

ST WINIFRED'S SUSTAINABILITY CURRICULUM PLAN

Summer 2020

This incorporates themes from:
Eco Schools
Sustainable development goals
Rights Respecting Schools
Laudato Si

Overarching Challenge

Children should be challenged to think about what they learn and to find the links connecting current learning with what they have been taught. From this they should apply their knowledge to begin to form personal actions they can take in their own lives, both within school and the wider community.

SUSTAINABILITY PLAN – NURSERY				
Topic	Themes	Knowledge	Challenge	vocabulary
biodiversity	Caring for all plants, animals and insects	Seasons, habitats, minibeasts, decay. God's beautiful plants, God's animals, God made us, God loves us .		woodland, park, pond, hedgerow, coast, winter, spring, summer, autumn, growth, decay.
energy	Reducing energy use and investigating greener energy sources.	Light and dark, switch off.		source, light, electricity, cold, warm.
global citizenship	working with others on local and global issues	Festivals		World, country, home country, Earth
healthy living	Improving mental and physical well-being.	Our bodies, keeping clean.		Naming body parts, types of food, body organs - heart, lungs. Senses
litter	Reducing the amount of litter in your local area.	Litter in the local environment		Litter, rubbish, bin, recycling, compost
marine	Protecting all rivers, canals, lakes and oceans.	Seaside and aquarium experiences		River, lake, pond, stream, sea.
school grounds	Enhancing where you work and play.	Exploring the local environment		playground, classroom, dinner hall, outside
transport	Finding more environmentally-friendly ways to travel.	Forms of public transport		walk, scooter, bike, car, bus, train, trams, planes, submarines
waste	Refuse, Reduce, Reuse, Repair, Recycle.	healthy eating and composting		paper, glass, cans, compost
water	Protecting an important natural resource.	wasting water.		tap, turn off,
Skills: observing, questioning, identifying, classifying, grouping, recording, describing, discussing, judging, concluding.				

SUSTAINABILITY PLAN – RECEPTION				
Topic	Themes	Knowledge	Challenge	vocabulary
biodiversity	Caring for all plants, animals and insects	Seasonal changes, environments, habitats and living things - their similarities and differences. To know that God made the world and to think of ways to keep our world beautiful.		woodland, park, pond, hedgerow, coast, winter, spring, summer, autumn, growth, decay.
energy	Reducing energy use and investigating greener energy sources.	Using simple software and using appropriate technology.		source, light, electricity, cold, warm.
global citizenship	working with others on local and global issues	Festivals and family celebrations across the world.		World, country, home country, Earth
healthy living	Improving mental and physical well-being.	Awareness of being healthy through diet and exercise.		Naming body parts, types of food, body organs - heart, lungs. Senses
litter	Reducing the amount of litter in your local area.	Observing their local environment and its quality.		Litter, rubbish, bin, recycling, compost
marine	Protecting all rivers, canals, lakes and oceans.	Under the sea.		River, lake, pond, stream, sea.
school grounds	Enhancing where you work and play.	Exploring the local environment		playground, classroom, dinner hall, outside
transport	Finding more environmentally-friendly ways to travel.	Exploring different forms of public transport		walk, scooter, bike, car, bus, train, trams, planes, submarines
waste	Refuse, Reduce, Reuse, Repair, Recycle.	Minibeast habitats and composting		paper, glass, cans, compost
water	Protecting an important natural resource.	Under the sea.		tap, turn off,
Skills: observing, questioning, identifying, classifying, grouping, recording, describing, discussing, judging, concluding.				

SUSTAINABILITY PLAN – YEAR 1				
Topic	Themes	Knowledge	Challenge	vocabulary
biodiversity	Caring for all plants, animals and insects	learning about nocturnal animals. Animals – identify and name a variety of common animals that are birds, fish, amphibians, reptiles and mammals. Describe and compare the structure of these animals. Discuss where these animals live and what they eat. Understanding the importance of treating the environment with respect – with specific reference to The Countryside Code.		Know common wild and garden plants, including deciduous and evergreen trees. Describe the basic structure of a variety of common flowering plants, including trees. Know common animals including fish, amphibians, reptiles, birds and mammals. Identify carnivores, herbivores and omnivores. Describe and compare the structure of a variety of common animals
energy	Reducing energy use and investigating greener energy sources.	Light used in the past - How light sources have changed over time e.g. the use of candles to light bulbs, seasonal changes and how they affect the hours of daylight.		Low energy bulb, timer
global citizenship	working with others on local and global issues	Belonging – in relation to our family, church and community. Becoming more familiar with the work of UNICEF and the Rights of the Child. To understand that we all need to work together to make the world a fairer place for everyone.		Community group, local action, rights, fairness
healthy living	Improving mental and physical well-being.	Different ways to keep safe. Naming and understanding the uses of the different parts of our body. Our senses. Healthy eating (link to Harvest) and exercise. Growth.		Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.
litter	Reducing the amount of litter in your local area.	Belonging – in relation to our family, church and community. Our local environment facilities.		Local action, active, nature reserve, recycling, composting
marine	Protecting all rivers, canals, lakes and oceans.	Research how transport has impacted the growth of London as a world city.		Water pollution, dredging, litter, plastics

school grounds	Enhancing where you work and play.	Exploring the local environment. To understand and use some simple geographical vocabulary to discuss place. To know the difference between human and physical features.		Geographic language for different land use. Park user groups, names of local parks
transport	Finding more environmentally-friendly ways to travel.	Identifying different forms of transport and recognising how transport has changed over time. To conduct transport surveys in our local area. To use maps and photos to plan journeys. To consider the impact of sustainable transport.		Geographic language, walk to school week,
waste	Refuse, Reduce, Reuse, Repair, Recycle.	Understanding the importance of treating the environment with respect		Refuse, Reduce, Reuse, Repair, Recycle. Pollution.
water	Protecting an important natural resource.	Seasonal change – children will observe and discuss changes across the seasons. Children will describe weather associated with the seasons and how day length varies. Children will be encouraged to ask questions, carry out simple tests and record their results.		Language around water in different forms in the landscape including weather phenomena.

Skills: asking simple questions and recognising that they can be answered in different ways, observing closely, using simple equipment, performing simple tests, identifying and classifying, using their observations and ideas to suggest answers to questions, gathering and recording data to help in answering questions. Making tables and charts about the weather; and making displays of what happens in the world around them

SUSTAINABILITY PLAN – YEAR 2				
Topic	Themes	Knowledge	Challenge	vocabulary
biodiversity	Caring for all plants, animals and insects	Animals including humans Plants-growing sunflowers Taking ownership of the garden in school Animals and their habitats		Habitat, micro habitat, Pond, meadow, log pile, woodland, river, lake, beach, cliff Organism – plant, animal
energy	Reducing energy use and investigating greener energy sources.	Science – everyday materials		Fossil fuels, renewable energy, conductor, insulator.

global citizenship	working with others on local and global issues	Geography - Africa		key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop
healthy living	Improving mental and physical well-being.	PSHE caring for animals DT cooking Jollof rice HISTORY Sport- the Olympics		Vocabulary around basic needs of animals for survival, as well as the importance of exercise and nutrition for humans.
litter	Reducing the amount of litter in your local area.	SCIENCE Taking ownership of the garden in school		Language around human impact (both positive and negative) on environments and the negative effects of population and development, litter or deforestation.
marine	Protecting all rivers, canals, lakes and oceans.	PSHE caring for animals – frogspawn and water pollution and habitat loss.		Language around human impact (both positive and negative) on environments and the negative effects of population and development, litter or deforestation.

school grounds	Enhancing where you work and play.	Geography – map skills. SCIENCE Plants-growing sunflowers Taking ownership of the garden in school Animals and their habitats		Language around human impact (both positive and negative) on environments. Also around collecting, analysing and communicating with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes.
transport	Finding more environmentally-friendly ways to travel.	Scooter school		Language around human impact (both positive and negative) on environments. Sustainable travel.
waste	Refuse, Reduce, Reuse, Repair, Recycle.	Science – everyday materials		Language to identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. Also to describe the simple physical properties of a variety of everyday materials.
water	Protecting an important natural resource.	SCIENCE Animals including humans. Growing frog spawn		Language around human impact (both positive and negative) on environments and the negative effects of population and development, litter or deforestation.
Skills: - asking simple questions and recognising that they can be answered in different ways - observing closely, using simple equipment ☐ performing simple tests - identifying and classifying - using their observations and ideas to suggest answers to questions - gathering and recording data to help in answering questions.				

SUSTAINABILITY PLAN – YEAR 3

Topic	Themes	Knowledge	Challenge	vocabulary
biodiversity	Caring for all plants, animals and insects	SCIENCE: Animals including Humans SCIENCE: Plants/Animals including Humans		different parts of flowering plants: roots, stem/trunk, leaves and flowers. main body parts associated with the skeleton and muscles.
energy	Reducing energy use and investigating greener energy sources.	SCIENCE: Light GEOGRAPHY: Polar Regions		Vocabulary around light energy, solar power. Location and characteristics of a range of the world's most significant human and physical features; concentrating on their environmental regions, key physical and human characteristics, countries, and major cities; understand how some of these aspects have changed over time; types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.
global citizenship	working with others on local and global issues	GEOGRAPHY: Volcanoes & Earthquakes. Issues that affect different parts of the world		Types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

healthy living	Improving mental and physical well-being.	PE: Athletics and Tennis. Effects on wellbeing and physical health. PSHE: Relationships/ circle time - friendships		Vocabulary around improving feelings of well being, reducing stress and feel more relaxed due to release of endorphins; improving concentration and focus; increasing energy levels; improving quality of sleep, decrease anxiety and depression
litter	Reducing the amount of litter in your local area.	The Miraculous Journey of Edward Tulane by Kate DiCamillo. Link to this story.		Stewardship, caring.
marine	Protecting all rivers, canals, lakes and oceans.	Trips: Maritime Museum. Incorporating how water is vulnerable to sea travelling ships. Include the environmental impact of shipping includes air pollution, water pollution, acoustic, and oil pollution. Ships are responsible for more than 18 percent of some air pollutants.		Vocabulary around the environmental impact of shipping, including air pollution, water pollution, acoustic, and oil pollution.
school grounds	Enhancing where you work and play.	PSHE: Relationships/ circle time – friendships. Enhancing how the outside play areas can build friendships.		Quiet space, buddy stops, game tables, MUGA.
transport	Finding more environmentally-friendly ways to travel.	Trips: thinking about we can travel more environmentally.		Language around sustainable transport: bus, train, walk, scooter, park and stride, pollution, climate change.
waste	Refuse, Reduce, Reuse, Repair, Recycle.	The Miraculous Journey of Edward Tulane by Kate DiCamillo. Link to this story.		Stewardship, caring.
water	Protecting an important natural resource.	Trips: Maritime Museum. Incorporating how water is vulnerable to sea travelling ships.		Vocabulary around the environmental impact of shipping, including air pollution, water pollution, acoustic, and oil pollution.

Skills:

Science - practical scientific methods, processes and skills through the teaching of the programme of study content: asking relevant questions and using different types of scientific enquiries to answer them; setting up simple practical enquiries, comparative and fair tests; making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers; gathering, recording, classifying and presenting data in a variety of ways to help in answering questions; recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables; reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions; using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions; identifying differences, similarities or changes related to simple scientific ideas and processes; using straightforward scientific evidence to answer questions or to support their findings.

Geography - use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied; use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world; use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

SUSTAINABILITY PLAN – YEAR 4				
Topic	Themes	Knowledge	Challenge	vocabulary
biodiversity	Caring for all plants, animals and insects	GEOGRAPHY: Amazon rain forest, mapping, human and physical geographical features and environmental issues. Living things and their environment - to use classification keys to help group, identify and name a variety of living things in their local and wider environment		food chains, food webs, identifying producers, predators and prey, habitats, habitat loss.
energy	Reducing energy use and investigating greener energy sources.	Science: Electricity: experiments to discover insulators, conductors and circuits.		Renewable energy, solar energy, wind energy, photovoltaic cells, energy efficiency, insulation.
global citizenship	working with others on local and global issues	GEOGRAPHY: Amazon rain forest, mapping, human and physical geographical features and development pressures.		Activist, campaigner, community groups, social media, campaign groups.
healthy living	Improving mental and physical well-being.	Circle time, PE and art and design improve physical and mental wellbeing. Animals Including Humans – Describe the simple functions of the basic parts of the digestive system in humans. Construct and interpret a variety of food chains, identifying producers, predators and prey.		Mindfulness, well-being, contact with nature, mental health.
litter	Reducing the amount of litter in your local area.	Living things and their environment - to use classification keys to help group, identify and name a variety of living things in their local and wider environment. Protecting the local habitats.		rethink—refuse—reduce—re-choose—repair-reuse-recycle, food chain, food web. Flotsam, jetsam.
marine	Protecting all rivers, canals, lakes and oceans.	Link transport with history work on Vikings and how they explored Europe. Know that transport then was less damaging to water ways. Geography – the water cycle.		rethink—refuse—reduce—re-choose—repair-reuse-recycle, food chain, food web. Chemical pollution, oil spill, eco system, acidification, bleaching.
school grounds	Enhancing where you work and play.	Living things and their environment - to use classification keys to help group, identify and name a variety of living things in their local and wider environment		Natural environment, habitat, well-being contact with nature.

transport	Finding more environmentally-friendly ways to travel.	Link transport with history work on Vikings and how they explored Europe.		Low energy, low pollution, sustainable transport,
waste	Refuse, Reduce, Reuse, Repair, Recycle.	Using packaging materials, reuse them to construct an Anderson shelter in Art and Design.		rethink—refuse—reduce—re-choose—repair-reuse-recycle. Junk modelling,
water	Protecting an important natural resource.	GEOGRAPHY: Amazon rain forest – the river and its protection.		Chemical, waste, pollution,

Skills:

Science - practical scientific methods, processes and skills through the teaching of the programme of study content: asking relevant questions and using different types of scientific enquiries to answer them; setting up simple practical enquiries, comparative and fair tests; making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers; gathering, recording, classifying and presenting data in a variety of ways to help in answering questions; recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables; reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions; using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions; identifying differences, similarities or changes related to simple scientific ideas and processes; using straightforward scientific evidence to answer questions or to support their findings.

Geography - Pupils should be taught to locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities; name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time; identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region in North or South America. Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle; human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

Geographical skills and fieldwork: use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied; use the 8 points of a compass, 4- and 6-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world; use fieldwork to observe, measure record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

SUSTAINABILITY PLAN – YEAR 5				
Topic	Themes	Knowledge	Challenge	vocabulary
biodiversity	Caring for all plants, animals and insects	SCIENCE: All Living Things SCIENCE: Living things and their habitats		Life cycle, fragile habitat, environmental impact
energy	Reducing energy use and investigating greener energy sources.	SCIENCE: properties and changing of states, earth and space, forces.		Renewable energy – wave, solar, thermal, biofuel, wind. Sea level change.
global citizenship	working with others on local and global issues	RE: Inspirational People, Reconciliation. Key environmental figures.		Climate change, social justice, equity, CAFOD, live simply.
healthy living	Improving mental and physical well-being.	RE: Inspirational People, Reconciliation PSHE: For Jimmy workshops		Social justice and change, SVP, CAFOD, reconciliation, trust
litter	Reducing the amount of litter in your local area.	HISTORY: River Thames – include how pollution has changed over time		sustainable behaviour, monitor, research.
marine	Protecting all rivers, canals, lakes and oceans.	HISTORY: River Thames GEOGRAPHY: Rivers, coasts and mountains		Thames 21, non-native invasive species,
school grounds	Enhancing where you work and play.	IT & COMPUTING: Statistics - graphs – survey of school grounds usage.		Data logger, GIS,
transport	Finding more environmentally-friendly ways to travel.	Literacy: Persuasive writing IT & COMPUTING: Statistics - graphs - Hands up surveys		Campaign groups: Sustrans, Living Streets, Transport for London, London cycling campaign
waste	Refuse, Reduce, Reuse, Repair, Recycle.	Mouse, Bird, Snake, Wolf by David Almond: linking waste materials being made into new things (animals) IT & COMPUTING: Statistics - graphs – waste surveys		Rethink waste
water	Protecting an important natural resource.	ART & DESIGN: Monet, River art		Freshwater, habitat

Skills:

Science - planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary; taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate; recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs; using test results to make predictions to set up further comparative and fair tests; reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations; identifying scientific evidence that has been used to support or refute ideas or arguments.

Geography - Pupils should be taught to locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities; name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time; identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region in North or South America. Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle; human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

Geographical skills and fieldwork: use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied; use the 8 points of a compass, 4- and 6-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world; use fieldwork to observe, measure record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

SUSTAINABILITY PLAN – YEAR 6				
Topic	Themes	Knowledge	Challenge	vocabulary
biodiversity	Caring for all plants, animals and insects	SCIENCE Evolution and Inheritance; and Living things and their habitats		Steward, stewardship, ecology, integral ecology (Laudato si)
energy	Reducing energy use and investigating greener energy sources.	Energy efficiency around school (RAFT)		Carbon, fossil fuel, emission
global citizenship	working with others on local and global issues	GEOGRAPHY Local study of the UK European country: Spain. Comparing how problems are solved. GEOGRAPHY: Environmental issue		Campaign groups, community action, local action. Common home,
healthy living	Improving mental and physical well-being.	PSHE Hate Crime workshop ART & DESIGN Julien Opie portraits – how we see ourselves.		Equity, justice, 'mental pollution (Laudato Si)'
litter	Reducing the amount of litter in your local area.	GEOGRAPHY Local study of the UK		Waste and recycling centres, fly tipping, environmental health, hazardous material, landfill
marine	Protecting all rivers, canals, lakes and oceans.	GEOGRAPHY Local study of the UK		Thames 21, Port of London Authority, Canal and River Trust, Environment Agency. Phosphates, run off, acidification, acid rain.
school grounds	Enhancing where you work and play.	Literacy: Debate writing inspired by our topic work- 'The countryside is better than the city.'		natural space, local distinctiveness, common ground charity.
transport	Finding more environmentally-friendly ways to travel.	GEOGRAPHY Local study of the UK		Sustrans, Living Streets
waste	Refuse, Reduce, Reuse, Repair, Recycle.	Waste monitor roles within school.		Resource efficiency, circular economy, zero avoidable waste.

water	Protecting an important natural resource.	GEOGRAPHY: Environmental issue		'national framework for water resources', drought, regional water transfer, water efficiency, leak, water demand.
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Skills:

Science - planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary; taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate; recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs; using test results to make predictions to set up further comparative and fair tests; reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations; identifying scientific evidence that has been used to support or refute ideas or arguments.

Geography - Pupils should be taught to locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities; name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time; identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region in North or South America. Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle; human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.

Geographical skills and fieldwork: use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied; use the 8 points of a compass, 4- and 6-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world; use fieldwork to observe, measure record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.