

English National Curriculum Key Stage links to Meteorology

Subject	KS1 (Programme of Study) links	KS2 (Programme of Study) links	KS3 (National Curriculum links)	KS4 (National Curriculum links)	KS5
Citizenship			2.1, 2.3b, 2.3c, 3e, 4g, 4i	2.3c, 3g, 3i, 3m, 4h	
Design and technology			1.1a		
English			2.2a, 2.2b, 3.3e, cross curricular linkages		
Geography	1d, 3a, 3c, 3d, 3e, 4a, 4b, 5b, 6a, 6b, 7a, 7b	1b, 1c, 1d, 2a, 2b, 2d, 3a, 3b, 3d, 3e, 4a, 5a, 5b, 6a, 6b, 6c, 6e	1.7a, 1.7b, 2.1b, 2.1g, 2.2a, 2.3a, 2.3b, 3.b, 3f, 3h, 4b, 4d, 4e, 4i, scale, fieldwork investigations, working outside the classroom		
IT			1.2a, 1.3b, 1.3c, 1.4a, 3e, developing models	1.2a, 1.3b, 3a, 3c, 3d	
Mathematics			1.3b, 1.3d, 1.4a, 1.4b	1.3b, 2.3d, patterns and exceptions, mathematics used as a tool	
PSHE			1.1a, 1.1b, 1.1c, 1.2c, 2.1c, 2.2a, 2.2b, 2.2c	1.1a, 1.1b, 1.1c, 1.3b	
Science	Sc1. 1f, Sc2.5c, Sc.4 3a	Sc1.2f, Sc1.2g, Sc1.2h, Sc1.2j, Sc1.2k, Sc1.2l, Sc3.2e, Sc.3.2g, Sc.4.3b, Sc.4.4a, Sc.4.4b, Sc.4.4c, Sc.4.4d	1.1b, 1.2a, 1.2b, 2.1c, 2.2a 3.4c, 4d, 4e, 4g, Sustainability, 4i, 4k, career opportunities	1a, 1d, 2a, 2b, 2c, 2d, 3a, 3b, 3c, 4a, 4b, 4c, 8a, 8b, 8c	

Where can meteorology (weather/climate and environment studies)
fit with the
English National Curriculum (highlighted parts= most relevant)

Overarching aims of the curriculum meteorology could link with

- The whole curriculum develops learners' knowledge, understanding, skills and personal qualities in order that they become successful learners, confident individuals and responsible citizens.
- **Citizenship KS3-** Prepare young people for the world of employment and for further and higher education
- Make learners more aware of, and engaged with, their local, national and international communities
- Encourage learners to take responsibility for their own health and safety, and to appreciate the benefits and risks of the choices they make
- **Citizenship KS3-** Values underpinning the curriculum- the environment, both natural and shaped by humanity, as the basis of life and a source of wonder and inspiration that needs to be protected.
- To develop confident individuals who are open to the excitement and inspiration offered by the natural world and human achievements.
- **Citizenship KS3-** To develop responsible citizens who sustain and improve the environment, locally and globally
- **Citizenship KS3-** To develop responsible citizens who take account of the needs of present and future generations in the choices they make
- To develop responsible citizens who can change things for the better.

Citizenship Key Stage 3

Citizenship KS3- Responsible citizens who make a positive contribution to society.

Citizenship KS3- Citizenship encourages them to take an interest in topical and controversial issues and to engage in discussion and debate.

Citizenship KS3- They play an active role in the life of their schools, neighbourhoods, communities and wider society as active and global citizens

Citizenship KS3- 2.1 Critical thinking and enquiry.

Pupils should be able to:

- a) engage with and reflect on different ideas, opinions, beliefs and values when exploring topical and controversial issues and problems

b) Research, plan and undertake enquiries into issues and problems using a range of information and sources

c) analyse and evaluate sources used, questioning different values, ideas and viewpoints and recognising bias. Topical and controversial issues and problems: Political, social and ethical issues and problems can be controversial and sensitive, and can lead to disagreement. They should not be avoided, but need to be handled so that pupils develop skills in discussing and debating citizenship issues and considering points of view that are not necessarily their own.

Citizenship KS3- 2.3b Work individually and with others to negotiate, plan and take action on citizenship issues to try to influence others, bring about change or resist unwanted change, using time and resources appropriately.

Citizenship KS3- Take action: Action should be informed by research and investigation into a political, social or ethical issue or problem. This includes developing and using skills, while applying citizenship knowledge and understanding. Actions could include: presenting a case to others about a concern; conducting a consultation, vote or election; organising a meeting, event or forum to raise awareness and debate issues; representing the views of others at a meeting or event; creating, reviewing or revisiting an organisational policy; contributing to local community policies; lobbying and communicating views publicly via a website, campaign or display; setting up an action group or network; training others in democratic skills such as advocacy or campaigning.

Citizenship KS3- 2.3c Analyse the impact of their actions on communities and the wider world, now and in the future

Citizenship KS3- 3e. Actions that individuals, groups and organisations can take to influence decisions affecting communities and the environment.

Citizenship KS3- Environment: This provides opportunities to evaluate individual and collective actions that contribute to sustainable practices. Pupils could consider the different ethical implications of actions, policies and behaviour. This work can be linked with work in science and geography.

Citizenship KS3- 4g/i Curriculum opportunities should include opportunities to take into account legal, moral, economic, environmental, historical and social dimensions of different political problems and issues and to make links between citizenship and work in other subjects and areas of the curriculum.

Citizenship Key Stage 4

Citizenship KS4- 2.3c. Negotiate, decide on and take action to try to influence others, bring about change or resist unwanted change, managing time and resources appropriately

Citizenship KS4- 3g. How information is used in public debate and policy formation, including information from the media and from pressure and interest groups

Citizenship KS4- 3i. Policies and practices for sustainable development and their impact on the environment.

Citizenship KS4- Policies and practices for sustainable development: This includes how the policies of local and national government and of organisations can ensure that future generations

can meet their needs, and the ways in which individuals and groups can influence these policies through action.

Citizenship KS4- 3m. The UK's role in the world, including in Europe, the European Union, the Commonwealth and the United Nations

Citizenship KS4- 4h. Take into account a range of contexts, such as school, neighbourhood, local, regional, national, European, international and global, as relevant to different topics

Citizenship KS4- Campaigning: Campaigning is an important example of a community based citizenship activity. Students learn about democratic processes and how to influence those in power from being involved in existing campaigns and from running their own. They learn how to participate positively in public life in ways that are safe, responsible and within the law.

Citizenship KS4- Media and ICT: This includes: using different media and ICT to communicate ideas, raise awareness, lobby or campaign on issues; using and interpreting a wide range of sources of information during the course of enquiries and research; and learning how different media inform and shape opinion. Students need to evaluate the extent to which a balanced or partial view of events and issues is presented.

Design and Technology Key Stage 3

Design and Technology Key Stage 3 1.1a -Understanding that designing and making has aesthetic, environmental, technical, economic, ethical and social dimensions and impacts on the world. Environmental: This includes opportunities to explore issues relating to sustainability.

English Key Stage 3

English KS3- 2.2a. extract and interpret information, events, main points and ideas from texts

English KS3- 2.2b. Infer and deduce meanings, recognising the writers' intentions

English KS3- 3.3e. The forms for such writing should be drawn from different kinds of: ie stories, poems, play scripts, autobiographies, screenplays, diaries, minutes, accounts, information leaflets, plans, summaries, brochures, advertisements, editorials, articles and letters conveying opinions, campaign literature, polemics, reviews, commentaries, articles, essays and reports.

English KS3- Cross-curricular links with other subjects: These include using reading skills developed in English in other subjects (eg assessing the usefulness of texts and distinguishing between fact and opinion when analyzing websites in ICT) or using themes and ideas from other subjects to provide a purposeful context for reading in English (eg selecting and comparing information on an issue of local importance raised in citizenship).

Geography Key Stage 3

The study of geography stimulates an interest in and a sense of wonder about places. It helps young people make sense of a complex and dynamically changing world. It explains where places are, how places and landscapes are formed, how people and their environment interact, and how a diverse range of economies, societies and environments are interconnected. It builds on pupils' own experiences to investigate places at all scales, from the personal to the global.

Geography Key Stage 3 -Scale: Scale influences the way we think about what we see or experience. Any geographical enquiry benefits from being viewed from a range of scales to develop an understanding of how these scales are interconnected.

Geography Key Stage 3 -1.7a Understanding that the physical and human dimensions of the environment are interrelated and together influence environmental change.

Geography Key Stage 3 -Exploring sustainable development and its impact on environmental interaction and climate change. Environmental interaction and sustainable development: Understanding the dynamic interrelationship between the physical and human worlds involves appreciating the possible tensions between economic prosperity, social fairness (who gets what, where and why), and environmental quality (conserving resources and landscapes and preventing environmental damage). The interaction of these factors provides the basis for geographical study of the environment and understanding of sustainable development.

Geography Key Stage 3 -1.7b Appreciating how people's values and attitudes differ and may influence social, environmental, economic and political issues, and developing their own values and attitudes about such issues.

Geography Key Stage 3 -2.1b Collect record and display information

Geography Key Stage 3 -2.1g Solve problems and make decisions to develop analytical skills and creative thinking about geographical issues.

Geography Key Stage 3 -2.2a Select and use fieldwork tools and techniques appropriately, safely and efficiently.

Geography Key Stage 3 -2.3a Use atlases, globes, maps at a range of scales, photographs, satellite images and other geographical data

Geography Key Stage 3 -2.3b Construct maps and plans at a variety of scales, using graphical techniques to present evidence.

Geography Key Stage 3 -3b A range of investigations, focusing on places, themes or issues

Geography Key Stage 3 -3f Physical geography, physical processes and natural landscapes

Geography Key Stage 3 -3h Interactions between people and their environments, including causes and consequences of these interactions, and how to plan for and manage their future impact.

Geography Key Stage 3 -4b Explore real and relevant contemporary contexts

Geography Key Stage 3 -4d Use varied resources, including maps, visual media and geographical information systems

Geography Key Stage 3 -4e Undertake fieldwork investigations in different locations outside the classroom, individually and as part of a team

Geography Key Stage 3 -4i Make links between geography and other subjects, including citizenship and ICT, and areas of the curriculum including sustainability and global dimension.

Geography Key Stage 3 -Personal experiences of geography: This involves using pupils' practical and life experiences to extend and deepen their awareness and understanding of a range of geographical ideas, such as the significance of location, the nature of environments and sustainable development.

Geography Key Stage 3 -Fieldwork investigations: Fieldwork provides opportunities for pupils to analyse issues in real contexts. Fieldwork also links study to pupils' personal experiences of places and environments.

Geography Key Stage 3 -Different locations outside the classroom: Fieldwork should relate directly to topics studied, making the most of the local area as well as contrasting localities.

Information and Communication technology Key Stage 3

ICT KS3- 1.2a Exploring the ways that ICT can be used to communicate, collaborate and share ideas on a global scale, allowing people to work together in new ways and changing the way in which knowledge is created.

ICT KS3- 1.3b Using ICT to model different scenarios, identifying patterns and testing hypotheses.

ICT KS3- 1.3c Manipulating information and processing large quantities of data efficiently.

ICT KS3- 1.4a Exploring how ICT changes the way we live our lives and has significant social, ethical and cultural implications.

ICT KS3- Developing models: This could include: • using a computer model to explore real and/or imaginary scenarios • exploring possibilities by answering 'What if...?' questions • testing and exploring cause and effect.

ICT KS3- 3e The impact of ICT on individuals, communities and society, including the social, economic, legal and ethical implications of access to, and use of, ICT.

Information and Communication technology Key Stage 4

ICT KS4- 1.2a Exploring the ways that ICT can be used to communicate, collaborate and share ideas on a global scale, allowing people to work together in new ways and changing the way in which knowledge is created.

ICT KS4- 1.3b Using ICT to model different scenarios, allowing people to identify patterns and test hypotheses.

ICT KS4- 3a. Use of increasingly demanding problems and more complex information from a wide range of sources in a variety of contexts

ICT KS4- 3c. Developing an understanding of the need to: keep information secure and minimise risks from computer viruses and other malicious practice

ICT KS4- 3d. The impact of ICT on individuals, communities and society, considering the social, economic, legal and ethical implications of access to, and use of, ICT.

Mathematics Key Stage 3

Mathematics Key Stage 3 -1.3b Understanding that mathematics is used as a tool in a wide range of contexts.

Mathematics Key Stage 3 1.3d Engaging in mathematics as an interesting and worthwhile activity.

Mathematics Key Stage 3 1.4a Knowing that mathematics is essentially abstract and can be used to model, interpret or represent situations.

Mathematics Key Stage 3 1.4b Recognising the limitations and scope of a model or representation.

Mathematics Key Stage 4

Mathematics Key Stage 4- 1.3b Understanding that mathematics is used as a tool in a wide range of contexts.

Mathematics Key Stage 4-Mathematics is used as a tool: This includes using mathematics as a tool for making financial decisions in personal life and for solving problems in fields such as building, plumbing, engineering or geography. Current applications of mathematics in everyday life include internet security, weather forecasting, modelling changes in society and the environment, and managing risk (eg insurance, investments and pensions). Mathematics can be used as a way of perceiving the world, for example the symmetry in architecture and nature and the geometry of clothing.

Mathematics Key Stage 4 2.3d Look at data to find patterns and exceptions

Mathematics Key Stage 4- Patterns and exceptions: Students should understand that random processes are unpredictable.

Science Key Stage 3

Science Key Stage 3- 1.1b Critically analysing and evaluating evidence from observations and experiments.

Science Key Stage 3- 1.2a Exploring how the creative application of scientific ideas can bring about technological developments and consequent changes in the way people think and behave.

Science Key Stage 3- 1.2b Examining the ethical and moral implications of using and applying science.

Science Key Stage 3- 2.1c Plan and carry out practical and investigative activities, both individually and in groups.

Science Key Stage 3- 2.2a Obtain, record and analyse data from a wide range of primary and secondary sources, including ICT sources, and use their findings to provide evidence for scientific explanations

Science Key Stage 3- 3.4c Human activity and natural processes can lead to changes in the environment.

Science Key Stage 3- 4d. Study science in local, national and global contexts, and appreciate the connections between these

Science Key Stage 3- 4e. Experience science outside the school environment, including in the workplace, where possible

Science Key Stage 3- 4g. Recognise the importance of sustainability in scientific and technological developments

Science Key Stage 3- Sustainability: This relates to the continuity of economic, social and environmental aspects of human society, as well as the non-human environment. It also incorporates sustainable development: meeting the needs of the present generation without compromising the ability of future generations to meet their needs. It could include examining issues surrounding the availability of finite resources, waste reduction and recycling, energy conservation and renewable energy resources, and environmental pollution.

Science Key Stage 3- 4i Prepare to specialise in a range of science subjects at key stage 4 and consider career opportunities both within science and in other areas that are provided by science qualifications

Science Key Stage 3- 4k Make links between science and other subjects and areas of the curriculum.

Science Key Stage 3- Career opportunities: The knowledge, skills and understanding developed through the study of science are highly regarded by employers. Many career pathways require qualifications in science, but science qualifications do not necessarily lead to laboratory-based occupations.

Science Key Stage 4

Science Key Stage 4- 1a How scientific data can be collected and analysed

Science Key Stage 4-1d That there are some questions that science cannot currently answer, and some that science cannot address.

Science Key Stage 4-2a Plan to test a scientific idea, answer a scientific question, or solve a scientific problem

Science Key Stage 4-2b Collect data from primary or secondary sources, including using ICT sources and tools

Science Key Stage 4-2c Work accurately and safely, individually and with others, when collecting first-hand data

Science Key Stage 4-2d Evaluate methods of collection of data and consider their validity and reliability as evidence.

Science Key Stage 4-3a Recall, analyse, interpret, apply and question scientific information or ideas

Science Key Stage 4-3b Use both qualitative and quantitative approaches

Science Key Stage 4-3c Present information, develop an argument and draw a conclusion, using scientific, technical and mathematical language, conventions and symbols and ICT tools.

Science Key Stage 4-4a About the use of contemporary scientific and technological developments and their benefits, drawbacks and risks

Science Key Stage 4-4b To consider how and why decisions about science and technology are made, including those that raise ethical issues, and about the social, economic and environmental effects of such decisions

Science Key Stage 4-4c How uncertainties in scientific knowledge and scientific ideas change over time and about the role of the scientific community in validating these changes.

Science Key Stage 4-8a The effects of human activity on the environment can be assessed using living and non-living indicators

Science Key Stage 4-8b The surface and the atmosphere of the Earth have changed since the Earth's origin and are changing at present

Science Key Stage 4-8c The solar system is part of the universe, which has changed since its origin and continues to show long-term changes.

PSHE Key Stage 3

PSHE Key Stage 3- Education for economic wellbeing and financial capability improves motivation and progression by helping pupils see the relevance of what they learn in school to their future lives. It expands their horizons for action by challenging stereotyping, discrimination and other cultural and social barriers to choice. It helps pupils to aim high.

PSHE Key Stage 3- Economic wellbeing and financial capability: This non-statutory programme of study brings together careers education, work-related learning, enterprise and financial capability. It supports the fifth outcome of Every Child Matters and also contributes to the other outcomes, particularly 'enjoy and achieve' and 'make a positive contribution'.

PSHE Key Stage 3- 1.1a Understanding that everyone has a 'career'.

PSHE Key Stage 3- 1.1b Developing a sense of personal identity for career progression.

PSHE Key Stage 3- 1.1c Understanding the qualities, attitudes and skills needed for employability.

PSHE Key Stage 3- 1.2c Understanding how to make creative and realistic plans for transition.

PSHE Key Stage 3- 2.1c Assess their needs, interests, values, skills, abilities and attitudes in relation to options in learning, work and enterprise

PSHE Key Stage 3- 2.2a Use a variety of information sources to explore options and choices in career and financial contexts

PSHE Key Stage 3- 2.2b Recognise bias and inaccuracies in information about learning pathways, work and enterprise

PSHE Key Stage 3- 2.2c Investigate the main trends in employment and relate these to their career plans.

PSHE Key Stage 4

PSHE Key Stage 4- 1.1a Understanding that everyone has a 'career'.

PSHE Key Stage 4-1 .1b Developing a sense of personal identity for career progression.

PSHE Key Stage 4- 1.1c Understanding the qualities, attitudes and skills needed for employability.

PSHE Key Stage 4- 1.3b Understanding the need to manage risk in the context of financial and career choices.