Class: Natterer's
Cycle A1
Terms – 1 and 2
Title: Is the natural world dangerous? - Volcanoes
Main subject focus: Geography

Big enquiry questions worth asking:
Learning Theme Big Question: Is the natural world dangerous?
Why is this so important?
To inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives
To develop contextual knowledge of the location of globally significant places including their defining physical characteristics. To understand the processes that give rise to key physical and human geographical features of the world and to understand the interaction between physical and human processes.

Other questions worth asking:
What is a volcano?
How does it form?
Why is it different from a mountain?
What is the ring of fire?
What are the different types of volcano?
What causes it to erupt?
Why do people choose to live near volcanoes?
Why do some countries have volcanoes and others do not?
What evidence do we have for volcanic eruptions through history?
How can people prepare for and protect themselves for eruptions?
What is the impact on the climate of volcanic activity?
What is a greenhouse gas?
Why is volcanic soil very fertile?

What do we want the children to know? (Knowledge)
An understanding of the processes that give rise to key physical features of the world and how this impacts humans and other living organisms.

What will be your real life project?
In depth study of Icelandic volcano eruption Eyjafjallajokull in 2010. Impacts on travel, safety of people living in proximity, geothermal activity in Iceland. Chances of further eruptions, scientific monitoring of activity. After effects on farming, productivity, tourism.
In depth historical study of Pompeii. What evidence do we have as historians to explain what happened in Pompeii?

Trips and visits

Key vocabulary: physical and human features, continents, countries, oceans, mountain, volcano, soil, farm, city, town, Plate tectonic theory, Earth's crust, ash cloud, cone, composite, shield and dome volcanoes, caldera, lava; magma; vent; crater; dormant; eruption; fertile; pyroclastic flow; extinct; fault lines (plate boundaries);

Key knowledge (from NC)	Key knowledge and vocabulary (in bold)	Key skills progression
As geographers we will… • locate the world's continents, countries and oceans (focus on UK, Europe and North and South America) • describe and understand key aspects of **physical** geography including **mountains and volcanoes**. • Use maps to find location of the world's most significant physical features (volcanoes) •	• Be able to locate the world's **continents**, **countries** and **oceans** on a map of the world • Know the key **physical features** and the difference between **physical** and **human features** • Know where key **countries** are on a map of the world • Locate famous volcanoes on the map in Europe, North and South America and be able to describe the type of volcano (formation, last eruption, proximity to human settlements) • Be able to explain **Plate Tectonic** theory and how this explains the 'Ring of Fire' • Know the key **physical features**: **mountain, volcano, ocean, soil** • Know how **mountains** are formed and how **volcanoes** form. • Know the key **human features: city, town, farm** **Specific vocabulary: physical and human features, continents, countries, oceans, mountain, volcano, soil, farm, city, town, Plate tectonic theory, Earth's crust, ash cloud, cone, composite shield and dome volcanoes, caldera,**	• to use an atlas to locate continents, countries and oceans. • use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied • to ask questions about the natural and wider world • to describe the Earth's crust and how and why the thickness varies in different locations • to describe why a volcano is formed and to explain the differences between mountains and volcanoes. • to make records (pictures, writing, photos) • to use evidence to study the effects of the natural world (volcanic activity, eruption) • to describe reasons why people choose to live near active volcanoes • to describe and compare the effect of a major volcanic eruption in modern life (Iceland 2010) and throughout history (Pompeii AD79) • to describe and locate famous volcanoes around the world (Europe: Mount Etna, Vesuvius, North America: Mount St Helen's, Mount Rainier, South America: Cotopaxi, Osorno, Hawaiin volcanoes, Popocatepetl)

As historians we will…	• To compare the effects of a volcanic eruption in ancient times to modern times.	• to use historical evidence to understand how people lived 2000 years ago
• gain historical perspective by placing our growing knowledge into different contexts • understand how our knowledge of the past is constructed from a range of sources	• describe the effects of the eruption of Vesuvius on the Roman city of Pompeii • to use sources to study the lifestyles of the Romans in Pompeii in the 1st century at the time of the eruption of Vesuvius in 79AD	• to make a comparison of sources that historians use to inform us of past events • to use this evidence to compare the effects of the eruption of Vesuvius with that of Eyjafjallajokull • Look at and use books and pictures, stories, eye witness accounts, pictures, photographs, artefacts, historic buildings, museums, galleries, historical sites and the internet to find out about the past. • Ask simple historical questions and find answers about the past by; • Using documents, printed sources (e.g. archive materials) the Internet, databases, pictures, photographs, music, artefacts, historic buildings, visits to museums and galleries and visits to sites as evidence about the past. • Describe objects, people or events in history. • To begin to identify and describe similarities and differences. • Use historical knowledge to communicate ideas about the past using different genres of writing, drawing, diagrams, data-handling, drama role-play, storytelling and using ICT
As artists and designers we will…	**Art and DT** **Sketch book work –** pencil and charcoal sketches of different types of volcano	•
• Create sketch books to record observations and use them to review and revise ideas. • Improve mastery or art and design techniques, including painting, drawing and sculpture with a range of materials (eg pencil, charcoal, paint, oil pastels, clay)	- Pencil sketches of the volcano model looking at scale and surrounding features - Practise sculpting using chicken wire and paper mache and/or clay **Final pieces** -	

• Select from and use a wide range of materials and components, including construction materials, textiles, ingredients, according to their functional properties and aesthetics • Apply their understanding of how to strengthen, stiffen, and reinforce more complex structures	Design, create and evaluate an accurate and labelled model of a volcano and surrounding land.	
As a theologist we will… Be asking: Why are some journeys and places special? AMV 5 Why are some journeys and places special? **explores how religions and beliefs express aspects of life's journey in a variety of creative ways** The focus here is on exploring why people believe that some places are special and discovering what practices and events are associated with these places This example connects with Areas of Enquiry C (Forms of expressing meaning) and E (Questions of meaning, purpose and truth). It makes cross-curricular connections with Literacy, Geography and Art. The lessons could be used in discrete RE time or as part of a 'creative curriculum' approach where RE links with other curriculum subjects around a theme or key question, such as 'Journeys' or 'Special Places'	(a) Why do some people believe that some places are special? (b) Why do people go on pilgrimage and special journeys? (c) What practices and events are associated with pilgrimage and special journeys? (d) What artistic, symbolic and other expressive work is associated with special journeys and places? (e) How might we make a record of the impact on ourselves of the journey we make and the places we visit? **Specific Vocabulary: journey, moral duty, belief, evangelism, pilgrimage, pilgrim, quest, Christians, Muslims, Jews, Buddhists, Hindus, Sikhs, faith, sacred, holy, pilgrim, pilgrimage, punishment, judgement, Paradise, forgiveness, prayer, worship, mosque, temptation, sacrifice, commitment, Calligraphy, geometric, idolatry, monastic, medieval, symbolism, Baptism, christening, confirmation, wedding, funeral, charity, symbol, Qur'an, ceremony, friendship, loyalty.**	•

As scientists we will …. ▪ describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals ▪ explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment ▪ recognise that environments can change and that this can sometimes pose dangers to living things. ▪ give reasons for classifying plants and animals based on specific characteristics. ▪ describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird ▪ describe the life process of reproduction in some plants and animals	▪ Use the local **environment** throughout the year to raise and answer questions that help them to identify and study plants and animals in their **habitat** and identify how the **habitat** changes throughout the year ▪ explore possible ways of grouping a wide selection of living things that include **microorganisms**, **animals** and **flowering plant**s and **non-flowering plants**. ▪ Group **vertebrate** animals into groups such as **fish, amphibians, reptiles, birds, and mammals**; and **invertebrates into snails and slugs, worms, spiders, and insects**. ▪ Through direct observations where possible, they should **classify** animals into commonly found **invertebrates** (such as **insects, spiders, snails, worms**) and **vertebrates** (**fish, amphibians, reptiles, birds and mammals**). ▪ Discuss reasons why living things are placed in one group and not another. ▪ Use **classification** systems and **keys** to identify some animals and plants in the immediate **environment**. Research unfamiliar animals and plants from a broad range of other habitats and	▪ asking relevant questions and using different types of scientific enquiries to answer them ▪ gathering, recording, classifying and presenting data in a variety of ways to help in answering questions ▪ recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables ▪ identifying differences, similarities or changes related to simple scientific ideas and processes ▪ using straightforward scientific evidence to answer questions or to support their findings. ▪ planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary ▪ taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate

	decide where they belong in the classification system.	recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
	Study the significance of the work of scientists such as Carl Linnaeus, a pioneer of **classification**	using test results to make predictions to set up further comparative and fair tests
	observe **life-cycle** changes in a variety of living things, for example, plants in the vegetable garden or flower border, and animals in the local environment.	reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
	find out about the work of naturalists and animal behaviourists, for example, David Attenborough and Jane Goodall.	identifying scientific evidence that has been used to support or refute ideas or arguments.
	find out about different types of reproduction, including sexual and asexual reproduction in plants, and sexual reproduction in animals (**Year 6 only**).	
	observing and comparing the life cycles of plants and animals in their local environment with other plants and animals around the world (in the rainforest, in the oceans, in desert areas and in prehistoric times)	
	Specific vocabulary: **Organisms, microorganisms, classification, invertebrates (snails and slugs, worms, spiders and insects), vertebrates (fish, mammals, birds, reptiles, amphibians), classification keys, habitats, environment, flowering plants, non-**	

	flowering plants, animals, life-cycles, reproduction (sexual and asexual)	
As information technologists we will: ▪ understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation ▪ analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems ▪ evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems ▪ be responsible, competent, confident and creative users of information and communication technology.	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs ==understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration== ==use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content== select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information ==use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.== ==TOBE AMENDED WHEN SCHEME IS FINALISED==	Unit 5.1 We are game developers • Make a computer game – pupils design and create programs to accomplish a given goal • Work with a variety of input and output which will include keyboard and/or mouse (input) and the computer display together with speakers or headphones (output). • Using common programming constructs such as sequences of instructions, selection and repetition of a particular evet. • If the games uses scores, levels, randomisation or time limits the pupils will need to work with variables. • Use logical reasoning to detect and correct errors and evaluating digital content. Learning expectations: • Create original artwork and sound for a game • Design and create a computer programme for a computer game, which uses sequence, selection, repetition and variables • Detect and correct errors in their computer game • Use iterative development techniques to improve their game
As linguists we will: • Understand and respond to spoken and written language from a variety or authentic sources	FRENCH • Listen attentively to spoken language and show understanding by joining in and responding	Unit 5 All Aboard – Light Bulb Languages • Make statements about travel • Describe the weather • Say the days of the week

• Speak with increasing confidence, fluency and spontaneity, finding ways of communicating what they want to say, including through discussion and asking questions, and continually improving the accuracy of their pronunciation and intonation • Can write at varying length, for different purposes and audiences, using the variety of grammatical structures that they have learnt • Discover and develop an appreciation of a range of writing in the language studied.	• Explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words • Engage in conversations, ask and answer questions, express opinions and respond to those of others, seek clarification and help • Speak in sentences, using familiar vocabulary, phrases and basic language structures • Develop accurate pronunciation and intonation • Present ideas and information orally • Read carefully and show understanding or words, phrases and simple writing • Appreciate stories, songs, poems and rhymes in the language • Broaden their vocabulary • Write phrases from memory and adapt to create new sentences • Describe people, faces, things and actions orally and in writing • Understand basic grammar: feminine, masculine, conjugation of basic verbs.	Unit 6 Pocket Money – L'argent de Poche • Express likes and dislikes about toys • Justification of opinions • Numbers 21 to 39 (recap 1-20) • Simple prices