Topic: Why does the USA have different climate zones? Year Group: 5 Term: Spring 1 and 2

Ambition:

Learn about places that children could visit in the future

Learn about jobs that involve using maps

Community:

Learn about communities in other countries?

Equality:

Be curious about the world around them and able to learn with resilience

Links to Prior Learning

Y4 - What is a biome?

Y1 – How do the seasons change?

Writing Opportunities Through Topic Lessons

Explanation about the different climate zones/vegetation belts (similarities and difference) include information about the climate, vegetation and animals and how they are adapted Why does the USA have different climate zones?

Fact file: Features/
Instrumentation Jazz
and Blues music and
icons:
Louis Armstrong
B.B. King, Bessie Smith

Geography independent hot task
Information text:
Landmarks in the USA

Instructions: step-bystep guide to make an American inspired toy

Key Texts

Fox Margaret Wild Wonder R.J Palicio

The Dress and the Girl Camille Andros (Greek immigration to US) The Arrival Shaun Tan

We've Got a Job: The 1963 Birmingham Children's March Cynthia Leveson Equality Swing Low (The Works KS2 p.173)

Key Vocabulary

Geography
biome, climate zones,
vegetation belts,
desert, grassland,
deciduous forest, city,
country, state,
latitude, longitude,
coordinates, arid,
temperate,
Mediterranean, polar,
tropical, temperature,
rainfall, graphs

prototype, accurate, saw, mark out, cam, mechanism, movement, linear motion, rotary motion, pivot, off-centre, axle, framework, shaft, bench hooks, saws, hand drill, G-cramp, exploded diagram

Computing Record card database, records, fields, grouping, sorting

Projects

DT project:
Make an American
inspired moving toy
[for example, gears,
pulleys, cams, levers
and linkages]

Cooking project:
Burgers, coleslaw and salad

Computing project:
Entrust
Creating and Using
Spreadsheets as
Models to Solve
Problems
create a spreadsheet to
compare costs of
holidays to get the best
value for money e.g.
hotels, flights etc

Concrete Knowledge

Geography

- Know the names of 4 countries in North America (USA, Canada, Mexico, Greenland) and 4 major cities in the USA
- Know the names of at least 3 world biomes, climate zones and vegetation belts
- Know some features of a desert, grassland and deciduous forest
- Know that the capital city of the U.S.A is Washington D.C
- Know 3 landmarks in the USA

DT

- Know how to use learning from mathematics to help design and make products that work (measuring and marking out for dowel)
- Know that materials have both functional properties and aesthetic qualities
- Know that materials can be combined and mixed to create more useful characteristics
- Know that mechanical and electrical systems have an input, process and output
- Know how mechanical systems such as cams or pulleys or gears create movement
- Know how to reinforce and strengthen a 3D framework

DT	-	Fo	OC

Know that grown crops have historically been used to develop recipes

Know what a can opener and ring pull tins are Know the names of the ingredients and where it comes from (chickpeas, coriander, cucumber)

Skill Progression

Geography

- I can locate and label the places that I am studying on a map (North American countries: USA, Canada, Mexico and Greenland; cities in the USA)
- I can explain how the latitude affects the different climate zones, vegetation belts and biomes in the USA
- I can find the coordinates of key North
 American cities using longitude and latitude
- Geography
- I can draw graphs to compare the temperature of different climate zones (line graphs)

DT - Food

- I can use my fingertips to run yoghurt into flour to make a dough
- I can use a can opener and open ring-pull tins (with support)
- I can bake bread

Computing Spring 2:

Teach computing flat-file data bases J2 data databases

Final project: Maths/geography/ PSHE create a database about holiday details

- I can use a form to record information
- I can compare paper and computer-based databases
- I can outline how grouping and then sorting data allows us to answer questions
- I can explain that tools can be used to select specific data
- I can explain that computer programs can be used to compare data visually
- I can apply my knowledge of a database to ask and answer real-world questions

DT - Design:

- I can use exploded diagrams to develop and communicate my ideas
- I can describe the purpose of their products
- I can indicate the design features of their products that will appeal to intended users
- I can explain how particular parts of their products work carry out research, using surveys, interviews, questionnaires and webbased resources
- I can identify the needs, wants, preferences and values of particular individuals and groups
- I can develop a simple design specification to guide my thinking

DT – Make

- I can select tools, materials and equipment suitable for the task
- I can explain their choice of tools and equipment in relation to the skills and techniques they will be using
- I can produce appropriate lists of tools, equipment and materials that I will need
- I can formulate step-by-step plans as a guide to making
- I can accurately measure, mark out, cut and shape materials and components (Measure and mark out dowels)
- I can accurately assemble, join and combine materials and components

DT – Evaluate:

I can investigate and analyse:

- how well products have been designed
- how well products have been made
- why materials have been chosen
- what methods of construction have been used
- how well products work
- how well products achieve their purposes
- how well products meet user needs and wants

I can investigate and analyse:

- how much products cost to make
- how innovative products are
- how sustainable the materials in products are

what impact products have beyond their intended purpose

DT Evaluate:

- I can identify the strengths and areas for development in their ideas and products
- I can consider the views of others, including intended users, to improve their work
- I can critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make
- I can evaluate my ideas and products against my original design specification

Science, Music, R.E., PSHE, French and P.E. units

Science Forces

Music
This is our voice project

R.E.
Participating and willing to lead
Being modest and listening to others

PSHE Being my best

P.E.
Sp1 Coach: Gymnastics
CT: Handball
Coach: Tennis
Ct: Netball/swimming

French
Sp1: What is the
weather?
Sp2: Do you have a
pet?

E-safety
Sp1 Online Bullying,
Managing Online
Information and
Health,

E-safety Sp2 Wellbeing and Lifestyle

Maths in Context

Using co-ordinates to show the location of places in USA (lines of longitude and latitude) Measure with weighing scales and measuring jugs and scale the recipe for 2/4 people Know how to use learning from mathematics to help design and make products that work (measuring and marking out for dowel)

Cultural Capital

Self-control and selfdiscipline Adaptability & Resilience

Taking responsibility

Self-reflection

Our place in the world

Ambition

Care and respect

Appreciation

Livelihood

Communication

Cultural diversity and equality

Technological advancements

Cultural and Artistic Icons

Jazz and Blues music Louis Armstrong B.B. King Bessie Smith





Health Education, Money Management, Environmental Education

PSHE: Know some of the harmful effects of smoking and drinking alcohol PSHE: Know that the media does not always portray people as they are in real life

Rights Respecting

Article 31: Every child has the right to play and relax

Wider links

Wider links

Wider links



Enrichment experiences and Community Involvement					