Computer Science

Topic	Term	Content/skills developed	Reflection on previous learning	Qatar National Identity links
Python Programming	2	Variables, inputs/outputs, loops, and conditions. Writing and running basic programs. Debugging, logical thinking.	Develops from block coding in Year 7 (Scratch, flowcharts). Prepares students for more advanced Year 9 programming concepts.	Connects to Qatar's technology innovation agenda. Promotes problem-solving and computational thinking in line with Vision 2030.
Binary Conversions	2	Converting between decimal and binary. Understanding binary in computers (on/off, 1s and 0s). Introduction to ASCII and data representation.	Builds on Year 7 basic understanding of how computers store information. Prepares for Year 9 data representation and theory units.	Helps students understand the "language of computers" that drives Qatar's digital transformation. Encourages curiosity in the science behind smart tech and cybersecurity.

English

Topic	Term	Content/skills developed	Reflection on previous learning	Qatar National Identity links
Novel: A Monster Calls	2	• Themes of grief, loss, truth, courage, and imagination; understanding character relationships and the use of fantasy to explore real emotions. • Close reading, inference, prediction, and analysis of language, symbolism, and atmosphere.	• Students can write for a specific audience and purpose, using correct format, clear organisation, and accurate spelling, punctuation, and grammar. • They have developed persuasive writing skills, using emotive language, rhetorical questions, and logical structure, supported by drafting, editing, and peer assessment.	• Promotes emotional strength, resilience, and coping with adversity, reflecting Qatar's values of perseverance and inner strength. • Highlights the importance of family, care, and community support, central to Qatari culture and social responsibility.
Novel: A Monster Calls	2	• Analytical and creative writing, including structured paragraphs, use of evidence, and descriptive language to convey mood and emotion. • Empathy, reflection, emotional awareness, and the ability to express personal responses respectfully and thoughtfully.	• Through studying Gothic literature, students can analyse atmosphere, symbolism, character, and setting, skills that directly support understanding the mood and themes of *A Monster Calls*. • Students have strengthened their close-reading, inference, and interpretation skills, helping them explore deeper meanings, emotions, and writer's intent in the novel.	• Encourages reflection, empathy, and moral courage, supporting Qatar's vision of developing emotionally intelligent, ethical, and thoughtful citizens. • Explores respect for stories, wisdom, and guidance from elders, linking to Qatar's strong emphasis on heritage, tradition, and storytelling.

Mathematics

Topic	Term	Content/skills developed	Reflection on previous learning	Qatar National Identity links
Decimals	2	1. Place value with decimals to thousandths and beyond. 2. Reading and writing decimals in words and digits. 3. Ordering, comparing and rounding decimals to specified places. 4. Addition and subtraction with decimals (align decimal points). 5. Multiplication and division with decimals (shifting decimal places). 6. Converting between fractions, decimals and percentages. 7. Multiplying and dividing by powers of 10. 8. Using decimals in measurement and money contexts. Examples: 9. Place value: 4.237 is 4 units, 2 tenths, 3 hundredths, 7 thousandths. 10. Add: 2.35 + 0.7 = 3.05. 11. Multiply: 4.2 x 0.5 = 2.1. 12. Divide: 12.6 ÷ 0.3 = 42. Work: multiply numerator and denominator by 10 to get 126 ÷ 3 = 42. 13. Convert fraction to decimal: 3/8 = 0.375.	Connects with place value, fractions, and money in Year 6.	Qatari riyal currency (riyals and dirhams), fuel consumption and prices in Qatar.
Angles	2	1. Naming angles: acute, right, obtuse, straight, reflex, complete. 2. Measuring and drawing angles with a protractor and estimating angles. 3. Angle facts: angles on a straight line sum to 180 degrees, around a point sum to 360 degrees, vertically opposite angles equal. 4. Angles in triangles sum to 180 degrees; in quadrilaterals sum to 360 degrees. 5. Angle properties in parallel lines: alternate, corresponding and co-interior angles. missing angle = 180 - (45 + 60) = 75 degrees. 6. Parallel lines: If one corresponding angle is 110 degrees then the matching corresponding angle is 110 degrees.	Builds on basic shape recognition and introduction to right angles in Year 6.	Qatari architecture (e.g., Islamic geometric patterns in mosques, Museum of Islamic Art), modern buildings in Doha with unique angle designs.
Sequences	2	1. Recognising numeric and geometric patterns: term-to-term and position-to-term descriptions. 2. Generating terms of arithmetic sequences and finding common difference. 3. Finding the nth term of simple linear sequences (an = a + (n-1)d form). 4. Recognising simple geometric sequences and simple quadratic sequences (intro to square numbers). 6. Sequence 3, 7, 11, 15. Common difference = 4. nth term = 4n - 1. Check: n=1 gives 3. 7. Sequence 2, 4, 8, 16 is geometric with ratio 2. 5th term = 32. 8. Squares sequence 1, 4, 9, 16, nth term = n^2. 9. Given nth term 5n + 2, find 10th term = 5*10 + 2 = 52	Extends number pattern recognition from Year 6 (odd/even, multiples).	Patterns in Qatari heritage, such as Arabic mosaic designs, carpets, and repeated geometric art.

Shapes	2	1. Classifying 2D shapes (triangles, quadrilaterals, polygons) and 3D shapes (prism, pyramid, sphere, cylinder, cone). 2. Identifying properties: sides, angles, vertices, edges, faces, symmetry lines, parallel sides. 3. Distinguishing regular and irregular shapes, convex and concave polygons. 4. Understanding nets of 3D shapes and how faces form solids. 5. Identifying types of triangles: equilateral, isosceles, scalene, right-angled. 6. Using coordinates to describe positions of shapes and simple constructions. Examples: 7. A cube has 6 faces, 12 edges and 8 vertices. 8. Triangle classification: triangle with sides 5, 5, 8 is isosceles because two sides equal. 9. Symmetry: An equilateral triangle has 3 lines of symmetry.	Builds on knowledge of 2D and 3D shapes, polygons, and symmetry from Year 6.	Explore Qatari landmarks (e.g., dhow boats, stadiums built for FIFA World Cup, Souq Waqif structures) and traditional Islamic geometric art.
Area	2	1. Perimeter and area for rectangles and squares: area = length x width. 2. Area of a triangle: area = 1/2 x base x height. 3. Area of a parallelogram: area = base x height. 4. Area of a trapezium (trapezoid): area = (sum of parallel sides / 2) x height. 5. Area of compound shapes by splitting into simple shapes. 6. Units of area and converting between mm2, cm2, m2 and km2. 7. Using area in problem solving and real contexts. Examples: Rectangle area: length 7 and width 4 gives area 7 x 4 = 28 square units. Triangle area: base 6 and height 4 gives area = 1/2 x 6 x 4 = 12 square units. Trapezium area: parallel sides 6 and 10, height 4. Area = ((6 + 10) / 2) x 4 = (16 / 2) x 4 = 8 x 4 = 32.	Builds on rectangle and square area from Year 6.	Calculate the area of stadium pitches (Qatar World Cup), desert tents, majlis carpets, or museum floor designs.

Science

Topic	Term	Content/skills developed	Reflection on previous learning	Qatar National Identity links
Atoms and the Periodic Table	2	• Describe the structure of an atom. • Classify an element as a metal or non-metal given its properties and describe some contributions of Medeleev to the development of the Periodic Table. • Analyze the Periodic Table and describe the properties of elements in Group 2 and draw the electronic structure of the atoms for the first 18 elements. • Use ratios to determine chemical formulae. • Define covalent and ionic bonding.	Year 6 & Term 1 Year 7 – Understanding atoms, elements, compounds, and metals vs non-metals; basic periodic table familiarity; particle model foundations.	• Connect atomic structure and periodic trends to Qatar's industries such as petrochemicals, materials science, and energy production. • Highlight Qatar's investment in scientific research and innovation, including chemistry-based technologies.
Separation techniques	2	• Define a pure substance in science and use a temperature-time graph to determine if a melting substance is pure. • Define a mixture and compare it to a compound. • Define the terms: solution, solute, solvent, dissolving and solubility. • Use the particle model to describe the process of dissolving. • Predict the mass of a solution from given masses of a solute and solvent. • Describe how temperature affects solubility. • Describe and explain filtration, evaporation, distillation, chromatography and other various separation techniques that can be used in the home.	Year 5 & 6 – Knowledge of mixtures, solutions, solubility, and basic particle model; introductory filtration/evaporation in primary science.	• Link distillation and evaporation to Qatar's large-scale desalination plants**,** essential for national water supply. • Connect separation techniques to oil and gas refining processes central to Qatar's economy. • Explore traditional methods used historically in the region (e.g., filtering water, evaporating seawater for salt).

Metals and other materials	2	• Write word equations for the reaction of a metal with an acid, metal and water and metal with oxygen when given the names of the reactants and products. • Use a pattern to predicts the products of the reaction of a metal with an acid, metal and water and a metal with oxygen. • Compare the reactivity of metal with acids, water and oxygen. • Describe a displacement reaction and predict the products of the reactions. • Describe steps needed to extract metals from its ore and calculate the mass of metal in an ore. • Describe ceramics, polymers, composites and synthetic polymers.	Year 6 & early Year 7 – Understanding metals/non-metals, chemical reactions, and particle behaviour; simple material classification.	• Link metals and materials to Qatar's construction sector, including the use of steel, aluminium, and composites in stadiums and national infrastructure. • Highlight sustainability initiatives in Qatar focusing on innovative materials and recycling.
Forces and motion	2	• Describe and use Newton's third law to explain how forces arise and the motion of objects. • Describe the link between forces and fields and do calculations involving weight, mass and gravitational field strength. • Use a distance-time graph to calculate speed. • Explain equilibrium and circular motion in terms of forces. • Describe the meaning of resultant force, vector and scalar as well as how to calculate resultant forces. • Calculate acceleration and describe motion using a speed-time graph.	Year 5 & 6 – Basic forces (push, pull, friction), motion concepts, simple measurements; introduction to graphs and speed.	• Connect forces and motion to Qatar's modern transport systems (Doha Metro, Lusail Tram, Hamad International Airport). • Relate circular motion and forces to cultural sports like camel racing, falconry, and dhow sailing.

Geography

Topic	Term	Content/skills developed	Reflection on previous learning	Qatar National Identity links
Introduction to Coasts	Term 2	Suggesting solutions to coastal problems (e.g., erosion, flooding). Developing problem-solving skills.	Applying knowledge of how people interact with environments (from Urbanisation unit) to a new physical setting.	**Coastal Development:** Relating coastal problems to Qatar's extensive coastline, home to critical infrastructure (Hamad Port, LNG plants), cities (Doha), and tourism (Pearl, beaches). Discussing national vulnerability.
Coastal Processes: Erosion	Term 2	Describing the four processes of coastal erosion (hydraulic action, abrasion, attrition, solution). Understanding process and force.	Building on the concept of physical processes shaping the landscape, similar to river erosion but in a new environment.	**Coastal Landforms:** Linking erosion processes to the formation of Qatar's own coastal features, such as the limestone cliffs at Zekreet, demonstrating that erosion is a natural, ongoing process.
Coastal Landforms of Erosion & Deposition	Term 2	Identifying erosional landforms (headlands, bays, arches). Explaining the process of longshore drift and resultant depositional landforms (spits, bars).	Using skills of identifying landforms from maps/photos developed in the Rivers unit and applying them to coastal settings.	**Longshore Drift & Management:** Connecting longshore drift to the movement of sand along Qatar's coasts and the need for management to protect beaches and property, a key issue for a coastal nation.
Coastal Flooding: Bangladesh	Term 2	Describing the social, economic, and environmental effects of coastal flooding in a Low-Income Country. Developing empathy and understanding of global inequality.	Contrasting the impacts of a hazard in an LIC with the HIC case studies from the Urbanisation unit, deepening understanding of global development disparities.	**Global Citizenship & Aid:** Highlighting Qatar's role in international humanitarian aid and disaster relief (e.g., through Qatar Fund For Development), linking to a real-world response to such disasters.
Coastal Management	Term 2	Describing hard engineering strategies (sea walls, groynes) used to protect coastlines. Evaluating different approaches.	Building on the concept of engineering solutions from the Rivers unit and applying it to a different geographical hazard.	**Qatar's Coastal Defence:** Linking hard engineering to visible examples in Qatar like the Corniche sea wall, groynes at Al Wakra beach, and the massive land reclamation.

ACHIEVING TOGETHER

UK Case Study: River Tees	Term 2	Applying knowledge of river processes, landforms, and management to a specific UK case study. Synthesizing learning.	A direct application and consolidation of the river knowledge from Year 7, bridging the gap between last term's human geography and physical systems.	Comparative Geography: Appreciating the physical geography and management challenges of other countries, fostering a global perspective as part of Qatar's international outlook.
Introduction to Weather & Climate	Term 2	Defining weather and climate. Identifying and locating major world climate zones (e.g., arid, temperate).	Moving from the study of human population distribution to understanding one of the key physical factors (climate) that influences it.	Qatar's Climate: Immediately locating Qatar within the 'Arid' climate zone. Discussing the characteristics of a desert climate as a fundamental part of the national environment and identity.
Measuring Weather	Term 2	Evaluating the ways in which we measure weather elements (temperature, rainfall, wind speed/direction, air pressure). Developing practical science skills.	Applying skills of data collection and interpretation from previous units to a new, observable context.	Qatar Meteorology: Linking to the work of the Qatar Meteorology Department, whose forecasts are vital for daily life, agriculture, shipping, and aviation in the country.
Weather Systems & Climate Controls	Term 2	Defining and describing anticyclones (high pressure) and depressions (low pressure). Explaining how sunlight and pressure belts create global climate patterns.	Building a more complex understanding of the causes behind the climate zones learned in the previous lesson.	The Sub-Tropical High: Explaining that Qatar's dominant climate is directly influenced by the sub-tropical high-pressure belt, which leads to clear skies and low rainfall.
Adaptations & Microclimates	Term 2	Categorising how plants and animals adapt to different climates. Suggesting how local factors (buildings, aspect, surface) create microclimates.	Linking the physical environment (climate) to its inhabitants, both natural and human, a theme from the Population unit.	Local Adaptations: Studying how native Qatari species (e.g., Ghaf tree, Oryx) are adapted to the arid climate. Analyzing microclimates in urban areas like Msheireb Downtown or Education City.
UK's Weather & Extreme Events	Term 2	Evaluating how to prepare for different weather types. Explaining the impacts of a specific extreme UK weather event (Beast from the East).	Understanding how a country's geography (like the UK's maritime location) determines its weather, contrasting with Qatar's continental influences.	National Preparedness: Comparing UK weather preparedness to Qatar's strategies for dealing with its own extreme weather events, such as heatwaves and dust storms (e.g., public health advice).
UK's Wind & Rain	Term 2	Evaluating the impacts of wind energy projects. Explaining the effects and impacts of rainfall (both positive and negative).	Connecting physical geography (weather) to human geography (energy, water resources) and sustainability.	Qatar's Energy & Water Transition: Contrasting UK wind energy with Qatar's focus on solar power (e.g., Al Kharsaah Solar Plant) as part of QNV 2030. Linking rainfall discussion to Qatar's water scarcity and advanced drainage systems.
UK Case Study: 2004 Boscastle Floods	Term 2	Evaluating the social, economic, and environmental impacts of a flash flood in the UK. Synthesizing knowledge of weather, rivers, and management.	A final case study that brings together concepts of physical processes (heavy rain, river discharge), impacts (social/economic), and human responses from the entire unit.	Learning from Disasters: Discussing how studying international disasters helps all countries, including Qatar, improve their own hazard response plans and infrastructure resilience, a key part of national security.

History

Curriculum Map: Year 8 History – The Transatlantic Slave Trade				
The Roots of Slavery	2	Assessing the origins of slavery (historical, economic, racial). Understanding that slavery existed in many forms before the Transatlantic system.	Building on prior learning about power, empire, and social structures in earlier historical periods (e.g., Romans, Medieval).	**Historical Context & Human Dignity:** Introducing the concept that systems of exploitation have existed globally. Linking to Islamic teachings on the treatment of slaves and eventual manumission, providing a comparative religious and ethical perspective.
The Slave Triangle	2	Evaluating the historical and human consequences of the Triangular Trade. Mapping the economic system linking Europe, Africa, and the Americas.	Applying understanding of trade routes and economic systems from Geography (e.g., trade in the Development unit) to a historical, exploitative context.	**Global Interdependence & Ethics:** Analyzing how global trade networks can have devastating human costs. Connecting to Qatar's modern, ethical position in global trade and its commitment to international labor standards and human rights.
Africans' Experiences of Capture	2	Analyzing the experience of capture using primary and secondary sources (e.g., narratives, accounts). Developing source analysis skills with a focus on empathy and perspective.	Developing skills in evaluating different types of historical evidence, building on source work from previous units (e.g., the Angevins).	**Human Rights & Resilience:** Focusing on the violation of basic human rights. Linking to Qatar's national and international advocacy for the protection of vulnerable peoples and the importance of preserving human dignity.
The Middle Passage	2	Describing the conditions and treatment during the Middle Passage. Evaluating its human impact (mortality, trauma, dehumanization).	Understanding the scale and brutality of forced migration, contrasting with voluntary migration patterns studied in Geography.	**Compassion & Commemoration:** Highlighting extreme human suffering to foster empathy. Connecting to Qatar's role in humanitarian aid and its support for global education as tools to prevent such atrocities in the future.
Slave Auctions	2	Explaining the process of slave auctions. Evaluating how enslaved Africans were treated as commodities and property.	Examining the economic mechanisms of a dehumanizing system, building on concepts of trade and value.	**Dignity & Labor Rights:** Discussing the reduction of human beings to property. Contrasting with Qatar's ongoing labor reforms (e.g., the abolition of the Kafala system, minimum wage) which aim to protect worker dignity and rights.
Life on the Plantations	2	Analyzing and comparing living/working conditions for field slaves and house slaves. Understanding the varied experiences within the system of enslavement.	Building a nuanced understanding of daily life under oppression, comparing different social roles and hierarchies.	**Social Justice & Reform:** Examining exploitation and inequality. Linking to Qatar's vision for a just society (QNV 2030) that promotes human development and fair treatment for all residents, learning from historical injustices.
Slave Resistance	2	Evaluating different forms of resistance (e.g., sabotage, revolt, cultural preservation). Assessing their success, consequences, and symbolic importance.	Exploring agency and protest within systems of control, a theme that can be traced to other historical struggles for rights.	**Agency & the Pursuit of Justice:** Highlighting the courage and agency of oppressed people. Connecting to universal values of striving for freedom and justice, which are enshrined in Qatar's permanent constitution and national ethos.
The Abolition of Slavery	2	Analyzing the economic, social, and moral reasons for abolition. Evaluating the role of key individuals (e.g., Wilberforce,Equiano) and events (e.g., Haitian Revolution).	Understanding how significant historical change occurs through a combination of grassroots activism, economic shifts, and legislative action.	**Moral Leadership & Global Citizenship:** Studying a pivotal human rights campaign. Relating to Qatar's modern role in diplomatic advocacy, mediation, and supporting international human rights initiatives as a responsible global actor.

The Legacy of the Slave Trade	2	Evaluating the long-term effects (e.g., racism, economic disparity, cultural diffusion, diaspora). Understanding how history shapes the contemporary world.	Synthesizing the unit's learning to understand historical continuity and change, and the enduring impact of past events.	**National Vision & Inclusive Future:** Discussing how nations address historical legacies. Linking to Qatar's vision of building an inclusive, knowledge-based economy that learns from the past and fosters mutual respect among its diverse population, in line with QNV 2030.
The Roots of Slavery	2	Assessing the origins of slavery (historical, economic, racial). Understanding that slavery existed in many forms before the Transatlantic system.	Building on prior learning about power, empire, and social structures in earlier historical periods (e.g., Romans, Medieval).	**Historical Context & Human Dignity:** Introducing the concept that systems of exploitation have existed globally. Linking to Islamic teachings on the treatment of slaves and eventual manumission, providing a comparative religious and ethical perspective.
The Slave Triangle	2	Evaluating the historical and human consequences of the Triangular Trade. Mapping the economic system linking Europe, Africa, and the Americas.	Applying understanding of trade routes and economic systems from Geography (e.g., trade in the Development unit) to a historical, exploitative context.	**Global Interdependence & Ethics:** Analyzing how global trade networks can have devastating human costs. Connecting to Qatar's modern, ethical position in global trade and its commitment to international labor standards and human rights.

Music

Topic	Term	Content/skills developed	Reflection on previous learning	Qatar National Identity links
Classical Period	T2	Explore key features of Classical music: balance, form, harmony	Builds on Baroque study; compare stylistic differences	Highlight global musical evolution and how traditional Qatari music preserved unique identity
Romantic Period	T2	Explore emotion, dynamics, programmatic music in the Romantic era	Connects to expressive techniques and storytelling in music	Compare emotional storytelling in Romantic music to oral traditions and poetry in Qatar
Compare Composers – Themes & Style	T2	Compare styles and techniques of historical composers	Develops critical listening and music vocabulary	Explore how music reflects identity — national pride in both Western and Qatari traditions
Ukulele – Advanced Chords	T2	Play complex chord shapes (G, Dm, E7, etc.); rhythm strumming patterns	Builds on Year 7 ukulele and chord progressions	Compose or play a traditional song with modern harmony; link to Qatari National Day
Performance Task – Historical Piece	T2	Small group performance of music from a studied period	Combines performance, history, and ensemble skills	Perform piece that represents cultural identity or heritage, discuss parallels in Qatar

PE

Topic	Term	Content/skills developed	Reflection on previous learning	Qatar National Identity links
Football	2	-Passing, dribbling, shooting, and ball control -Movement into space and basic positioning -Teamwork, communication, and game rules -Application of skills in small-sided and full-game situations	-Builds on fundamental movement skills and coordination developed in earlier years -Reinforces invasion game concepts such as space, attack, and defence -Develops confidence in applying skills under pressure	-Highlight football's importance in Qatar, including hosting the FIFA World Cup 2022 and Arab Cup -Promote pride in national sporting achievements and community football participation -Emphasise values of teamwork, respect, and fair play in Qatari culture
Handball	2	-Passing, catching, dribbling, and shooting techniques -Movement, spacing, and attacking/defending roles -Decision making and teamwork in game situations -Understanding and applying handball rules safely	-Builds on invasion game skills learned in football and previous units -Reinforces hand-eye coordination and spatial awareness -Develops tactical understanding and cooperation within a team	-Promote participation in school and community handball competitions in Qatar -Highlight the role of sport in developing healthy, active citizens -Emphasise values of discipline, cooperation, and respect within Qatari society

Art

Topic	Term	Content / Skills	Reflection on Previous Learning	National Identity Link
Collaborative Still Life (Drawing)	2 (Y8)	Still life compositions, Analysing artworks of prominent still life artist • Grid drawing, • group work	Build skills used to observe everyday objects.	Cultural symbolism, traditional and historical items
Still Life Painting	2 (Year 8)	Still life compositions, Analysing artworks of prominent still life artists	Encourages students to connect technical skills (drawing, shading, color mixing) with creative decision-making. Encourages students to connect technical skills (drawing, shading, color mixing) with creative decision-making.	Students select objects that reflect local culture and heritage (e.g., traditional coffee pots dallah, dates, textiles, pearls, or desert plants)
Monochromatic Art	2 (Y8)	Introduction to monochromatic color schemes (using tints, tones, and shades of a single color). • Exploration of value, contrast, and mood in artworks. • Techniques: shading, blending, layering paint. • Study of artists who use monochromatic palettes.	Builds on primary-level knowledge of basic color theory and drawing skills. • Reinforces understanding of light/dark values from earlier sketching exercises. • Encourages deeper observation of form and texture without distraction of multiple colors.	Students create monochromatic works inspired by local landscapes, architecture, or cultural motifs. • Reflection on how simplicity in color can highlight cultural identity and symbolism.