



Growing

Recommended year group: Year 7

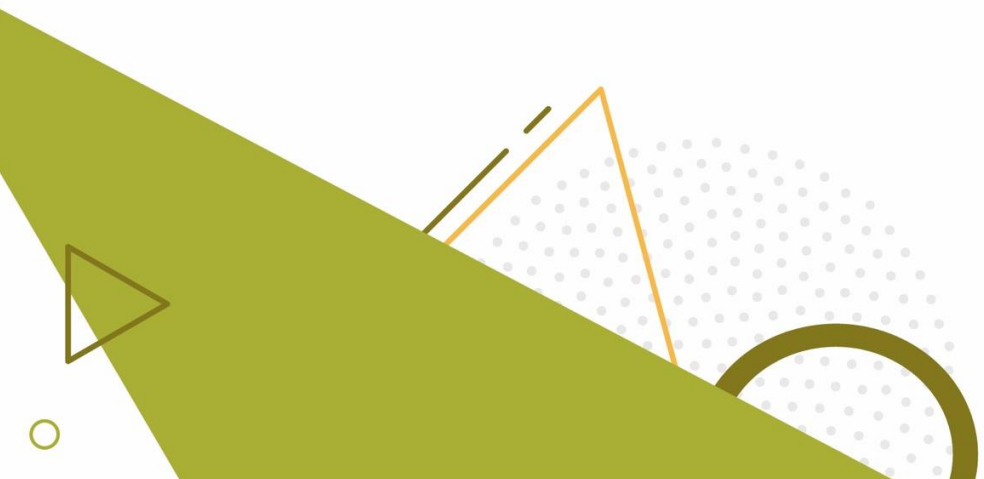
Subject focus: Science, Geography, History

Driving Question

What factors affect growth?

Introduction

Growing is a cross-curricular theme that helps pupils understand how change affects the world and their place within it. Through science, geography, history, English and computing, pupils explore how living things grow, how societies and populations change, and how people develop their identities over time. The theme encourages thoughtful discussion about evidence, choices and consequences, helping pupils recognise that growth can bring both opportunity and challenge. By the end of the journey, pupils develop the knowledge, skills and confidence needed to think critically about the world they are growing up in.



Assessment outcomes

Lesson 3 - Big Write: Letter to a Future Self
CL.WP.02 – Writing for purpose & audience

Lesson 5 - Introduction to Spreadsheets (LC)
TL.PU.02 – Analysing information using ICT

Lesson 8 - Big Read: Great Expectations
RL.LD.04 – Reading & language analysis
Explain how Dickens presents growing up using language and context.

READ

The Boy at the Back of the Class – tells the story of a refugee child finding safety and friendship at school, showing how empathy and kindness help individuals grow, belong, and find their place in the world

LISTEN

You're Dead To Me: Series 1, Episode 1 - The Aztecs - British Comedy Guide exploring how the Aztec civilisation grew into a powerful empire through belief, trade, and population growth, and how that growth brought both achievement and serious consequences when it collided with European expansion.

WATCH

BBC Bitesize – The Carbon Cycle

<https://www.bbc.co.uk/bitesize/topics/z9y942p/articles/z2p3mp3>

A clear, student-friendly explanation of how carbon moves through living things, the atmosphere, and the Earth

Key vocabulary

Audience, Carbon cycle, Cell, Chart, Colonisation, Combustion, Decomposition, Dependants, Direct address, Empire, Exploration, Formula, Hypothesis, Infrastructure, Interpretation, Population growth, Qualitative data, Quantitative data, Reliability, Resources, Social class, Spreadsheet, Tone, Urbanisation, Validity, Voice, Worksheet

Extended learning opportunities

Careers

These ideas can be used alongside the lessons in order to discover career pathways associated with key elements of learning from this theme.

Explore careers in Biology - <https://nationalcareers.service.gov.uk/job-profiles/biologist>

Explore careers in Healthcare - <https://nationalcareers.service.gov.uk/job-profiles/paediatrician>

Sites to visit

[Eden Project Rainforest Biome tour](#)

[A Virtual Tour of Reading Hospital: Neurology](#)

Interactive comparison tool

[PopulationPyramids.org – Compare Countries](#)

Allows side-by-side comparison of the **UK and India**, with sliders to show change over time.

Routes of Tudor and early modern explorers

[Tudor History – Exploration Maps](#)

Sir Francis Drake's circumnavigation

[Ages of Exploration – Drake's Route Map](#) Clear map of Drake's journey around the world,



People, Place and Time

The 'People, Place and Time' resources provide support to key knowledge throughout the theme. More specifically:

The People resources explore individuals whose ideas, discoveries, and actions shaped understanding of growth in science, education, cities, society, and opportunity, showing how human progress is driven by learning, creativity, evidence, and the desire to improve lives.

Place explores how towns and cities grow as populations increase, examining how human settlement, planning, and design shape environments and affect how people live together in changing places.

Family learning opportunities

Ideas for discussion and activities at home:

- Discuss the highlights of a holiday, journey or memorable experience and write down the key points as a diary entry. Include what happened, your opinions and how you felt.
- Observe the changes in a slice of bread over a period of a few days. Discuss why the bread has green bits on it after a few days.
- Grow some flowers/ plants/ vegetables together.

1. Great Expectations – Charles Dickens (abridged): Pip is a young boy who grows up poor and dreams of becoming a gentleman. When he unexpectedly comes into money, his life changes, but so do his values. The novel explores how growing up can involve loss of innocence, pressure from society, and difficult choices about identity and class.

2. Boy – Roald Dahl: This autobiographical book shares stories from Roald Dahl's childhood, both funny and painful. Dahl describes school, family life, and moments that shaped who he became. It shows how early experiences—good and bad—help people grow and influence their future.

3. Refugee – Alan Gratz: Three children from different time periods are forced to flee their homes because of conflict and danger. The book explores forced migration, resilience, and how children are made to grow up quickly during crises.

4. A Monster Calls – Patrick Ness: Conor is struggling with his mother's illness and his own fear and anger. A mysterious monster begins visiting him, telling stories that challenge how Conor sees the world. The novel explores emotional growth, grief, and the difficulty of facing the truth.

5. Millions – Frank Cottrell-Boyce: Two brothers find a bag full of money just before the UK changes its currency. The story explores moral choices, different ways of growing up, and how money affects people's values.

6. The Explorer – Katherine Rundell: After surviving a plane crash in the Amazon rainforest, four children must learn how to survive alone in a dangerous environment. As they face challenges, they develop courage, independence, and teamwork. The book shows personal growth through survival and discovery.

7. Holes – Louis Sachar: Stanley is sent to a detention camp where boys dig holes every day as punishment. As secrets from the past are uncovered, Stanley begins to understand injustice, friendship, and responsibility. The novel explores how challenges can lead to personal growth and change.

8. Private Peaceful – Michael Morpurgo: Told through the memories of a young soldier on the eve of execution in the First World War, the story reflects on childhood, family, and the loss of innocence. It explores how war forces people to grow up too quickly and the human cost of conflict.

9. The Boy Who Harnessed the Wind – William Kamkwamba: Based on a true story, William grows up in Malawi and uses science and creativity to build a windmill to help his village survive famine. The book shows how knowledge, determination, and problem-solving can enable growth even in hardship.

10. Journey to the River Sea – Eva Ibbotson: Maia is sent to live with distant relatives in the Amazon rainforest after losing her parents. Surrounded by unfamiliar cultures and environments, she learns independence and self-confidence. The story explores personal growth through travel, loss, and belonging.

Lessons

Lesson title	Subject	Essential knowledge/concepts	Competencies	National curriculum coverage
Lesson 1: Decay and the Carbon Cycle	Biology	Describe how carbon moves through the carbon cycle and the role of decay. Explain the processes of photosynthesis, respiration, decomposition and combustion. Apply knowledge of the carbon cycle to model and describe real-world scenarios.	SC.CS.01 Using Scientific Ideas	KS3 Science – Biology: Photosynthesis: The reactants in, and products of, photosynthesis, and a word summary for photosynthesis.
Lesson 2: Decay Experiment Part 1	Biology	Plan and carry out a simple scientific investigation into decomposition. Identify and define key scientific terms such as <i>decompose</i> , <i>hypothesis</i> , <i>method</i> , <i>prediction</i> , and <i>variable</i> . Write a clear and structured scientific method using the correct format.	SC.ES.01 Planning Scientific Enquiries	KS3 Science: Working scientifically: Experimental skills and investigations Biology: Aerobic and anaerobic respiration in living organisms, including the breakdown of organic molecules to enable all the other chemical processes necessary for life. The differences between aerobic and anaerobic respiration in terms of the reactants, the products formed and the implications for the organism.
Lesson 3 - Big Write: Letter to your future self	English	Identify the key features of a personal letter. Develop personal letter writing skills. Use an author's voice to create an effective tone.	CL.WP.02: Produce clear and coherent writing in which the development, organisation, and style are appropriate to task, purpose, and audience (voice)	KS3 English: Plan, draft, edit and proof-read through: amending the vocabulary, grammar and structure of your writing to improve its coherence and overall effectiveness

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Lesson 4: Population growth and its effects	Geography	Look at different data about the world's population. Describe how the population has changed over time and name the indicators used to measure it (such as birth rate and death rate). Identify the effects of population growth. Explain how population growth can affect a country.	SE.GE.02 Demonstrate understanding of human geography concepts and their interrelationships with places, environments and processes. SC.PE.02 Develop data analysis and statistics skills through presenting and interpreting observations in order to make and evaluate reasoned conclusions that may lead to further investigation.	KS3 Geography: Understand the processes that give rise to key physical and human geographical features of the world. Are competent in the geography aims to ensure that all pupils: collect, analyse and communicate a range of data. Understand through the use of detailed place based exemplars at a variety of scales, the key processes in human geography relating to population and urbanisation.
Lesson 5: Introduction to spreadsheets	Computing	Identify and describe the components of a spreadsheet. Use simple formulas in a spreadsheet. Create and interpret graphs and diagrams for simple data.	TL.PU.02 Analysing Information Using ICT (Excel)	Computing: The national curriculum for computing aims to ensure that all pupils: are responsible, competent, confident and creative users of information and communication technology.
Lesson 6: Decaying Experiment: Part 2	Science	Evaluate the results of a scientific investigation. Explain our findings in a clear and structured conclusion. Use data to support our explanations.	SC.ES.03: Collecting Data SC.PE.03: Making and Explaining Conclusions	KS3 Science: Working scientifically: Experimental skills and investigations, Analysis and Evaluation.

Lesson title	Subject	Essential knowledge/concepts	Competencies	National curriculum coverage
Lesson 7: How does a country grow? – exploration to conquest	History	Describe key Tudor and Stuart explorers and colonists. Explain how Tudor exploration and colonisation changed England and the New World Explain how the actions of individual explorers and colonists led to trade, settlement or conflict.	SE.HS.01 Structuring, organising and deploying historical knowledge, using historical vocabulary SE.HS.04 Using historical interpretations	History: The development of Church, state and society in Britain 1509-1745: Elizabethan religious settlement and conflict with Catholics (including Scotland, Spain and Ireland); first contact with India. Students should discern how and why contrasting arguments and interpretations of the past have been constructed.
Lesson 8: Big Read: <i>Great Expectations</i>	English	Identify Dickens’ attitude towards growing up. Explain a key theme in a literary extract. Analyse Dickens’ language.	RL.ID.02 Cite specific textual evidence to support conclusions drawn from the text. RL.LD.04: Identify and interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyse how they affect meaning or tone.	KS3 English: Develop an appreciation and love of reading, and read increasingly challenging material independently through a pre-1914 text. Read critically through knowing how language, including figurative language, vocabulary choice, grammar, text structure and organisational features, presents meaning.
Lesson 9: Careers in Health	Careers	Identify personal preferences around working in the Health sector. Describe the careers that are available in the NHS which fit your interests. Investigate the qualities needed to work in these areas.	PD.CA.02: Experiencing the world of work.	Gatsby Benchmark 2 – Every student, and their parents, should have access to good quality information about future study options and labour market opportunities. Gatsby Benchmark 4 – All teachers should link curriculum learning with careers.