

Year 5- North America

Term:	Autumn 2	
Subject focus:	Geography and Design Technology	
Non-Fiction:	Persuasion	
Fiction:	Narrative with a Flashback	



Concepts		
Geography	Design Technology	
People and Places/Nature	Innovate/Technique/Evaluate	

Within this geography topic, children will focus on the countries which make up North America including their different climates, biomes and will use atlases to help support their learning.

Learning will then focus in on Mexico where children will do a more in-depth study, learning about the culture, the human and physical features in order to compare these with the UK. This learning will also support their understanding of the Mayans in the following term.

They will also learn a brief history of the United States of America, focusing on the land use prior to the Europeans arriving, and then how the land use changed. This geographical knowledge will be built upon in Year 6 when they learn about the Mayflower and the migration of British people to the Americas.

This topic links to previous work on continents, making links with South America and the Amazonia, and links to future learning on the Mayan Civilisation, Europe and the way Europe has affected the wider world, in addition to the Mayflower.

Within the D&T unit children learn about the work of Kaffe Fasset and use her work as inspiration for their own textile design. Building on previous sewing skills, including stitches to embellish, children will design and make a cushion cover. The children will be inspired by the Mexican tradition of the Day of the Dead, as well as doing product analysis of cushions, looking at their materials, embellishment and fastenings.

Geography

National Curriculum

Geography

- I can understand and use a widening range of geographical terms such as climate zones, biomes and vegetation belts, river, mountains, volcanos and earthquakes, and the water cycle
- I can identify the physical characteristics and key topographical features of the countries within North America
- I can understand about weather patterns around the world and relate these to climate zones
- I can explain how rivers erode, transport and deposit materials
- I can explain about the physical features of coasts and begin to understand erosion and deposition
- I can understand how humans affect the environment
- I can explain about changes to the world environment
- I can understand why people seek to manage and sustain their environment
- I can compare the physical features of regions in the UK and a region in North America, identifying similarities and differences

Design Technology

- I can use my research into existing products and my market research to inform the design of my innovative product
- I can create prototypes to show my ideas
- I can make careful and precise measurements so that joins, holes and openings are in exactly the right place
- I can produce step by step plans to guide my making, demonstrate that I can apply my knowledge of different materials, tools and techniques
- I can make detailed evaluations about existing products and my own considering the views of others to improve my work

Computing

- I can use the internet to allow me to share data with another person
- I can select appropriate software to use for a given task
- I can confidently use a range of software tools
- I understand how to choose online content for my age group
- I can use more advanced features when searching online
- I can use a range of search tools to find exactly what I am looking for

Year 5 Geography North America

Foundation subject Knowledge and skills

Where in the world?

- Identify where the continent of North America on an atlas and describe its position in relation to the other continents
- Know that North America is made up of 23 countries and across those countries there are a range of weather conditions and physical features
- Identify mountain ranges and rivers on an atlas
- An ecosystem is a system of plants and animals which are interconnected and working together and an ecosystem covering a large area of a continent is called a biome
- A biome is a natural area of plants and animals.
- The world is divided into lots of different biomes and they are all different depending on their climate
- There is no exact number when it comes to types of Biomes, but many people believe there are six main ones
- The aquatic biome is the largest biome, covering nearly 75% of our planet and can be divided into two main categories: freshwater and saltwater.
- Know that the desert biomes cover about one fifth of our planet and are extremely dry areas. Depending on their location, they can be either hot or cold. Plants and animals have evolved over time to adapt to the harsh environment

- Forest biomes are home to a variety of trees and other plants. They cover about 30% of our Earth's surface and are extremely important to our ecosystem as they store carbon and provide many materials that we use
- The majority of the grassland biome is made up of a variety of grasses with very few trees or large plants. The two main types of grasslands found are 'tall-grass' (humid and wet), and 'short-grass' (dry). This biome is very popular for farming due to the rich soil
- The rainforest biome is home to a variety of tropical plants and animals and found in regions that are warm all year round. Unfortunately, rainforests now cover less than 6% of our planet but still produce about 40% of our oxygen
- The tundra biome is the coldest biome and therefore has little plant and animal variety. Tundra biomes cover approximately one fifth of the Earth's surface
- The climate zones of each biome
- The Grand Canyon is in the USA and has multiple biomes
- The Grand Canyon has several different biomes and climate conditions at the different altitudes within and around it
- The human and physical geographic features of the Grand Canyon
- The types of settlement and land use in and around the Grand Canyon
- About the Havasupai tribe and find out how they have lived at the Grand Canyon for hundreds of years.
- The lifestyle of the Havasupai and consider how they use the land around the Grand Canyon, both historically and today
- Some ways in which the use of the land by American Indians has changed over time
- Know that very few Native American tribes exist today as a result of their land being taken and invasion of the Europeans in the 19th Century

Physical Features

- Know that Mexico is a country in North America
- Know that Copper Canyon is in North Mexico
- Know that the Copper Canyon is a group of six distinct canyons in the Sierra Madre Occidental. The canyons were formed by six rivers.
- Know that the alpine climate of the mountainous regions of Copper Canyon has moderate temperatures from October to November and March to April. The bottom of the canyons are humid and warm and remain that way throughout the year. During the warmest months, April-June, drought is a chronic problem with little rainfall until July when the rainy season begins
- The region contains numerous species of pine and oak trees. Mexican Douglas-fir trees cover the highest parts, over 8000ft, but due to deforestation in the area, many species of wildlife are endangered. Cougars live in the remotest of regions and are rarely seen. After the summer rainy season, these upper regions blossom with wildflowers until October
- From 4000-8000 feet, oak trees grow in huge forests. IN the autumn, the forest becomes brilliant with colour from Andean alder and poplar trees.

 Brushwood and scrubby trees grow on the canyon slopes, which can tolerate the dry seasons. Huge fig and palm trees thrive at the bottom where water is plentiful and the climate is tropical
- Beaches
- Know that Mexico has many beaches-both coastlines are lined with beaches.
- Banderas Bay, on the Pacific coast, is Mexico's largest bay and full of long sandy beaches and tropical jungles
- The water is warm so it makes for a good place for snorkelling and scuba diving
- The horseshoe shaped bay has over 50 miles of shoreline, ranging from cliffs to sandy beaches, with the city of Puerto Vallarta in the centre. The beaches account for approximately 60% of the shoreline.
- The Yucatan Peninsula has beaches that run along hundreds of miles of coastline. It has also got a lot of caves and sinkholes -called 'cenotes'- which were formed by water running through the soft limestone that the peninsula is made of. The ancient Maya civilisation used the cenotes for rituals and burials. Just off the Caribbean coast is the island of Cozumel with brilliant coral reefs

Volcanoes

- Mexico has over 40 active and extinct volcanoes. The highest volcano (and mountain) is Pico de Orizaba, in Eastern Mexico. It last erupted in the 17th century. At 5,700m Orizaba is also the third highest mountain in North America. The most active volcano in Mexico is Colima. Colima has been active for five million years. You can take a guided tour of the volcano, if you're brave enough! Popocatépetl, nicknamed El Popo, near Mexico City, is also active and last erupted in June 2010.
- Mexico is situated on the 'Ring of Fire', the world's most prominent volcano and earthquake region. However the volcanos on Mexico Baja California, a
 popular tourist destination, are mostly dormant. The peninsula to the west of mainland Mexico is called Baja California. Over 120 species of cactus are
 growing there.

Jungles

• The tropical south of Mexico is a land of dense, hot, humid jungle. These lowlands are home to all kinds of animals, birds and creepy crawlies including snakes, wild pigs, caiman, iguana, monkeys and even big cats like jaguar. One part of this area, the Isthmus of Tehuantepec, is particularly important as it's the narrowest piece of land between the Pacific Ocean and the Gulf of Mexico.

Deserts

- The largest desert in North America is the 200,000-square-mile Chihuahuan Desert, which stretches across six of Mexico's states and into Texas and New Mexico in the USA. This desert isn't simply sand there are over 400 species of cactus and a surprising number of animals. Mountain lions, Mexican wolves, prairie dogs and over 300 species of birds all live here. Other deserts in Mexico are the Sonoran Desert and Baja California.
- Know that Baja California is a peninsula that hangs like an icicle from the west coast of Mexico. It is a desert area full of tall cacti and white-sand beaches. Grey whales come to the lagoons along the west coast to mate and give birth.

Human Features

- Know that around 130 million people live in Mexico. The capital city is Mexico City and is the country's biggest city.
- The main language spoken in Mexico is Spanish and around 89% of people are Christians.
- Know that Mexico was conquered and colonised by the Spanish from the 16th century (children will learn more about colonisation in Year 6)
- Know that Mexico is a popular travel destination. The bay on the Pacific Ocean has many of the country's most popular beaches and there are many holiday resorts there.
- Know that the capital city is built on the site of the former Aztec capita, Tenochtitlan. There are ruins of the ancient Aztec pyramids at nearby Teotihuacan
- Know that Mexico's main trading partners are the USA, which is the most important partner for exports. China and Japan also sell many products to the Mexicans and are therefore Mexico's biggest import partners. The main exports from Mexico are corn, oil, fruits and vegetables, silver, coffee and cotton. Know that chocolate and chilies also come from Mexico

• Know about the festival of The Day of the Dead

- Day of the Dead (Dia de los Muertos) is a celebration during which the dead are honoured
- It is not a sombre and melancholy time, but a time of rejoicing and memories
- It is a day when people go to cemeteries and create altars to be with the souls of friends and relatives who have departed
- It is celebrated across three days. The full three days is a fiesta of flowers, food, candles, parades, prayers and fun
- The first day is on the same day as Halloween, 31st October. On this day, at midnight, the gates of heaven are opened
- On the second day, is when the spirits of deceased children (angelitos) visit
- The third day is when the spirits of adults visit
- It is also celebrated in areas of North America, such as California and Texas, where the Mexican/American heritage exists
- Day of the Dead is celebrated in Mexico, Equator and other areas in Central and South America, specifically those from Latino backgrounds

	• People create ofrendas (altars) to honour the deceased. The altars are a space to remember loved ones and light candles to guide the spirits. The alter included: pictures of the deceased; items they were fond of; something to eat; candles; flowers and gifts		
	• A special Day of the Dead bread called Pan de Muertos is eaten. This bread represents the soul of the departed. The loves are sometimes backed in the shape of skulls and sometimes are round loves decorated with bones. The bread is often decorated with frosting or seeds, which represent happiness in some areas of Mexico		
	• Foods that the deceased enjoyed whilst alive are placed on the altar. The dead have come back to visit when the food has spoilt, fizzy drinks go flat, bread becomes hard and fruit softens		
Comparison	Use atlases and globes to make comparisons between the land mass of North America and the UK		
with UK	Make comparisons between the physical features studied and those in the UK		
	Make comparisons between the human features studied and those in the UK		
	Design Technology		
Year 5			
Design Technology Textiles			
Year 5	• Explore the work of Kaffe Fasset (knitting, needlepoint, patchwork) especially those focused on the Day of the Dead http://www.kaffefassett.com/about/		
	• Evaluate different designs of cushions e.g. decorative, shapes, materials, usage, designers, the way they are fastened		
	Look at images from the Mexican Day of the Dead and set the brief to design a cushion inspired by Mexican art		
	Drawer sketches of possible ideas for the front of the cushion cover		
	Consider ways for fastening the cushion-button, Velcro, envelope cushion, etc		
	Learn how to create a seam by folding the fabric and securing with a running stich		
	Design a cushion, thinking about how it will be sewn together-will it use a fastening or have an envelope fastening?		
	Use a range of fabric paints/dyes to design front of cover		
	Follow design to sew cushion cover together		
	Evaluate end product		

Writing Outcomes			
Non-Fiction	Fiction		
Persuasion- Singular viewpoint of reasons to visit North	Text: The Princess and the Warrior		
America	Narrative with a flashback, based on Native American Myth		