Subject: Science

Rocks and soils

- compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
- describe in simple terms how fossils are formed when things that have lived are trapped within rock
- recognise that soils are made from rocks and organic matter

Prior learning:

KS1

У1

- identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- describe the simple physical properties of a variety of everyday materials
- compare and group together a variety of everyday materials on the basis of their simple physical properties

У2

- identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching

Next steps learning:

- <u>KS3</u>
- the composition of the Earth
- the structure of the Earth
- the rock cycle and the formation of igneous, sedimentary and metamorphic rocks

Small steps:

To identify what rocks are (and the different uses)

To group rocks based on their properties (and compare them)

To understand how rocks are formed (and the differences between the types)

To know what rocks make up the Earth (and how they are layered)

To explain the different layers of the Earth (and compare these)

To describe how fossils are formed (and how this happens)

Working scientifically NC objectives (Skills)

Year 3/4

- asking relevant questions and using different types of scientific enquiries to answer them
- setting up simple practical enquiries, comparative and fair tests
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- using straightforward scientific evidence to answer questions or to support their findings.

Year 5/6

- 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
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments

Key vocabulary:

rock, appearance, hard, soft, permeable, impermeable, smooth, shiny, rough, dull, bright, dark, sparkly, plain, durable, hard wearing, waterproof, strong, geologist, igneous, sedimentary, metamorphic, soils, decaying, microbes, crust, mantle, outer core, inner core, organism, fossil, amber, clay, mould

Reading links:

Rocks and minerals (Eyewitness books)
The pebble in my pocket
The street beneath my feet

Cross curricular links:

English: Explanation texts on Rock cycle

Subject: History Stone age to Iron age • changes in Britain from the Stone Age to the Iron Age Small steps (knowledge)	Prior learning: KS1 • significant historical events, people and places in their own locality Small steps (skills)		Next steps learning: K53 • a local history study • the study of an aspect or theme in British history that consolidates and extends pupils' chronological knowledge from before 1066
 Small steps (knowledge) What was life like in the Paleolithic and Mesolithic? How do we know? What changed from the Paleolithic and Mesolithic? What stayed the same? What did people eat in the Paleolithic and Mesolithic? How do we know this? How did the search for food change in the Neolithic? Why were these changes important? What tools were used in the neolithic? How were these used? Who were the Beaker people? Why were they significant? How did tools change after the Neolithic? What were the consequences of this? How did the Bronze age change to the Iron age? What was the impact of this? What are roundhouses? How do we know about them? What is a hillfort? What do they tell us about the Stone Age? What was life like in the South East during the Stone Age? 		 To interpret evidence; To recognise what char continued in life To use archaeological e To recognise changes a To recognise the signif evidence To recognise the signif To interpret evidence 	nd continuation; to recognise significance of changes icance of archaeological finds; to justify ideas with icance of a group of people accurately; to justify opinions occurred: to explain the impact of these changes to justify opinions
Key vocabulary: Excavation, artefacts, archaeologist, prehistory, Doggerland, continuity, Mesolithic, remains, preserve, migrate, agriculture, domestication, Neolithic, significant, tools, pottery, beaker, burial, construct, settlement, palisade, granary, ditch, bowl barrow, submerged settlement	Reading links: Stone Age Boy Wild Way home		Cross curricular links: English: Stone Age Boy-narrative writing British values: Democracy-ways society was run during Stone Age times

Subject: D&T

Marble runs

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

Technical knowledge

• apply their understanding of how to strengthen, stiffen and reinforce more complex structures

Prior learning:

KS1

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

• build structures, exploring how they can be made stronger, stiffer and more stable

Next steps learning:

KS3

Design

- use research and exploration, such as the study of different cultures, to identify and understand user needs
- identify and solve their own design problems and understand how to reformulate problems given to them

Make

 select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture

Evaluate

 test, evaluate and refine their ideas and products against a specification, considering the views of intended users and other interested groups

Technical knowledge

 understand and use the properties of materials and the performance of structural elements to achieve functioning solutions

Small steps (knowledge):

- 1. To investigate free standing structures (and apply my understanding of structures)
- 2. To use a wider range of tools and equipment to perform practical tasks (with growing accuracy)
- 3. To develop a range of practical skills to create bends
- 4. To investigate free standing structures
- 5. To select from and use materials and components to make a marble run
- 6. To evaluate and improve product

Small steps (skills):

- 1. To strengthen, stiffen and reinforce
- 2. To use tools and equipment accurately
- 3. To use tools and equipment accurately
- 4. To investigate existing products
- 5. To select and use different materials and components
- 6. To evaluate ideas and product against design criteria

Key vocabulary:

Free standing, structure, support, stiffen, sturdy, stable, reposition, strengthen, reinforce, Accurate, join, shape, cut aesthetics, tools, equipment, functional, Bend, skills, tools, equipment, cut, shape, join, existing, product, Aesthetic, functional, iterative process, Test, evaluate, design criteria, improve.

Reading links:

Cross curricular links:

Maths: time, measures Science: Material properties

Subject: Computing

Teach computing unit: Y4 The internet

- 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Prior learning:

KS1

- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

Next steps learning:

KS3

 understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns

Small steps (knowledge):

- 1. To describe how networks physically connect to other networks
- 2. To recognise how networked devices make up the internet
- 3. To outline how websites can be shared via the world wide web
- 4. To describe how content can be added and accessed on the world wide web
- 5. To recognise how the content of the world wide web is created by people
- 6. To evaluate the consequences of unreliable content

Key vocabulary:

Internet, network, router, network security,
Network switch, server, wireless access point
(WAP), router, Website, web page, web address,
router, routing, web browser, World Wide Web,
internet, content, website, web page, links, files,
Website, use, content, download, sharing, ownership,
permission, Information, sharing, accurate, honest,
content, adverts

Reading links:

Cross curricular links:

PSHE: Online safety

Subject: French	Prior learning:		Next steps learning:
 listen attentively to spoken language and show understanding by joining in and responding 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 so that others understand when they are reading aloud or using familiar words and phrases* read carefully and show understanding of words, phrases and simple writing understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the 	Prior learning: Previous French learnt in a	class	KS3 • initiate and develop conversations, coping with unfamiliar language and unexpected responses, making use of important social conventions such as formal modes of address • speak coherently and confidently, with increasingly accurate pronunciation and intonation
language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English			
Small steps (knowledge):	•	Small steps (skills):	
1. To know how to greet someone		•	on, ask and answer questions
2. To ask and answer a question		2. Listen to language ar	·
3. To know numbers 0-10		3. To develop accurate	
4. To find out how old someone is		4. To speak in sentence	2 .
Key vocabulary:	Reading links:		Cross curricular links:
See separate vocabulary list			PSHE: R30-34 Respecting self and others;
·			L6-10 Communities
			British values: Mutual respect, tolerance of
			those with different beliefs and faiths
			Those with different beliefs and faiths

Subject: Music

Kapow unit-Rock and roll

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- improvise and compose music for a range of purposes using the interrelated dimensions of music
- listen with attention to detail and recall sounds with increasing aural memory
- use and understand staff and other musical notations
- appreciate and understand a wide range of highquality live and recorded music drawn from different traditions and from great composers and musicians
- develop an understanding of the history of music

<u>Prior learning:</u>

KS1

- use their voices expressively and creatively by singing songs and speaking chants and rhymes
- play tuned and untuned instruments musically
- listen with concentration and understanding to a range of high-quality live and recorded music
- experiment with, create, select and combine sounds using the interrelated dimensions of music

Next steps learning:

<u>KS3</u>

- play and perform confidently in a range of solo and ensemble contexts using their voice, playing instruments musically, fluently and with accuracy and expression
- improvise and compose; and extend and develop musical ideas by drawing on a range of musical structures, styles, genres and traditions
- listen with increasing discrimination to a wide range of music from great composers and musicians
- develop a deepening understanding of the music that they perform and to which they listen, and its history

Small steps (knowledge):

hand jive 1950's tempo dynamic notation style

To understand the history of rock and roll
To be able to perform with a sense of style
To play a walking base line on tuned percussion
To be able to play a rock and toll bass line
To be able to play a rock and roll piece of music

Key vocabulary:	Reading links:
rock and roll	

Cross curricular links:

Subject: PSHE
Safety first

H35, 37, 38, 39, 40, 41, 43, 44, 46, 47, 48, 49, 50 R9, 18, 24, 28, 29

Prior learning:

<u>KS1</u>

H28, 29, 30, 31, 32, 33, 34, 35, 36, 37 R15, 19, 20 Next steps learning:

H23, 24 25, 26, 27, 28, 29, 30, 31, 32, 33

Small steps (knowledge):

To be responsible for making good choices

To identify a risky situation and act responsibly

To understand that a choice can be made to not do something

To know how to stay safe when out and about

To know about dangerous substances

To know how to respond to emergency situations

Key vocabulary:

independent, responsible, decisions, choices, safe, healthy, consequences, instructions, rules, advice, help, risk, danger, hazard, safe, choices, decisions, rules, responsible, outcome, peer pressure, choices, dare, decisions, family, friends, media, comfortable, uncomfortable, right, wrong, feelings, dangerous, local environment, unfamiliar place, road safety, pedestrian crossing, zebra crossing, traffic, cycling, water safety, swim, dive, depth, railway, train, danger, electricity, cables, responsibility, independence, drugs, medication, medicine, pill, vaccine, inhaler, insulin, injection, alcohol, cigarettes, e-cigarettes, lungs, body, physical, health, wellbeing, impact, affect, harm, hurt, casualty, injury, emergency, first aid, 999, paramedic, ambulance, cut, graze, burn, scald, choking, shock

Reading links:

Cross curricular links:

Science: Animals including humans-recognise the impact of diet, exercise, drugs and lifestyle on the

way their bodies function British values: Rule of law

Subject: RE	Prior learning:	Next steps learning:
Why do religions and non-religious groups	<u>KS1</u>	<u>KS3</u>
celebrate important moments in life?	Why do people celebrate special occasions?	Use appropriate language to explain religions,
LK52: recognise and describe symbols and	Religions share some things in common, ask	beliefs and practices
rituals, compare different beliefs and	appropriate questions	
teachings		
Ask questions about religion and belief		
UKS2: describe similarities and differences of		
belief and practise, raise questions about		
beliefs and values		
Small steps (knowledge):		
What are the main religions of the world? H	ow are the similar/different?	

What is a rite of passage?
How do religions celebrate births? How are the similar/different?

How do religions celebrate weddings? How are they similar/different? How do religions conduct funerals? How are they similar/different?

Key vocabulary:	Reading links:	Cross curricular links:
Religion, symbol, book, God, rites of passage,		PSHE: R30-34 Respecting self and others;
timeline, life, birth, wedding, funeral, ceremony,		L6-10 Communities
ritual		British values: Mutual respect, tolerance of
		those with different beliefs and faiths

Subject: PE

Tag Rugby

- use running, jumping, throwing and catching in isolation and in combination
- play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending
- compare their performances with previous ones and demonstrate improvement to achieve their personal best

<u>Prior learning:</u>

KS1

- master basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities
- participate in team games, developing simple tactics for attacking and defending

Next steps learning:

KS3

- use a range of tactics and strategies to overcome opponents in direct competition through team and individual games [for example, badminton, basketball, cricket, football, hockey, netball, rounders, rugby and tennis]
- analyse their performances compared to previous ones and demonstrate improvement to achieve their personal best
- take part in competitive sports and activities outside school through community links or sports clubs

Small steps:

To apply basic principles of invasion games

To move the ball

To move with the ball into space

To pass a rugby ball

To receive a rugby ball

To know and apply rules of tagging

To gain possession by intercepting a pass

To use defending skills

To use attacking skills

To apply principles and rules of tag rugby in a game

To compete against other teams in a mini tournament

Key vocabulary:

Invasion, pass, receive, rules, tag, possession, attack, defence, throw, catch, move, dodge, intercept, control, accuracy, communicate, space, tactic, team

Reading links:

Cross curricular links:

Science/PSHE-keeping healthy, effects of exercise on body