Houses and Homes in the Curriculum for Excellence

A comprehensive guide to planning a programme of learning and teaching linking to many subject/topic areas of the curriculum.

Devised by teachers and other education professionals working in partnership with the Aberdeen Urban Studies Trust

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Houses and Homes

Built Environment Education in the context of the Curriculum for Excellence

Ideas for planning a structured, integrated, cross-curricular, inter-disciplinary programme of learning and teaching

Houses and Homes

Ideas for planning a structured, integrated, cross-curricular, inter-disciplinary programme of learning and teaching in the context of the Curriculum for Excellence.

Introduction

Over the years Aberdeen Environmental Education Centre (AEEC) has produced several resource booklets containing ideas for learning and teaching dealing with energy education, nutrition, farming and food production. Having been very well received by teachers, and to coincide with the introduction of the new curriculum for Scotland, we have devised this booklet to encourage teachers to plan cross-curricular, inter-disciplinary programmes of work dealing with the built environment and, in particular, houses.

'Houses and Homes' is a popular context for learning and teaching especially within primary schools. Set within the framework of Scotland's Curriculum for Excellence, the booklet deals with all the subject areas where there is potential for studying aspects of houses and homes. It will enable teachers to plan their own programmes of work by selecting appropriate areas of study which fulfil their own particular curricular objectives.

Learning and teaching resources produced by AEEC, designed for use by pupils and teachers, can be downloaded from www.austrust.org.uk, the website of the Aberdeen Urban Studies Trust (AUST) which has been formed to carry on the work of the Aberdeen Environmental Education Centre. Pupil resources (personal record sheets) deal with the design of houses and have been devised for use in the environment around school. They are suitable for pupils from early stages in primary school through to early secondary. The 'My House' resource provides pupils with information about house design and the personal record sheets to compare with their own home.

Websites:

Engaging Places contains a wealth of information about using the built environment for learning and teaching, and is a useful starting point for additional ideas and resources.
http://www.engagingplaces.org.uk

Other very good sites include:

http://www.ewht.org.uk/Pupils-study-World-Heritage-architecture.aspx
http://ihpe.mhcat.cat/index.php
http://www.photoarch.org.uk/photoarch/default.aspx
www.schoolzone.co.uk/resources/geog.html
www.cm.ac.uk/places/eu/html
http://pbs.org/wgbh/buildingsbig/lab/index.html
http://www.architecture.about.com/library/bl-basics.htl
http://architecture.about.com/cs/timeline
http://www.howstuffworks.com/toilet.htlm
www.nts.org.uk/learn/schools_resource.php
http://maps.nls.uk/
www.historic-scotland.gov.uk/learning
www.aberdeenheritage.org.uk/kidsfun.asp

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Aberdeen City Heritage Trust has worked on and helped fund the preparation of these teaching materials.

Help us to help you

Keep in contact with us through our e-mail at enquiries@austrust.org.uk
More information and latest developments can be viewed at www.austrust.org.uk where you can download our learning and teaching resources, and post comments.

3-18 A Curriculum for Excellence

Curriculum Levels

Level	Stage
Early	Pre-school and P1
First	To the end of P4, but earlier for some children
Second	To the end of P7, but earlier for some children
Third and Fourth	S1 to S3, but earlier for some. The fourth level broadly equates to SCQF level 4. Young people's programmes will not include all of the fourth level outcomes: in most curriculum areas, the fourth level experiences and outcomes are intended to provide possibilities for choice. (Further guidance is available within the Building the Curriculum series.)
Senior Phase	S4 to S6

STAGE	*LEVELS : Curriculum for Excellence 3 - 18*					*LEVELS : 5 - 14*	
Pre-School	***Early***						
P1	***Early***					*Level A*	*Early Stages*
P2	*Early*	***First***				*Level A*	*Early Stages*
P3		***First***				*Level A / B*	*Early Stages*
P4		***First***	*Second*			*Level B / C*	*Middle Stages*
P5		*First*	***Second***			*Level C / D*	*Middle Stages*
P6			***Second***			*Level C / D*	*Middle Stages*
P7			***Second***	*Third / Fourth*		*Level D / E*	*Upper Stages*
S1			*Second*	***Third / Fourth***		*Level E / F*	*Upper Stages*
S2				***Third / Fourth***		*Level E / F*	*Upper Stages*
S3				***Third / Fourth***			
S4					***Senior***		
S5					***Senior***		
S6					***Senior***		
College					*Senior*		

Cross-curricular, inter-disciplinary planning grid for: Upper Stages / Early Secondary

Science
Planet Earth
• discuss different types of energy used in homes or schools
e.g. solar, photo voltaic arrays, windmills
SCN 3-04b

Forces, Electricity and Waves
Forces
• look at the design of toilet cisterns and ways to reduce cistern capacity, without compromising effectiveness
SCN 2-08b

• investigate the use of photo voltaic cells in domestic and school applications
SCN 3-08a

Materials
Earth's Materials
• discuss the differences between materials with respect to energy conservation (insulation, utilisation of sunshine, heat storage), where and how they are used and why
• investigate why materials have been chosen for specific functions
e.g. slates for roofing, glass fibres for insulation, rubber for seals
SCN 2-17a

Materials
Chemical Changes
• investigate what emerges when burning:
wood, coal, smokeless fuel, oil, gas, paraffin
• investigate the chemical/heat transference processes involved in the operation of a refrigerator
SCN 3-19b

Social Studies
People in Society, Economy and Business
• discuss the appropriateness of any new development (new flats, football stadium) and whether it enhances or detracts from what is already in the neighbourhood
SOC 4-15a

• look at the impact of new housing estates on:
- the environment
- wildlife
- the lives of people
• identify a local area which requires conservation measures and draw up an action plan
SOC 3-15a

Social Studies
People, Past Events and Societies
• investigate the development of housing utilities:
- energy for power and lighting
- sanitation
SOC 3-01a

People, Place and Environment
• consider how we can make our homes more environmentally friendly in relation to:
- how waste is disposed
- energy efficiency
- water management

• investigate how pupils get from home to school
- consider the most environmentally-friendly method
SOC 3-08a

• people have been moving into cities and returning to live in areas outwith the centre of towns since the 19th century
- investigate how these movements have affected people and the environment
SOC 4-10a

Literacy and English
Listening and Talking
Creating Texts
• discuss the main social and environmental impact of a new football stadium development beside a housing suburb
- pupils take on various roles, prepare and argue their case
LIT 3-09a

Writing
Creating Texts
• draw up an action plan for an area which you feel requires conservation
LIT 3-29a

Topical Science
• investigate the science involved with carbon capture in coal-fired power stations
SCN 4-02b

Expressive Arts
Art and Design
• make a colour study of the room you like best in your home
- why do you like it?
EXA 3-03a

• look for and draw a new building in your area which you think does not fit in well with its surroundings
- draw the buildings/areas on either side of your chosen subject
EXA 3-04a

• make a doll's house
- 6 groups each working with a crisp box creating different rooms to be combined into a home
EXA 3-04a

Technologies
Technological Developments in Society
• investigate the best building materials for energy conservation
• find out the energy efficiency of building materials with respect to the sunshine, winds and temperatures in Scotland
• consider the use of the car and other forms of transport, and the implications on how we use places
• look at planning in different scales:
village, town, city
TCH 3-02a

Craft, Design, Engineering and Graphics Contexts for Developing Technological Skills and Knowledge
• design a finial for display on a particular building:
- begin by looking for these in the local environment and investigate the inspiration behind the design(many finials reflect natural shapes and forms)
TCH 3-15b

Cross-curricular, inter-disciplinary planning grid for: Middle Stages

Science
Planet Earth
Energy Sources and Sustainability
• compare outside and inside the classroom/home
• sort resources of heat, light and sound into natural and artificial
SCN 1-04a

Processes of the Planet
• consider how the states of the water cycle effects homes: rain, water, ice
• observe these effects, and how buildings cope
SCN 2-05a

Forces, Electricity and Waves
• investigate how shadows affect the area in and around the home
• think of ways to maximise daylight entering a building
SCN 2-11b

Materials
Properties and Uses of Substances
• compare how long it takes for sugar to dissolve in hot and cold water; find out if the temperature of the water affects the amount that can be dissolved
SCN 2-16b

Earth's Materials
• discuss the properties of common building materials
SCN 2-17a

Chemical Changes
• how is 'grey water' - water which has been used e.g. kitchen, bathroom (but not toilet) best used?
SCN 2-18a

Numeracy and Mathematics
Patterns and Relationships
• investigate patterns in the environment around school
MTH1-13a

Technologies
Technological Developments in Society
• consider what is used and recycled in the home
TCH 1-02a

• natural and man-made materials in housing comparisons: texture, weight, suitability
• look for contrasts in the local environment:
- colour, shape, building design, old, new, natural/man-made materials
TCH 2-01b

• fuels (differentiate between renewable and non-renewable) wood, charcoal, coal, peat, oil, oil substitutes (e.g. alcohol, vegetable oils)
TCH 2-02b

Craft, Design, Engineering and Graphics Contexts for Developing Technological Skills and Knowledge
• provide pupils with the opportunity to observe at home, in school, and in the built environment
TCH 2-15b

Social Studies
People, Place and Environment
• compare the environment around school with that of a contrasting area: city centre/rural; urban/suburban; coastal/inland
• pupils make a study of their own home or a home of their choice and its surroundings
SOC 2-07a

• examine the effect of bad weather on pupils' homes: flooding, falling trees, damage through high winds
• develop knowledge of the physical features of Scotland and how they affect the design of our homes
SOC 2-12a

People in Society, Economy and Business
• discuss the local area and how land is used for different purposes e.g. play areas, shopping, school, public parks, car parking, work
SOC 2-16a

Expressive Arts
Art and Design
• a figure drawing lesson of someone working with wood or stone:
- dress pupil as a joiner sawing or planing a piece of wood or a mason using a hammer and chisel
• colour studies of chalk, Cray-Pas crayon or paint of various types of brick/stone samples taken into school
EXA 2-04a

Drama
• pupils devise a production on the work of a construction company through the ages
EXA 2-13a

Social Studies
People, Past Events and Societies
• through a study of Early Settlers look at building materials, house styles, locations, needs, and compare with today
• look at examples of local heritage; study old maps of the local area and compare with today
• interview elderly residents about the local area long ago, and the different styles of homes
• compile a scrap book/DVD of change in building design in the local area
• look at features of housing through time
SOC 2-01a

• look at features of housing through time: Georgian, Victorian, Edwardian and modern periods
SOC 2-02a

• comparison between past/present construction of houses, roofing materials, glass, interior design, waterproofing, insulation
SOC 2-04a

Literacy and English
Writing
Creating Texts
• working in groups pupils become estate agents operating during different times in history
- language, and reference to materials will reflect house construction through the ages
LIT 2-28a

Science

Early	First	Second	Third	Fourth	Senior
Learning in the sciences will enable me to : • *develop curiosity and understanding of the environment and my place in the living, material and physical world* • *demonstrate a secure knowledge and understanding of the big ideas and concepts of the sciences* • *develop skills for learning, life and work* • *develop the skills of scientific inquiry and investigation using practical techniques* • *develop skills in the accurate use of scientific language, formulae and equations* • *apply safety measures and take necessary actions to control risk and hazards* • *recognise the impact the sciences make on my life, the lives of others, the environment and on society* • *recognise the role of creativity and inventiveness in the development of the sciences* • *develop an understanding of the Earth's resources and the need for responsible use of them* • *express opinions and make decisions on social, moral, ethical, economic and environmental issues based upon sound understanding* • *develop as a scientifically-literate citizen with a lifelong interest in the sciences* • *establish the foundation for more advanced learning and future careers in the sciences and the technologies.*			*Learning in the sciences will enable me to :* • *develop curiosity and understanding of the environment and my place in the living, material and physical world* • *demonstrate a secure knowledge and understanding of the big ideas and concepts of the sciences* • *develop skills for learning, life and work* • *develop the skills of scientific inquiry and investigation using practical techniques* • *develop skills in the accurate use of scientific language, formulae and equations* • *apply safety measures and take necessary actions to control risk and hazards* • *recognise the impact the sciences make on my life, the lives of others, the environment and on society* • *recognise the role of creativity and inventiveness in the development of the sciences* • *develop an understanding of the Earth's resources and the need for responsible use of them* • *express opinions and make decisions on social, moral, ethical, economic and environmental issues based upon sound understanding* • *develop as a scientifically-literate citizen with a lifelong interest in the sciences* • *establish the foundation for more advanced learning and future careers in the sciences and the technologies.*		

Science

Planet Earth

Energy Sources and Sustainability

First	Second	Third
I am aware of different types of energy around me and can show their importance to everyday life and my survival. ***SCN 1-04a*** **• discuss electricity as a power source for heating, cooking and lighting** **• using their own senses: identify feelings and sources of heat, light and sound** **- compare outside and inside the classroom / home** **- sort sources of heat, light and sound into natural and artificial** **• how do we keep ourselves / houses / classes warm?** **• how does light enter home / school?** **- where is it lightest / darkest?** **• identify loud and soft sounds** **- what are favourite sounds and why?** **• discuss everyday uses of heat, light and sound within the home** **• make a list of household appliances that use electricity** **• discuss the difference between mains electricity and battery power** **• discuss the dangers associated with the use of electricity in the home**	*By considering examples where energy is conserved, I can identify the energy source, how it is transferred and ways of reducing wasted energy.* ***SCN 2-04a*** **• is heat energy a form of pollution, or is it a useful resource in the wrong place ?** *I can investigate the use and development of renewable and sustainable energy to gain an awareness of their growing importance in Scotland or beyond.* ***TCH 2-02b*** **• discuss different types of energy used in homes or schools e.g.** **- solar** **- photo voltaic arrays** **- wind turbines** **- localised sources** **- remote sources - pylons/piping etc.** **• The traditional sources of energy are:** **- coal burning** **- nuclear** **- hydroelectric**	*By investigating renewable energy sources and taking part in practical activities to harness them, I can discuss their benefits and potential problems.* ***SCN 3-04b*** **• discuss different types of energy used in homes or schools e.g.** **- solar** **- photo voltaic arrays** **- wind turbines**

Cross-curricular, inter-disciplinary planning grid for: Early Stages: (early level-first level)

Science
Planet Earth
Energy Sources and Sustainability
• discuss electricity as a power source for heating, cooking and lighting
• using their own senses: identify feelings and sources of heat, light and sound
SCN 1-O4a

Forces, Electricity and Waves
Electricity
• make a list of household appliances that use electricity
• discuss the difference between mains electricity and battery power
• discuss the dangers associated with the use of electricity in the home
SCN O-O9a

Materials
Properties and Uses of Substances
• investigate materials commonly used for building
SCN O-15a

Technologies
Technological Developments in Society
• name some common building materials
• look at the roofs of different houses and discuss their purpose and the materials used for construction – focus on energy
• build a model home using different junk materials (plasticine, wooden blocks, clay)
• consider which other aids were used i.e. glue, tape, papier mache
TCH O-O1a

• junk models of houses
• ask pupils to think about what to do with the junk they did not need for their models
• how do pupils' families/school deal with waste materials in the home or school
TCH O-O2a

Literacy and English
Listening and Talking
Finding and Using Information
• invite grandparents to relate tales of their childhood
LIT O-O4a

Writing
Organising and Using Information
• compare your life with that of your grandparents
- look at rooms in the house, furniture, food, clothes, lifestyles, inventions
LIT O-26a

• write clear, concise instructions for using a piece of household equipment for then and now
LIT 1-26a

Social Studies
People, Place and Environment
• visit significant buildings in the local area and describe their main features
SOC O-O7a

• look at basic household resources and explore how to conserve these resources
SOC O-O8a

• look at the effects of weather on:
- building materials
- activities in and around the home
SOC 1 –12a

Numeracy and Mathematics, Measurement
• pupils begin by looking at their own home and compare with others around them:
- which houses are smaller/larger?
- how does their home compare with the school building?
MNU O-11a

Patterns and Relationships
• investigate patterns on a wall
- draw
- take rubbings
MTH O-13a

Shape, Position and Movement
Properties of 2D and 3D Objects
• use the environment around the school to investigate 2D and 3D objects
MTH 1-16

Social Studies
People, Past Events and Societies
• create a timeline of their grandparents, parents and their own homes
• look at different rooms, furniture, food, lifestyles, clothes, inventions
SOC O-O1a

• discuss materials through time – look at the exterior of houses in the local area and compare the building materials used with those of today
• investigate old maps or photographs of their locality and note changes over the years
SOC 1-O1a

Expressive Arts
Art and Design
• take tools used for building into the classroom and use for pencil drawings
EXA O-O4a

• experiment with Cray-Pas crayons on coloured sugar paper to draw tools used in the building industry
EXA 1-O2a

Drama
• create a street scene through mime, showing characters on the street and the work they do
EXA O-14a

• using mime demonstrate the work on building sites through time
EXA 1-12a

Literacy and English

Writing

Creating Texts

First	Second	Third
	I can convey information, describe events, explain processes or combine ideas in different ways. ***LIT 2-28a*** **• working in groups, pupils become estate agents operating during different periods in history with language and reference to materials reflecting house construction through the ages** **• write an inventory/description of the property**	*I can persuade, argue, evaluate, explore issues or express an opinion using a clear line of thought, relevant supporting detail and/or evidence.* ***LIT 3-29a*** **• draw up an action plan for an area which you feel requires conservation, listing all the things that need to be changed or improved and how this should be achieved.**

Science

Planet Earth

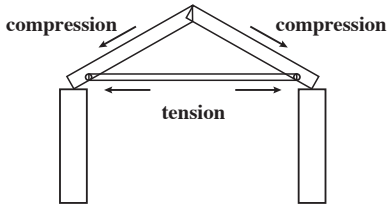
Processes of the Planet

First	Second	Third
	I can apply my knowledge of how water changes state to help me understand the processes involved in the water cycle in nature over time. ***SCN 2-05a*** **• consider how the states of the water cycle effects homes** **- rain** **- ice** **- snow** **• observe these effects, and how buildings cope (in some countries design has to accommodate regular heavy snow where it is used as an insulant with shallow pitched roofs e.g. in - Scandinavia or Switzerland)** **- when water freezes it expands - consider the implications for building materials that are saturated or filled with water** **- think about porosity of different types of building materials** **- importance of guttering and good drainage in a climate where high levels of rainfall are common**	

Science

Forces, Electricity and Waves

Forces

Early	Second	Third
Through everyday experiences and play with a variety of toys and other objects, I can recognise simple types of forces and describe their effects. ***SCN 0-07a*** **• use toys such as Kapla to build towers; observe cantilevers; and demonstrate how friction works** **- use different shapes and forms**	*By investigating floating and sinking of objects in water, I can apply my understanding of buoyancy to solve a practical challenge.* ***SCN 2-08b*** **• look at the design of toilet cisterns and ways to reduce their capacity without compromising effectiveness**	*I have collaborated in investigations into the effects of gravity on objects and I can predict what might happen to their weight in different situations on Earth and in space.* ***SCN 3-08a*** **• possible bridge design** **• arched openings demonstrating route of forces** **• difference between compressive and tensile forces** 
First		

Literacy and English

Writing

Organising and Using Information

Early	Second	Third
Within real and imaginary situations, I share experiences and feelings, ideas and information in a way that communicates my message. ***LIT 0-26a*** **• compare your life with that of your grandparents** **- look at rooms in the house, furniture, food, clothes, lifestyles, inventions**		
First		
I am learning to use my notes and other types of writing to help me understand information and ideas, explore problems, generate and develop ideas or create new text. ***LIT 1-25a*** **• compare style of houses in the local area with those of a different location** *By considering the type of text I am creating[6], I can select ideas and relevant information, organise these in a logical sequence and use words which will be interesting and/or useful for others.* ***LIT 1-26a*** **• write clear, concise instructions for using a piece of household equipment for then and now** **• compare a rich person's house with that of a poorer person consider :** **- size of house - building materials** **- furnishings - entertainment** **- health - hygiene** **• write about how your house has changed consider :** **- new windows - doors** **- extensions - repainting** **• write about changes within the home** **- decorating - arrival of a new baby** **- new kitchen - new carpet** **- bedding during summer and winter** **- look at the reasons for change** **• write an inventory of items in a room and describe them (inventories were used by wealthy people to identify the furniture and belongings in rooms of castles and country houses)** **• describe how a sash and case window works**		

Literacy and English

Listening and Talking

Creating Texts

First	Second	Third
		When listening and talking with others for different purposes, I can : *• communicate information, ideas or opinions* *• explain processes, concepts or ideas* *• identify issues raised, summarise findings or draw conclusions.* ***LIT 3-09a*** **• discuss the main social and environmental impact of a new football stadium development being built beside a housing suburb** **• pupils take on various roles, prepare and argue their case** **• discuss the main social and environmental impact of demolishing an important historic building**

Science

Forces, Electricity and Waves

Electricity

Early	Second	Third
I know how to stay safe when using electricity. I have helped to make a display to show the importance of electricity in our daily lives. ***SCN 0-09a*** **• make a list of household appliances that use electricity** **• discuss the difference between mains electricity and battery power** **• discuss the dangers associated with the use of electricity in the home**	*I have used a range of electrical components to help to make a variety of circuits for differing purposes. I can represent my circuit using symbols and describe the transfer of energy around the circuit.* ***SCN 2-09a*** **• wiring up a bell or buzzer; creating a switch**	

First	Fourth
	Using a variety of sources, I have explored the latest developments in chemical cells technology and can evaluate their impact on society. ***SCN 4-10b*** **• investigating the use of photo voltaic cells in domestic and school appliances** **• consider impact and usefulness of batteries for storage of energy for use at a later date**

Science

Forces, Electricity and Waves

Vibrations and Waves

First	Second	Third
	By exploring reflections, the formation of shadows and the mixing of coloured lights, I can use my knowledge of the properties of light to show how it can be used in a creative way. ***SCN 2-11b*** **• investigate how shadows affect the area in and around the home e.g. where is the best place to build a sun porch or conservatory?** **• think of ways to maximise daylight entering a building** **• experiment with reflecting surfaces** **- mirrors** **- foil** **- add water to reflect light** **- consider how complementary colours work, and their applications in room design**	

Literacy and English

Listening and Talking

Finding and Using Information

First	Second	Third
I listen or watch for useful or interesting information and I use this to make choices or learn new things. ***LIT 0-04a*** **• invite grandparents to relate tales of their childhood**		

Literacy and English

Early	First	Second	Third	Fourth	Senior
I develop and extend my literacy skills when I have opportunities to: *• communicate, collaborate and build relationships* *• reflect on and explain my literacy and thinking skills, using feedback to help me improve and sensitively provide useful feedback for others* *• engage with and create a wide range of texts[1] in different media, taking advantage of the opportunities offered by ICT* *• develop my understanding of what is special, vibrant and valuable about my own and other cultures and their languages* *• explore the richness and diversity of language[2], how it can affect me, and the wide range of ways in which I and others can be creative* *• extend and enrich my vocabulary through listening, talking, watching and reading.* *In developing my English language skills:* *• I engage with a wide range of texts and am developing an appreciation of the richness and breadth of Scotland's literary and linguistic heritage* *• I enjoy exploring and discussing word patterns and text structures.*			*I develop and extend my literacy skills when I have opportunities to:* *• communicate, collaborate and build relationships* *• reflect on and explain my literacy and thinking skills, using feedback to help me improve and sensitively provide useful feedback for others* *• engage with and create a wide range of texts[1] in different media, taking advantage of the opportunities offered by ICT* *• develop my understanding of what is special, vibrant and valuable about my own and other cultures and their languages* *• explore the richness and diversity of language[2], how it can affect me, and the wide range of ways in which I and others can be creative* *• extend and enrich my vocabulary through listening, talking, watching and reading.* *In developing my English language skills:* *• I engage with a wide range of texts and am developing an appreciation of the richness and breadth of Scotland's literary and linguistic heritage* *• I enjoy exploring and discussing word patterns and text structures.*		

Science

Materials

Properties and Uses of Substances

Early	Second	Third
Through creative play, I explore different materials and can share my reasoning for selecting materials for different purposes. ***SCN 0-15a*** **• investigate materials commonly used for building:** **- slate** **- concrete brick** **- concrete tile** **- roof felt** **- granite** **- sandstone** **- discuss their suitability** **- take rubbings**	*By investigating common conditions that increase the amount of substance that will dissolve or the speed of dissolving, I can relate my findings to the world around me.* ***SCN 2-16b*** **• compare how long it takes for sugar to dissolve in hot and cold water; find out if the temperature of the water affects the amount of heat used to dissolve the amount that can be dissolved** **• water vapour in buildings** **• what happens when this cools?** **- condensation in windows** **- black mould in damp areas where moisture condenses** **• "efflorescence" - salt staining on buildings. Where does it come from?** **• think about how some coastal areas have a more salty environment and how this effects the durability of materials**	

First

I can make and test predictions about solids dissolving in water and can relate my findings to the world around me.
SCN 1-16a

• salt : show how the varying concentration of salt in the Arctic Ocean creates the Gulf Stream current; could global warming switch the process off and stop the current of warm water coming to the British Isles?

Science

Materials

Earth's Materials

First	Second	Third
	Having explored the substances that make up Earth's surface, I can compare some of their characteristics and uses. ***SCN 2-17a*** **• discuss the properties of common building materials - slate, tile, wood, glass, concrete, brick, harling** **look at:** **- strength** **- durability -how long materials last?** **- malleability** **- rigidity** **- texture** **- colour** **- opacity** **- insulation** **- heat storage** **- resistance to weathering** **compare:** **- granite & sandstone** **- man-made and natural materials** **• discuss how easily repairable different materials are** **• discuss the differences between materials with respect to energy conservation (insulation, utilisation of sunshine, heat storage), where and how are they used and why:** **- investigate why materials have been chosen for specific functions e.g. slates for roofing; glass fibres for insulation; rubber for seals** **- investigate the energy required to produce materials ("embodied energy"): quarrying, transporting, manufacturing. Compare the amounts of energy used**	

Numeracy and Mathematics

Information Handling

Data and Analysis

First	Second	Third
I have explored a variety of ways in which data is presented and can ask and answer questions about the information it contains. ***MNU 1-20a*** **• survey the types of homes in the area around school, display and interpret accurately**		

Numeracy and Mathematics

Shape, Position and Movement

Angle, Symmetry and Transformation

First	Second	Third
I can describe, follow and record routes and journeys using signs, words and angles associated with direction and turning. ***MTH 1-17a*** • **describe the route taken on an investigation of the area in the immediate vicinity of school** • **think about views, landmarks, features, perspective** • **think about how you remember the route to school or how you remember where your house is**		

Science

Materials

Chemical Changes

First	Second	Third
	I have investigated different water samples from the environment and explored methods that can be used to clean and conserve water and I am aware of the properties and uses of water. ***SCN 2-18a*** • **how is 'grey water' - water which has been used e.g. kitchen, bathroom (but not toilet) - best utilised** • **investigate how rain water is collected and used**	*I have helped to design and carry out practical activities to develop my understanding of chemical reactions involving the Earth's materials. I can explain how we apply knowledge of these reactions in practical ways.* ***SCN 3-19b*** • **what emerges when burning:** **- wood (carbon dioxide, smoke and water vapour)** **- coal (carbon dioxide, smoke and carbon particles)** **- smokeless fuel (carbon dioxide, water vapour)** **- oil (carbon dioxide, water vapour)** **- gas (carbon dioxide, water vapour)** **- paraffin (carbon dioxide, water vapour)** • **investigate the chemical/heat transference processes involved in the operation of a refrigerator** • **investigate heat pumps**
		Fourth
		I can collect and analyse experimental data on chemical reactions that result in an obvious change in energy. I can apply my findings to explain the significance of the energy changes associated with chemical reactions. ***SCN 4-19a*** • **reaction rates approximately double for a 10°C increase in ambient temperature (very approximately, where catalysts or enzymes are involved, see below):** **- implications of global warming on plants and ecosystems** • **catalysts (inorganic) and enzymes (organic /biological) can greatly reduce the energy required to complete a chemical reaction**

Science

Topical Science

First	Second	Third

Fourth

Having selected scientific themes of topical interest, I can critically analyse the issues, and use relevant information to develop an informed argument.
SCN 4-20b

- **investigate the science involved with carbon capture in coal-fired power stations**
- **investigate the energy used in a building's construction and by a building in use ("embodied" energy is the energy used in the manufacture, transportation and construction of buildings)**

- where do materials come from?
- are some highly insulative materials very large users of energy in production?

- **consider the outputs from production of cement and other materials used in the building industry (5% of all CO2 emissions in the world are from the manufacture of cement; UPVC is less than 5% recyclable and has toxic by-products in manufacture and disposal)**

Numeracy and Mathematics

Number, Money and Measure

Properties of 2D Shapes and 3D Objects

First	Second	Third
I can explore and discuss how and why different shapes fit together and create a tiling pattern with them. ***MTH 1-16b*** • **use the environment around school to investigate 2D and 3D shapes** • **look at decorative floor tiles in an old building's vestibule, parquet flooring** • **think about how the bricks/stones are laid out at the corner of a building** • **think about why different geometric shapes are used, by creating a mosaic**		

Numeracy and Mathematics

Number, Money and Measure

Patterns and Relationships

Early	Second	Third
I have spotted and explored patterns in my own and the wider environment and can copy and continue these and create my own patterns. ***MTH 0-13a*** **• investigate patterns on a wall** **- draw** **- take rubbings** **• look at patterns:** **- windows and doors in buildings** **- glazing in windows** **- wall bonds** **- on roofs** **- stained glass** **- paving**		
First		
Through exploring number patterns, I can recognise and continue simple number sequences and can explain the rule I have applied. ***MTH 1-13b*** **• investigate patterns in the environment around school**		

Technologies

Early	First	Second	Third	Fourth	Senior
Learning in the technologies enables me to: *• develop an understanding of the role and impact of technologies in changing and influencing societies* *• contribute to building a better world by taking responsible, ethical actions to improve my life, the lives of others and the environment* *• gain the confidence and skills to embrace and use technologies now and in the future, at home, at work and in the wider community* *• become an informed consumer and producer who has an appreciation of the merits and impacts of products and services* *• be capable of making reasoned choices relating to the environment, sustainable development and ethical, economic and cultural issues* *• broaden my understanding of the role that information and communications technology (ICT) has in Scotland and in the global community* *• broaden my awareness of how ideas in mathematics and science are used in engineering and the technologies* *• experience work-related learning, and establish firm foundations for lifelong learning, and specialised study and careers.*			*Learning in the technologies enables me to:* *• develop an understanding of the role and impact of technologies in changing and influencing societies* *• contribute to building a better world by taking responsible, ethical actions to improve my life, the lives of others and the environment* *• gain the confidence and skills to embrace and use technologies now and in the future, at home, at work and in the wider community* *• become an informed consumer and producer who has an appreciation of the merits and impacts of products and services* *• be capable of making reasoned choices relating to the environment, sustainable development and ethical, economic and cultural issues* *• broaden my understanding of the role that information and communications technology (ICT) has in Scotland and in the global community* *• broaden my awareness of how ideas in mathematics and science are used in engineering and the technologies* *• experience work-related learning, and establish firm foundations for lifelong learning, and specialised study and careers.*		

Technologies

Technological Developments in Society

Early

I enjoy playing with and exploring technologies to discover what they can do and how they can help us.
TCH 0-01a

- **name some common building materials**
- **look at the roofs of different houses and discuss their purpose and the materials used for construction - focus on energy**
- **build a model home using different junk materials (plasticine, wooden blocks, clay):**
  - **how much energy did the pupils use to build with different materials?**
  - **what other aids were used i.e. glue, tape, papier mâché?**

Within and beyond my place of learning, I can reduce, re-use and recycle resources I use, to help care for the environment.
TCH 0-02a

- **junk models of houses :**
  - **ask pupils to think what to do with the junk they did not need for their models**
- **how pupils' families / school deal with waste materials in the home or school**

First

Throughout all my learning, I take appropriate action to ensure conservation of materials and resources, considering the impact of my actions on the environment.
TCH 1-02a

- **consider what is reused and recycled in the home**
- **consider a property as something that can be modified and reused**

Second

I can investigate how an everyday product has changed over time to gain an awareness of the link between scientific and technological developments.
TCH 2-01b

- **classify building materials and find out what is natural and what is man-made: lime mortar uses natural material, but cement is manufactured**
- **natural and man-made materials in housing comparisons: texture, weight, suitability: look for contrasts in the local environment - colour shape, building design, old, new, natural / man-made materials**

Having analysed how lifestyle can impact on the environment and Earth's resources, I can make suggestions about how to live in a more sustainable way.
TCH 2-02a

- **discuss the differences between materials with respect to energy conservation (insulation, utilisation of sunshine, heat storage) - "embodied energy" i.e. how much energy a material takes to produce, transport and install: where and how they are used and why:**
  - **investigate why materials have been chosen for specific functions e.g. slates for roofing; glass fibres for insulation; rubber for seals**

I can investigate the use and development of renewable and sustainable energy to gain an awareness of their growing importance in Scotland or beyond.
TCH 2-02b

- **fuels (differentiate between renewable and non-renewable) :**
  - **wood, charcoal, coal, peat**
  - **oil, oil substitutes (e.g. alcohol, vegetable oils)**
- **discuss different types of energy used in homes or schools e.g.**
  - **solar**
  - **photo voltaic arrays**
  - **windmills/turbines**
  - **ground source heat pumps**
  - **heat recovery systems**
  - **air-conditioning systems**
- **discuss how much energy a material takes to produce, transport and install, and how long it will last**

Third

From my studies of sustainable development, I can reflect on the implications and ethical issues arising from technological developments for individuals and societies.
TCH 3-02a

- **investigate the best building materials for energy conservation;**
- **investigate the energy efficiency of building materials with respect to the sunshine, winds and temperatures encountered in Scotland**
- **think about how buildings are designed and orientated in relation to:**
  - **sun**
  - **prevailing wind**
  - **sea**
- **energy is only one aspect of sustainability : discuss healthy choices of materials (e.g. not treated with toxic chemicals or likely to exude vapours with consequences for those with asthma)**
- **cost of manufacturing and supplying materials**
- **consider the use of the car and other forms of transport, and the implications on how we make and use places:**
  - **look at planning in different scales:**
  - **village**
  - **town**
  - **city**

Numeracy and Mathematics

Number, Money and Measure

Measurement

Early

I have experimented with everyday items as units of measure to investigate and compare sizes and amounts in my environment, sharing my findings with others.
MNU 0-11a

- **pupils begin by looking at their own home and compare with others around them**
  - **which houses are smaller/larger?**
  - **how does their home compare with the school building?**

First

Second

Third

Numeracy and Mathematics

Early	First	Second	Third	Fourth	Senior
My learning in mathematics enables me to: • *develop a secure understanding of the concepts, principles and processes of mathematics and apply these in different contexts, including the world of work* • *engage with more abstract mathematical concepts and develop important new kinds of thinking* • *understand the application of mathematics, its impact on our society past and present, and its potential for the future* • *develop essential numeracy skills which will allow me to participate fully in society* • *establish firm foundations for further specialist training* • *understand that successful independent living requires financial awareness, effective money management, using schedules and other related skills* • *interpret numerical information appropriately and use it to draw conclusions, assess risk, and make reasoned evaluations and informed decisions* • *apply skills and understanding creatively and logically to solve problems, within a variety of contexts* • *appreciate how the imaginative and effective use of technologies can enhance the development of skills and concepts*			*My learning in mathematics enables me to:* • *develop a secure understanding of the concepts, principles and processes of mathematics and apply these in different contexts, including the world of work* • *engage with more abstract mathematical concepts and develop important new kinds of thinking* • *understand the application of mathematics, its impact on our society past and present, and its potential for the future* • *develop essential numeracy skills which will allow me to participate fully in society* • *establish firm foundations for further specialist training* • *understand that successful independent living requires financial awareness, effective money management, using schedules and other related skills* • *interpret numerical information appropriately and use it to draw conclusions, assess risk, and make reasoned evaluations and informed decisions* • *apply skills and understanding creatively and logically to solve problems, within a variety of contexts* • *appreciate how the imaginative and effective use of technologies can enhance the development of skills and concepts*		

Technologies
Information & Communications Technology to Enhance Learning

First	Second	Third
		I enhance my learning by applying my ICT skills in different learning contexts across the curriculum. ***TCH 3-04a*** • **using ICT in the home to access maps and mapping via the internet**

Technologies

Food and Textiles Contexts for Developing Technological Skills and Knowledge

First	Second	Third
	Through discovery and imagination, I can develop and use problem solving strategies to meet design challenges with a food or textile focus. ***TCH 2-11a*** **• consider how interior/furniture/fabric designers work to fulfil a design brief** **• consider how kitchens are designed on both a domestic and commercial basis in relation to:** **- materials used** **- location in a building** **- capacity** **- type of catering operation**	

Expressive Arts

Drama

Early

I have the freedom to choose and explore how I can use my voice, movement, and expression in role play and drama.
EXA 0-12a

I use drama to explore real and imaginary situations, helping me to understand my world.
EXA 0-14a

• create a street scene through mime, showing characters on the street and the work they do :
- mail delivery - street cleaner
- van delivery - traffic warden

First

I enjoy creating, choosing and accepting roles, using movement, expression and voice.
EXA 1-12a

• through mime demonstrate the work on building sites through time

• re-enact work on a building site during different periods in history

Second

Inspired by a range of stimuli, I can express and communicate my ideas, thoughts and feelings through drama.
EXA 2-13a

• pupils devise a production on the work of a construction company through the ages

• introduce ideas of forces through the body and how these relate to forces in buildings

arch

cantilever

Third

Expressive Arts
Art and Design

Early

I can create a range of visual information through observing and recording from my experiences across the curriculum.
EXA 0-04a

- **take tools used for building into the classroom for pencil drawings**

First

I have the opportunity to choose and explore a range of media and technologies to create images and objects, discovering their effects and suitability for specific tasks.
EXA 1-02a

- **experiment with Cray-Pas crayons on coloured sugar paper to draw tools used in the building industry**

I can create and present work using the visual elements of line, shape, form, colour, tone, pattern and texture.
EXA 1-03a

- **look at homes in the local environment and record through pencil sketches and digital photography**
- **make pencil drawings of model vans, lorries, cranes, diggers taken into the classroom, or real items where time and weather permits**

EXA 1-04a

- **make small sketches of different naturally-occurring patterns to be found in or around home or school e.g. stone, brickwork, patterns created by railings or fences**

Second

Through observing and recording from my experiences across the curriculum, I can create images and objects which show my awareness and recognition of detail.
EXA 2-04a

- **figure drawing lesson of someone working with wood or stone**
- **dress pupil as a joiner sawing or planing a piece of wood, or a mason using a hammer and chisel**
- **colour studies of chalk, Cray-Pas crayong or paint of various types of brick/stone samples taken into school**

Third

- **make a colour study of the room you like best in your house**
- **why do you like it?**

EXA 3-03a

Through observing and recording, I can create material that shows accuracy of representation.
EXA 3-04a

- **look for and draw a new building in your area which you think does not fit in well with its surroundings**
- **draw the buildings/areas on either side of your chosen subject**
- **pupils make large 3D junk models of their own house, school or local building of interest**
- **make a doll's house**
- **6 groups each working with a crisp box creating different rooms to be combined into a home**
- **very carefully measure a door and draw it to scale of 1:10**

Technologies
Craft, Design, Engineering and Graphics Contexts for Developing Technological Skills and Knowledge

First

Second

Throughout my learning, I experiment with the use of colour to develop an awareness of the effects and impacts it can have.
TCH 2-15b

- **provide pupils with the opportunity to observe at home, in school, and in the local built environment**
- **consider:**
- **the psychological/emotional effect of colour**
- **the science behind colour**
- **why colours are chosen for certain uses (e.g. red for warmth/danger; blue for cold/calm)**
- **rooms in a house or building have different uses**
- **how would you decorate them?**

Third

I gain inspiration from natural forms, the built environment or imagination to develop a creative idea which could be realised using computer aided manufacture.
TCH 3-15b

- **design a finial for display on a particular building :**
- **begin by looking for these in the local environment and investigate the inspiration behind the design (many finials reflect natural shapes and forms)**

Social Studies

Early	First	Second	Third	Fourth	Senior
Learning in the social studies will enable me to : *• develop my understanding of the history, heritage and culture of Scotland, and an appreciation of my local and national heritage within the world* *• broaden my understanding of the world by learning about human activities and achievements in the past and present* *• develop my understanding of my own values, beliefs and cultures and those of others* *• develop my understanding of the principles of democracy and citizenship through experience of critical and independent thinking* *• explore and evaluate different types of sources and evidence* *• learn how to locate, explor and link periods, people and events in time and place* *• learn how to locate, explore and link features and places locally and further afield* *• engage in activities which encourage enterprising attitudes* *• develop an understanding of concepts that stimulate enterprise and influence business* *• establish firm foundations for lifelong learning and for further specialised study and careers*			*Learning in the social studies will enable me to :* *• develop my understanding of the history, heritage and culture of Scotland, and an appreciation of my local and national heritage within the world* *• broaden my understanding of the world by learning about human activities and achievements in the past and present* *• develop my understanding of my own values, beliefs and cultures and those of others* *• develop my understanding of the principles of democracy and citizenship through experience of critical and independent thinking* *• explore and evaluate different types of sources and evidence* *• learn how to locate, explor and link periods, people and events in time and place* *• learn how to locate, explore and link features and places locally and further afield* *• engage in activities which encourage enterprising attitudes* *• develop an understanding of concepts that stimulate enterprise and influence business* *• establish firm foundations for lifelong learning and for further specialised study and careers*	

Social Studies

People in Society, Economy and Business

Business

First	Second	Third
I have developed an understanding of the importance of local organisations in providing for the needs of my local community. ***SOC 1-20a*** **• visit significant buildings in the local area and describe their main features :** **- post office - bank - Town Hall** **• describe :** **- my home - my neighbour's home** **- my street - play areas** **- local services such as rubbish collections and deliveries**		

Social Studies

People in Society, Economy and Business

Society and Economy

Early

I am aware that different types of evidence can help me to find out about the world around me.
SOC 0-15a

- **visit significant buildings in the local area and describe their main features :**
  - post office - bank - Town Hall
  - police station - clinics
- **describe :**
  - my home - my neighbour's home
  - my street - play areas
  - local services such as rubbish collections and deliveries

First

Second

I can use evidence selectively to research current social, political or economic issues.
SOC 2-15a

- **look at the possible effects of power generation on the landscape :**
  e.g. coal / oil / nuclear / hydro / wind / solar power
- **investigate methods of energy conservation**

I can explain how the needs of a group in my local community are supported.
SOC 2-16a

- **discuss the local area and how land is used for different purposes e.g.**
  - play areas - public parks
  - shopping - car parking
  - school - work

I can describe the main features of a democracy and discuss the rights and responsibilities of citizens in Scotland.
SOC 2-17a

By comparing the lifestyle and culture of citizens in another country with those of Scotland, I can discuss the similarities and differences.
SOC 2-19a

- **investigate the provision of housing in a European and African nation**

Third

I can use my knowledge of current social, political or economic issues to interpret evidence and present an informed view.
SOC 3-15a

- **discuss the main social and environmental impact of a new football stadium development beside a housing suburb**
- **look at the impact of new housing estates on :**
  - the environment - the wildlife
  - the lives of people
- **identify a local area which requires conservation measures and draw up an action plan**

Fourth

I can evaluate conflicting sources of evidence to sustain a line of argument.
SOC 4-15a

- **discuss the appropriateness of any new development (new flats, football stadium) and whether it enhances or detracts from what is already in the neighbourhood**

I can evaluate the role of the media in a democracy, assess its importance in informing and influencing citizens, and explain decisions made by those in power.
SOC 4-17b

Social Studies

People, Past Events and Societies

First

I am aware that different types of evidence can help me to find out about the past.
SOC 0-01a

- **create a timeline of their grandparents, parents and their own homes ;**
- **look at the different rooms, furniture, food, lifestyles, clothes, inventions**

I can make a personal link to the past by exploring items or images connected with important individuals or special events in my life.
SOC 0-02a

- **invite grandparents to relate tales of their childhood**
- **think about how home interiors change for different occasions e.g. birthdays, Christmas**

I have explored how people lived in the past and have used imaginative play to show how their lives were different from my own and the people around me.
SOC 0-04a

Second

I understand that evidence varies in the extent to which it can be trusted and can use this in learning about the past. ***SOC 1-01a***
- **use maps to discover how places have changed over time**
- **study old photographs to see how much of the 'place' qualities have been taken away through road widening, heavy traffic and demolition**
- **discuss materials through time - look at the exterior of houses in the local area and compare the building materials used with those of today**
- **investigate old maps or photographs of their locality and note changes over the years**

By exploring places, investigating artefacts and locating them in time, I have developed an awareness of the ways we remember and preserve Scotland's history. ***SOC 1-02a***
- **pupils find out if their home has changed in any way since it was originally built : conversions / extensions / window and door replacements**
- **record changes in the environment :**
  - why did they happen and the effect they have : new pavements, windows, doors, trees cut down, new buildings
- **look at changes within the home and the reason for these changes : decorating, arrival of a new baby, new kitchen, new carpet, bedding during winter and summer**
- **investigate 'old' buildings in the local area: what do they tell us about how life has changed? (e.g. schools with separate entrances for boys and girls)**

I can use evidence to recreate the story of a place or individual of local historical interest. ***SOC 1-03a***
- **invite grandparents to relate tales of their childhood**

I can compare aspects of people's daily lives in the past with my own by using historical evidence or the experience of recreating an historical setting. ***SOC 1-04a***
- **compare household equipment over time : e.g.**
  - dust pan and brush to vacuum cleaner
  - earthenware hot water bottles to rubber to microwave
- **consider diet in relation to cooking techniques, kitchens and food sources**
- **compare the types of houses lived in by the rich with those of the poor**
- **explore different life styles producing a profile of rich and poor in relation to :**
  - size of house - building materials
  - furnishings - entertainment
  - health - hygiene
- **make a comparison between old and new styles of houses in the local area and compare with the houses in a different area**
- **compare household equipment past and present**
- **comparison between the past / present construction of houses - roofing materials, glass, interior design, waterproofing, insulation**
- **use the 'Houses and Homes' learning and teaching units produced by the Aberdeen Urban Studies Trust to develop a detailed knowledge and understanding of the development of homes over time**
- **look at features of housing through time : Georgian, Victorian, Edwardian and modern periods**
- **re-enact work on a building site during differing periods of history**

Having selected a significant individual from the past, I can contribute to a discussion on the influence of their actions, then and since.
SOC 1-06a

Third

I can use primary and secondary sources selectively to research events in the past.
SOC 2-01a
- **compile a scrap book of housing design**
  - extend this to a place design
- **through a study of Early Settlers look at building materials, house styles, locations, needs and compare with today**
- **look at examples of local heritage: study old maps of the local area and compare with today**
- **investigate the history of the local area and the development of buildings through time**
- **visit the local library to research the past using books, newspapers and photographs**
- **interview elderly residents about the local area long ago, and the different styles of homes**
- **make a historical trail of the local area with information and images on a range of local buildings along an interesting route**
- **make a scrap book / video of change in building design in the local area**

I can interpret historical evidence from a range of periods to help to build a picture of Scotland's heritage and my sense of chronology.
SOC 2-02a
- **look at features of housing through time : Georgian, Victorian, Edwardian and modern periods**
- **sequence pictures of houses from different periods in chronological order**
- **sequence pictures of household objects and furniture from different periods in chronological order : e.g. vacuum cleaners, irons / toys**

I can investigate a Scottish historical theme to discover how past events or the actions of individuals or groups have shaped Scottish society.
SOC 2-03a
- **compare and contrast Edwardian, Victorian and Georgian lifestyles with the present day** ***www.learningcurve.gov.uk***
- **explain why style and methods of construction have changed through time**

I can compare and contrast a society in the past with my own and contribute to a discussion of the similarities and differences. ***SOC 2-04a***
- **make a comparison between old and new styles of houses in the local area and compare with the houses in a different area**
- **compare household equipment Past & Present**
- **comparison between the past / present construction of houses - roofing materials, glass, interior design, waterproofing, insulation**
- **use the 'Houses and Homes' learning and teaching units produced by the Aberdeen Urban Studies Trust to develop a detailed knowledge and understanding of the development of homes over time**
- **explain developments in design in relation to events in history; see 'Exploring Buildings' - a pack by the Aberdeen Urban Studies Trust**

I can discuss why people and events from a particular time in the past were important, placing them within a historical sequence.
SOC 2-06a

Social Studies
People, Past Events and Societies

First	Second	Third
		I can use my knowledge of a historical period to interpret the evidence and present an informed view. ***SOC 3-01a*** **• investigate the development of housing utilities : - energy for power and lighting - sanitation** **• investigate changing types of windows throughout history** *I can make links between my current and previous studies, and show my understanding of how people and events have contributed to the development of the Scottish nation* ***SOC 3-02a***

Social Studies
People, Place and Environment

Early

I explore and discover the interesting features of my local environment to develop an awareness of the world around me. ***SOC 0-07a***
• visit significant buildings in the local area and describe their main features : - post office - bank - Town Hall • describe - my home - my neighbour's home - my street - play areas - local services such as rubbish collections and deliveries
I explore and appreciate the wonder of nature within different environments and have played a part in caring for the environment. ***SOC 0-08a***
• look at basic household resources and explore how to conserve the resources : - water - paper - metal - plastics - garden - electricity
While learning outdoors in differing weathers, I have described and recorded the weather, its effects and how it makes me feel and can relate my recordings to the seasons. ***SOC 0-12a***
• construct a weather chart and study the effects it has on our homes with regard to : - heating - need for windows - garden - curtains - lights - roof / walls etc.
• construct a profile of the local area showing houses and local landmarks : are there hills, flat areas, houses ?

First

I can describe and recreate the characteristics of my local environment by exploring the features of the landscape. ***SOC 1-07a***
• contrast a weather chart and study the effects it has on our homes with regard to : - heating - need for windows - garden - curtains - lights - roof / walls etc.
• construct a profile of the local area showing houses and local landmarks : are there hills, flat areas, houses ?
By using a range of instruments, I can measure and record the weather and can discuss how weather affects my life. ***SOC 1-12a***
• look at the effects of weather on : - building materials - activities in and around the home • add details to the local area profile : - washing on line - cooking - barbecue - gardening - children playing outside
By exploring a natural environment different from my own, I can discover how the physical features influence the variety of living things. ***SOC 1-13b***
• discuss how the land is used around the school and the different types of buildings • make a wall frieze / 3D model of a street in the local area • discuss keeping our bedroom tidy, looking after our gardens, not dropping litter in the street

Second

I can describe the major characteristic features of Scotland's landscape and explain how these were formed ***SOC 2-07a***
• study the immediate environment around the school by making a map of the journey to school and draw a 'mental map' of the area ; pupils share their maps with others • compare the environment around the school with that of a contrasting area : city centre / rural ; urban / suburban ; coastal / inland • pupils make a study of their own home or a home of their choice and its surroundings
I can consider the advantages and disadvantages of a proposed land use development and discuss the impact this may have on the community ***SOC 2-08b***
• investigate the changes to the local environment brought about by a new shopping area or industrial site
By comparing my local area with a contrasting area outwith Britain, I can investigate the main features of weather and climate, discussing the impact on living things. ***SOC 2-12a***
• compare homes in Scotland with homes around the world : look at ways in which the design of houses has been adapted to deal with weather and climate • develop knowledge about the physical features of Scotland and how they affect the design of our homes • examine the effects of bad weather on pupils homes : flooding, falling trees, damage through high winds • contact building firms abroad and enquire about the relationship between building materials and climate • study the formation process which led to physical features and how they are affected by running water / ice / earthquakes : investigate the effects of these on house building
I can explain how the physical environment influences the ways in which people use land by comparing my local area with a contrasting area. ***SOC 2-13a***
• compare the local area with a contrasting settlement : rural / urban / city centre; discuss the differences British / European • look at economic life in developed and developing countries - explore : household chores / activities / machines / tools

Third

I can identify the possible consequences of an environmental issue and make informed suggestions about ways to manage the impact. ***SOC 3-08a***
• consider how we can make our homes more environmentally friendly in relation to : - the materials we choose to build them from - how waste is disposed - energy efficiency - water management - orientation and design • investigate how pupils get from home to school - consider the most environmentally-friendly method

Fourth

I can develop my understanding of the interaction between humans and the environment by describing and assessing the impact of human activity on an area. ***SOC 4-10a***
• investigate the movement of population from town centres to the suburbs during the 1960s and 1970s, and the encouragement back to the city centres during the 1990s • people have been moving into cities and returing to live in areas outwith the centre of town since the 19th century - investigate how these movements have affected people and the environment