

Y5 It's A Wild, Wild World Learning Sequence

Synopsis: Children focus on natural disasters (earthquakes and volcanoes) and where/why these occur in the world. They use this to write a journalistic piece about a natural disaster.

In **Science**, children investigate forces and water/air resistance.

In **Geography**, children investigate the interaction between physical and human processes.

In **Art**, children use digital media to enhance their news reports and journalistic writing.

In **D&T**, children research structure of earthquake-proof buildings and use this to design a prototype.

In **Computing**, children use digital media, eg green screen, to support news report.

Curriculum areas: English, Science, Geography, Art, D&T and Computing

Length of theme: 6 weeks

English

Write newspaper report and/or news report about a natural disaster.

English Objectives

Comprehension

- Distinguish between fact and opinion
- Identify how language, structure and presentation contribute to meaning

Grammar & Punctuation

- Indicate possibility using adverbs and modal verbs
- Use relative clauses with relative pronouns
- Indicate parenthesis using brackets, dashes and commas

Text Structure & Features

- Reflect understanding of audience and purpose through choice of grammar, vocabulary and structure
- Use a wide range of devices to build cohesion within and across paragraphs

Plan, Draft, Edit & Evaluate

English Learning Sequence

- Share examples of newspaper cuttings and news coverage about natural disasters. How do reporters report on these? How does it differ to report in a newsroom?
- Children comment on layout/content and language used and consider how they impact on meaning
- Select some statements from one of the reports, or devise own – can children sort them into those that are fact and those that are the opinion of the writer/witnesses/experts
- Gather typical examples of recurrent language eg catastrophic, grave situation
- Assign children a natural disaster to report on eg earthquake, tsunami, volcanic eruption
- Children research real event, with a focus on the details (dates, location etc.)
- Grammar sessions on modal verbs (should, could, might, can etc.) and adverbs (definitely, possibly, maybe etc.) to reflect

- Use dictionaries to check the spelling and meaning of words
- Identify audience and purpose of writing
- Note and develop initial ideas drawing from reading
- Select appropriate grammar and punctuation and understand how these can change/enhance meaning
- Assess effectiveness of own and others' writing
- Propose changes to grammar, punctuation and vocabulary to enhance meaning/effectiveness
- Ensure correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register

In addition to the above, teachers should apply general spelling rules and guidance, as listed in [English Appendix 1](#) and ensure concepts and skills outlined in [English Appendix 2](#) are also addressed.

possibility. Can children use in context of writing sentences about natural disasters?

- Grammar sessions on relative clauses for precision and to add important information about preceding noun eg The volcano, which was considered dormant, erupted with great force last Tuesday evening.
- Role-play newscasters and reporters interviewing witnesses/survivors to glean first-person accounts
- Recap use of inverted commas when using direct quotes
- Note ideas for report/newspaper article, considering organisation, layout and cohesion within and across paragraphs. Refer to key words gleaned from previous sessions to add authenticity
- Draft, edit and improve writing to produce final piece

English

Write an explanation about natural disasters.

English Objectives

Grammar & Punctuation

- Use relative clauses with relative pronouns
- Indicate parenthesis using brackets, dashes and commas

Text Structure & Features

- Reflect understanding of audience and purpose through choice of grammar, vocabulary and structure
- Use a wide range of devices to build cohesion within and across paragraphs
- Use further organisational and presentational devices to structure text

Plan, Draft, Edit & Evaluate

- Use dictionaries to check the spelling and meaning of words
- Identify audience and purpose of writing
- Note and develop initial ideas drawing from reading

English Learning Sequence

- Watch appropriate videos of natural disaster eg volcanic eruption and discuss what is happening
- Applying geographical understanding, suggest reasons for this eg position in world in relation to tectonic plates
- Be introduced to key, subject-specific language and locate definitions eg crust, mantle, lava
- Use simple diagrams to explain the physical process, adding notes and annotations
- Share examples of explanation texts, drawing out some of the features (present tense, certain conjunctions and adverbials, explain phenomena, impersonal etc.)
- Recap previously-taught conjunctions and adverbials that can be used to help explain something eg so, because, when, due to the fact that, therefore, as a result. Can children identify these in written examples?

- Select appropriate grammar and punctuation and understand how these can change/enhance meaning
- Assess effectiveness of own and others' writing
- Propose changes to grammar, punctuation and vocabulary to enhance meaning/effectiveness
- Ensure correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register

In addition to the above, teachers should apply general spelling rules and guidance, as listed in [English Appendix 1](#) and ensure concepts and skills outlined in [English Appendix 2](#) are also addressed.

- Grammar session: relative clauses to add extra information about preceding noun eg Mount Etna, **which is located in Italy**, is still active. Rehearse and practise examples
- Grammar session: parenthetical punctuation around extra information. This can be a word, phrase, or subordinate clause (remember relative clauses are a type of subordinate clause)
- Plan their explanation by making jottings and notes and discussing these orally
- Draft, edit and improve explanation to produce final piece

Science

Investigate forces and air/water resistance.

Science Objectives

Working Scientifically

- **Independently decide which observations to make**
- **Use science experiences to plan different types of scientific enquiry**
- **Record data/results of increasing complexity using diagrams, classification keys, tables, bar and line graphs**
- **Report and present findings from enquiries, examining causal relationships and reliability of results**
- **Recognise and control variables where necessary**
- **Take measurements using a range of scientific equipment with accuracy and precision**
- **Use test results to make predictions to set up further tests (comparative/fair)**
- **Identify scientific evidence that has been used to support/refute arguments**

Scientific Knowledge

- Explain that unsupported objects fall towards the Earth because

Science Learning Sequence

- Use natural phenomena as a stimulus to introduce air and water resistance eg friction between tectonic plates, links to how tsunamis are formed
- Mind map what children already know about forces, gravity etc.
- Decide on the best type of scientific enquiry to find out about air and water resistance
- Children formulate scientific questions to answer and set up test eg Does the size of an object affect how quickly it falls through air? Make sensible, informed predictions
- Decide what to observe/measure and how to record results. Emphasise accuracy and reliability data eg repeating the test more than once
- Present findings in a range of ways
- Draw conclusions and make links to real life examples eg streamlined boats travelling through water; Olympic bikes, helmets and other kit streamlined to move more quickly; shape and size of parachutes
- Link mechanisms to the moving of large objects eg how best to move rubble after a natural disaster (pivots, levers etc.)

of the force of gravity acting between the Earth and the falling object. Identify the effects of air resistance, water resistance and friction, that act between moving surfaces

- Recognise that some mechanisms, including levers, pulleys and gears allow a smaller force to have a great effect

Geography

Investigate the interaction between physical and human processes.

Geography Objectives

- Locate majority of world's countries and cities using maps and identify environmental regions, key physical/human features
- Identify position of latitude/longitude and N/S hemispheres
- Identify positions of tropics of Cancer/Capricorn, Arctic and Antarctic
- Identify position of Prime/Greenwich Meridian time zones
- Securely use world maps, atlases and globes and digital mapping to build knowledge of the wider world
- Observe, record and present human/physical features of local area, using maps, sketches, plans, graphs and digital technology
- Examine geographical similarities and differences (regions of UK, European country and N/S America) and communicate geographically
- Explain key aspects of physical geography (climate zones, vegetation belts, mountains, earthquakes, volcanoes, biomes)
- Explain key aspects of human geography (settlement and land use)
- Understand the interaction between physical and human processes and features

Geography Learning Sequence

- Discuss what is meant by natural disaster, wild weather etc. How many of the key terms have children encountered eg cyclone?
- Draw on children's experiences and ensure they understand the terminology
- Using atlases/maps, children identify which regions of the world are prone to volcanos, earthquakes etc. and add symbols/key
- Using map to show Earth's tectonic plates, children explain why some areas are more vulnerable than others
- 'Zoom in' on the physical processes of earthquakes, volcanoes and tsunamis and carry out an in-depth study, examining the relationship between them
- Compare two different areas of the world where natural disasters are prevalent and explore similarities and differences
- Research and explain where and why they occur and their impact on human processes etc.

Art

Use digital media to enhance their news reports and journalistic writing.

Art Objectives

- Enhance digital media by editing sound, video, still images and

Art Learning Sequence

installations • Capture the artistic process in sketchbooks • Use a range of artistic vocabulary to communicate ideas, discuss and evaluate work/other art works • Improve mastery of art and design techniques with a wide range of materials • Communicate ideas and comment on artworks using artistic language	• Examine photographs/depictions of volcanoes erupting etc. and comment on them in terms of perspective, colours, content etc. • Gather images relating to natural disasters in sketchbooks and critique these using artistic language • Use sound, video and photographs to create a montage about chosen natural disaster • Consider how to manipulate sound, images and movement to best effect • Research other artists who use photography etc. to capture the world around them • Evaluate their work and own work
D&T	
<i>Research structure of earthquake-proof buildings and use this to design a prototype.</i>	
D&T Objectives • Communicate, generate, develop and model ideas using a range of strategies • Use research to inform design and generate own design criteria • Construct more complex structures by applying a range of strategies in order to solve real/relevant problems • According to their functional properties and aesthetic properties, select from and use a wide range of tools, equipment, materials and components accurately to make high quality prototypes • Investigate and analyse a range of existing products that address real/relevant problems in a range of contexts • Understand how key events & individuals in D&T helped to shape the world	D&T Learning Sequence • Choosing an earthquake-prone location in the world, research the structure of buildings there. How are they designed and built to withstand tremors? • Explore and discuss potential link between economics and quality of buildings • Using exploded diagrams (technical drawing showing assembly of parts) and cross-sections, children communicate their findings which in turn will inform their design • Set challenge of designing an earthquake-proof structure using real design criteria • Children consider which materials, tools and components would be best for their prototype • Work together to design and build the structure, evaluating and adapting throughout the process • Once built, 'test' each group's design by shaking violently! Whose model is still standing afterwards and why? • Investigate architects and engineers who are involved in the design of earthquake-proof buildings, considering their impact on the world

Computing

Use digital media, eg green screen, to support news report.

Computing Objectives

- Express own ideas by selecting, using and combining a variety of software on digital devices to design and create programs

Computing Learning Sequence

- Choose from a variety of software to express own news report/bulletin
- Test chosen software
- Select and use software and create news report
- Review completed project and evaluate accordingly focussing on effectiveness of different software choices