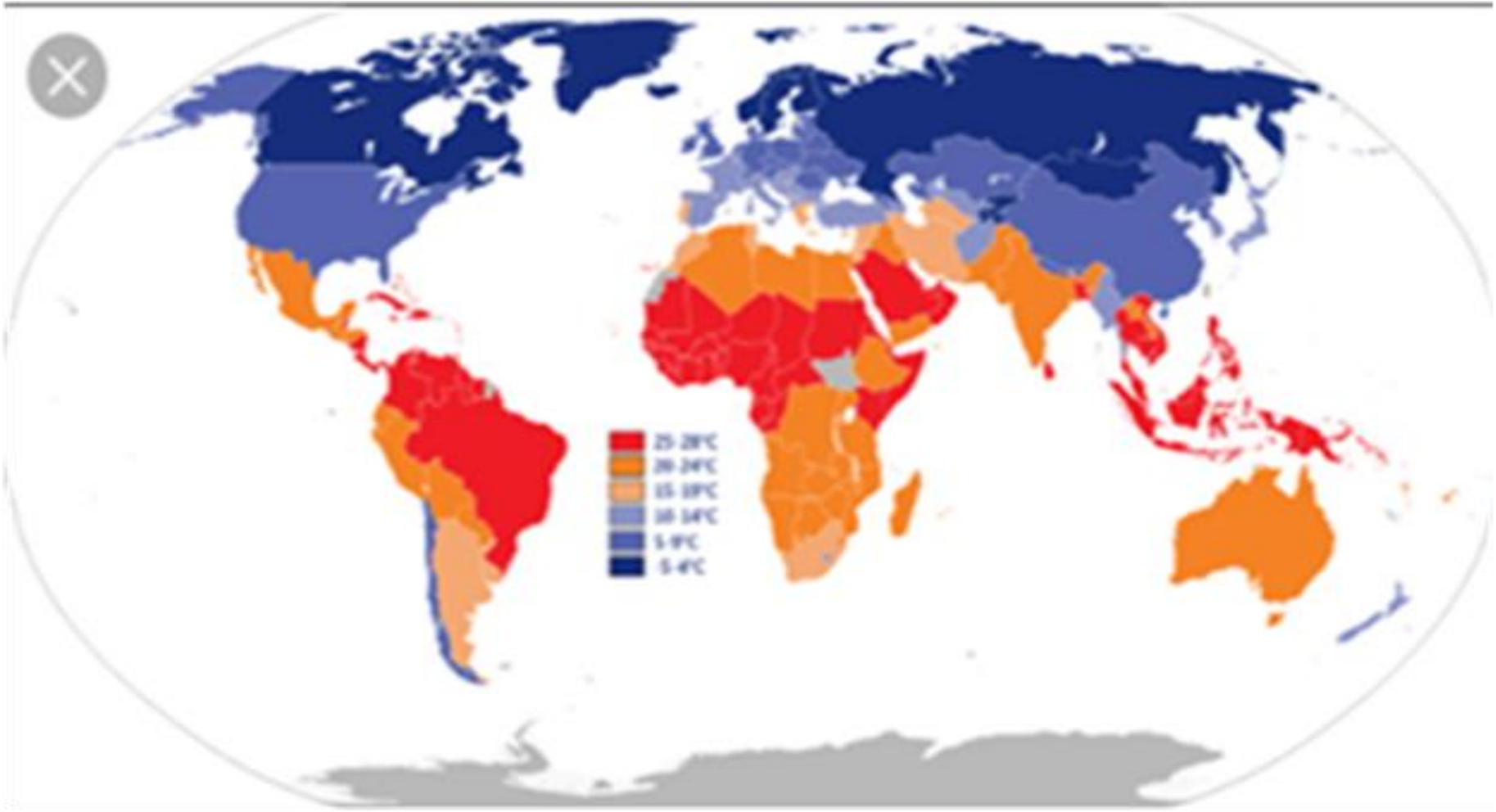
Tier 3 Vocabulary – Ensure the vocabulary links back to the main concepts and what children must know to be able to have a full understanding of the unit. Add any new vocabulary to the vocab / definition sheets.
Geography:
Continent: The name given to a group of countries that are close together.
Pacific Ocean: The largest of the world's oceans.

Atlantic ocean: The second biggest ocean in the world.
Indian ocean: The ocean to the south of India.
Southern ocean: The ocean that surrounds Antarctica.
Antarctic ocean: The sea that surrounds Antarctica, sometimes called the Southern Ocean.
Season: Each of the four parts of the year (spring, summer, autumn and winter).
Compass points: They show direction, North, East, South and West
Near: A short distance away.
Far: A big distance away.
Location: A particular place or position.
Route: The way to somewhere from a starting point.
Grid references: A map reference showing a location of something.
Weather: The state of atmosphere.

Map:



You must include a map here of the main knowledge required by the children


25-28°C
20-24°C
15-19°C
10-14°C
5-9°C
0-4°C

Timeline: Include here all of the main facts added that will link with the concepts – e.g. links to women's rights if that was a focus, dates re: evacuees when they arrived in Wolstanton etc. It should not be a cut and paste of a generic one from Twinkl.

- Clarice Cliff born on January 20th 1899 in Tunstall, Stoke-on-Trent
- Clarice started work at the age of 13 in 'The Potteries'
- Moved to the AJ Wilkinson's pottery factory in 1916.
- Clarice given her own studio. The famous 'Bizarre' wares launched 1927.
- The factory continues to produce pottery bearing Clarice's name until 1964
- The first Clarice Cliff exhibition takes place at Brighton in 1972
- Clarice Cliff dies suddenly at Chetwynd House on 23rd October 1972.

Art : Key questions.
Who was Clarice Cliff?
Why was she important to our local area?
What was she famous for?
How has she influenced art?
What media did she use?
What makes her Art unique?
How was she significant for women of that time period?