

prospectus



Extreme Survival KS2

Essential Knowledge

By the end of this unit children will know...

- How to use maps, atlases, globes and digital/computer mapping to locate areas of extreme heat and cold.
- How to explain why some areas are very cold and some very hot.
- How to describe and understand what life is like in those places for people, animals and vegetation.
- Consider how people and animals adapt to their environment to survive.
- The importance of shelter, food and clean water as the basis of survival.

Launch

Possible Visits and experiences:

- Trip to the local zoo with a focus on how animals survive in extreme conditions.
- Design and make a shelter in the school grounds.
- Invite a expert on 'exotic' creatures.

Explore

- Children to research places of extreme conditions – deserts and Polar Regions.
- Children to explore how people survive in those regions.

Energise

- Make models of a desert or polar landscape.

Celebrate

- Invite parents and carers into school for a celebration event. Children to act as guides to their exhibition on extreme survival.

Core Subjects:

Links to theme

English

Narrative: Children will write stories, fictional diary entries, descriptions and letters

Non-Fiction: Children will create survival guide leaflets, instructions, explanations and reports.

Mathematics

Data Handling: Pupils will collect, record and organise data about temperatures – using negative numbers.

Number: Pupils will calculate distances around the world and order them from the smallest to largest.

Science

Children give simple explanations of the changes and differences linking cause and effect, such as lack of light or water affecting plant growth, and identify ways in which animals or plants are suited to their environments.

They will give simple explanations of the ways in which some materials are suited to specific purposes, such as clothing, shelters etc.

They will begin to understand how food chains describe feeding relationships between plants and animals in a specific habitat.

Extreme Survival KS2: Theme Content

Personal Development

Spiritual

Children will be introduced to the idea that different societies have different beliefs and that these can be affected by the environments they live in.

Moral

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.

Social

Pupils will work together to build shelters showing they can listen to others opinions and negotiate to create a joint end result

Pupils will find and share stories in the news about people or animals who have survived in extreme circumstances.

Cultural

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.

Foundation Subjects

History, Geography and Citizenship

Geography

Pupils will use a range of geographical skills to help them investigate extreme places and environments and consider how animals and communities adapt to these environments

Pupils will select and use appropriate skills and ways of presenting information to help them investigate places and environments.

They will describe physical and human characteristics of places by referring to regions, countries and continents and consider how similarities and differences in environments affect the lives of people who live there.

Art and Design and Design Technology

Art : Pupils will identify how mixing colours can convey the mood and atmosphere of different places when painting or creating collages.

DT: Pupils will show they are aware of constraints when designing and building models and shelters and reflect on how they can adapt their design to solve technical problems.

Music, Languages and Physical Education

Physical Education: Pupils will consider how military fitness techniques can help people survive in extreme environments and they will use orienteering techniques to find their way around school grounds.

Computing

Pupils will search for and use information from a range of sources and make decisions about the usefulness of that information.

They will collect, record and organise data to enable them to compare temperatures in our country with those from other parts of the world.

Extreme Survival: Links to National Curriculum Framework

Core Subjects:

English

- Write for a wide range of purposes using the main features identified in reading.
- Use organisational devices such as heading and sub-headings.
- Organise paragraphs around a theme.
- Identify ideas drawn from more than one paragraph and summarise these.
- Ask questions to improve understanding of a text.
- Write for a wide range of purposes using the main features identified in reading.

Mathematics

- Interpret and present data using bar charts, pictograms and tables.
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
- Count backwards through zero to include negative numbers.

Science

- Make accurate measurements using standard units using a range of equipment e.g. thermometers and data loggers.
- Identify how animals and plants are suited to and adapt to their environment in different ways.
- Identify that animal's need the right amount of nutrition, and that they cannot make their own food and they get nutrition from what they eat.
- Give reasons for classifying animals based on specific characteristics.
- Recognise that environments are constantly changing and that this can sometimes pose dangers to specific habitats.
- Compare and group materials together.
- Examine the properties of materials using various tests.

Foundation Subjects

History, Geography and Citizenship

Geography:

- Describe and understand key aspect of physical geography including climate zones
- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features.
- Describe geographical similarities and differences between countries
- Ask and answer geographical questions about the physical and human characteristics of a location.

Art and Design and Design Technology

Art and Design:

- Experiment with creating mood with colour.
- Explore ideas in a variety of ways.
- Mix colours effectively.
- Select and arrange materials for striking effect.

Design Technology:

- Design with purpose by identifying opportunities to design.
- Choose suitable techniques to construct products.
- Refine work and techniques as work progresses, continually evaluating the product design.
- Understand and apply the principles of a healthy and varied diet
- Prepare ingredients hygienically using appropriate utensils

Music, Languages and Physical Education

N/A

Computing

- Use some of the advanced features of applications and devices in order to communicate ideas, work or messages professionally.
- Select, use and combine a variety of software on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use search engines effectively; be discerning in evaluating digital content.

Extreme Survival: Assessment Opportunities/Tasks within theme

Core Subjects

English

- Children plan and write a leaflet outlining ways to survive in a hot desert.
- Children to create an 'extreme survival' factfile
- Children to write adventure stories based on a polar or desert expedition.
- Children use a range of descriptive vocabulary to describe polar and desert settings.

Mathematics

- Children demonstrate ability to measure temperature and produce graphs to show the temperature of different places within school.
- Children demonstrate understanding of negative numbers when comparing polar and hot desert temperatures.

Science

- Children to use examples of camels, cacti, penguins and polar bears to give examples of how plants and animals are adapted to their environments
- Children create a desert/polar food chain or web.
- Children to plan, conduct and evaluate an investigation into materials that would help to insulate a teddy bear in the arctic.

Foundation Subjects

History, Geography and Citizenship

Geography:

- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features.
- Describe the similarities and differences between polar and desert climates
- Explain how the lives of people living in polar or desert climates differ to their own lives

Art and Design and Design Technology

Art and Design:

- Children to create their own desert collage, reflecting the colours and textures of the desert environment.

Design Technology:

- Children demonstrate their understanding of food hygiene and preparation techniques alongside their understanding of the different food groups and the nutrition that they provide to design their own healthy snack for the desert.
- Children will demonstrate ability in cutting and joining techniques when making their arctic shoeboxes.

Music, Languages and Physical Education

N/A

Computing

- Through research into Polar Bears and Penguins, children demonstrate effective use of a search engine and the ability to select information.
- Children choose their own area of independent study and create a presentation for parents to demonstrate their learning.