

Ontario Science & Technology - Grade 1

| Reference | Expectations | The Wetlands | The Rainforest | The Desert |
|---|---|---|---|--|
| | Students will: | | | |
| Life Systems: Characteristics and Needs of Living Things | Demonstrate an understanding of the basic needs of animals and plants | Animal Adaptations, Food Chains Organism Screens, Migration, , Food Web | Organism screens, Dependency Web Game | Organism screens, Build-a-Desert Game |
| | Investigate the characteristics and needs of animals and plants | Animal Adaptations, Food Chains Organism Screens, Migration, , Food Web | Organism screens, Dependency Web Game | Organism screens, Build-a-Desert Game, Adaptations |
| | Demonstrate awareness that animals and plants depend on their environment to meet their needs | Organism screens, Migration, Food Web, Food Chains | Organism screens, Dependency Web Game, Niches, Build a Tree | Organism screens, Build-a-Desert Game, Adaptations |
| | Classify characteristics of animals and plants by using the senses | Organism screens and Migration - using silhouettes | Organism screens, Build a Tree | Organism screens |
| | Describe the different ways in which animals move | Organism screens, Migration | Organism screens | Organism screens, Animal Adaptations |
| | Identify common characteristics of humans and other animals; identify variations | Organism screens, Migrations, Food Web | Organism screens, Dependency Web Game | Organism screens, Adaptations |
| | Describe and compare basic changes in humans and other living things as they grow | Organism screens, Migration | Organism screens | Organism screens |
| | Describe patterns that they have observed in living things | Organism Screens, Migration, Adaptations in Animals | Organism screens, Build a Tree | Organism screens |

Ontario Science & Technology - Grade 2

| Reference | Expectation | The Wetlands | The Rainforest | The Desert |
|--|--|---|---|---|
| | Students will: | | | |
| Life Systems: Growth and Changes in Animals | Identify ways in which humans affect other animals | Endangered Wetlands, Habitat, Pollution | Human Impact screens | Human Impact |
| | Identify & describe the major physical characteristics of different animal species | Organism screens, Migration | Organism screens | Organism screens, Animal Adaptations |
| | Classify a variety of animals using observable characteristics | Organism screens, Migration | Organism screens | Organism screens, Animal Adaptations |
| | Compare ways in which animals eat and use their environment to meet their needs | Organism screens, Food Web, Web Game | Niches, Dependency Web: Food, Organism screens (Food Source section) | Organism screens, Animal Adaptations |
| | Describe changes in the appearance and activity during an animal's life cycle | Green Frog video of metamorphosis, Migration | Organism screens (Life Cycle section) | Organism screens |
| | Compare the life cycles of animals with similar and different life cycles | Organism screens, Migration | Organism screens (Life Cycle section) | Organism screens |
| | Identify growth traits in animals; compare young & mature animals | Organism screens, Migration | Organism screens (Life Cycle section) | Organism screens |
| | Describe ways in which animals respond and adapt to their environment | Animal Adaptations, Organism screens & Migration (habitat, food source section) | Organism screens (Habitat section), Cryptic Coloration, Niches, Startle Displays, , Warning & Mimicry | Animal Adaptations screens, Organism screens (animals) |
| | Compare ways in which different animals care for their young | Organism screens and Migration (Life Cycle sections) | Organism screens (Life cycle section) | Organism screens |
| | Describe features of the environment that support the growth of familiar animals | Animal Adaptations, Habitat | Habitat, Niches, Organisms (Habitat section) | Animal Adaptations screens, Organism screens (animals) |
| | Identify and compare the effects of the seasons on animals | Migration, Animal Adaptations, Habitat | Seasonality | |
| | Describe ways in which humans can help or harm other living things | Habitat, Pollution | Human Impact screens | Human Impact screens |
| | Demonstrate an understanding of what small animals need to survive | Masked Shrew, Spotted Salamander, Green Frog, Yellow-headed Blackbird | Organism screens: Hummingbird, Red-eyed tree frog, Euphonia, Bat | Organism screens (e.g. Amphibians, reptiles, herbivorous mammals) |
| Describe the life processes of an animal that they have observed | Organism screens, Migration | Organism screens, Ant symbiosis | Animal Adaptations screens, Organism screens (animals) | |

Ontario Science & Technology - Grade 3

| Reference | Expectation | The Wetlands | The Rainforest | The Desert |
|---|--|--|--|--|
| | Students will: | | | |
| Life Systems: Growth and Changes in Plants | Investigate the requirements of plants and the effects of environmental changes on plants | Plant Adaptations, Evergreens in Bogs, Nutrient Cycles (in overview) | Epiphytic Lifecycle, Build a Tree, The Epiphytic Lifestyle, Organism screens: plants | Organism screens (plants), Plant Adaptations |
| | Describe how plants are important to other living things & the effects of humans on plants | Producers, Food Web Game, Food Chain | Web Game, Epiphytes, Pollination, Food, Niches | Build-a-Desert Game |
| | Identify the major parts of plants and describe their basic functions | Photosynthesis | Botany screens - Leaves, Roots, Seeds, Stems, Flowers | Plant Adaptations, Organisms (plants) |
| | Classify plants according to visible characteristics | Organism screens | Botany screens, Organism screens: plants, | Organisms (plants) |
| | Describe, by using their observations, the changes that plants complete in a life cycle | Organism screens (Life cycle section) | Organism screens, Tree Parts | Plant Adaptations, Organisms (plants) |
| | Identify traits that remain constant in some plants as they grow | Organism screens | Botany screens, Tree Parts | Plant Adaptations, Organisms (plants) |
| | Describe, using their observations, plant growth is affected by environmental change | Organism screens (Life cycle section) | Seasonality, Succession, Climate | Human Impact |
| | Explain how different features of plants help them survive | Organism screens (Introduction) | Botany screens, Tree Parts | Plant Adaptations, Organisms (plants) |
| | Describe ways in which humans use plants for food, shelter and clothing | Organism screens | Rainforest Riches, Impact screens | Plant Organism screens |
| | Identify how parts of plants are used to produce specific products for humans | Organism screens: Cranberry, Sphagnum Moss, Tamarack | Botany screens, Tree Parts, Rainforest Riches | Organism (plants):Agave, Barrel Cacti |
| | Describe the plants used in food preparation and identify places where they can be grown | Organisms screens: Cranberry, Labrador Tea | Rainforest Riches, Plant Organism screens | Plant Organism screens |
| | Describe various settings in which plant crops are grown | | Plantations | Human Impact |
| | Describe the dependencies of plants and animals | Food Chain, Food Web Game | Dependency Web, Dependency Web Game | Build-a-Desert Game |
| Compare the requirements of some plants and animals; identify the common requirements | Habitat, Food Web, Organism screens, Migration | Organism screens, Habitat, Food, Pollination, Seed Dispersal, Web Game | Build-a-Desert Game | |

Ontario Science & Technology - Grade 4

| Reference | Expectations | The Wetlands | The Rainforest | The Desert |
|---|---|--|---|--|
| | Students will: | | | |
| Life Systems: Habitats and Communities | Demonstrate an understanding of the concepts of habitat and community | Animal Adaptations, Organism screens, Food Web | Biodiversity, Habitat, Niches, Impact screens | Plant and Animal Adaptations |
| | Investigate the dependency of plants and animals on their habitat and the interrelationships of the plants and animals living in a specific habitat | Animal Adaptations, Organism screens, Food Web | Ant Symbiosis, Organism screens, Web Game, Web Game, Food, Habitat, Pollination, Seed Dispersal | Plant and Animal Adaptations |
| | Describe ways in which humans can change habitats and the effects of these changes | Endangered Wetlands, Conservation, Pollution | Impact screens, Rainforest Riches, Climate | Human Impact, Desertification |
| | Identify, through observation, various factors that affect plants and animals in a specific habitat | Migration, Organism screens, Conservation, Pollution | Impact screens, Rainforest Mechanisms, Niches | What is a Desert?, Plant and Animal Adaptations |
| | Classify organisms according to their role in a food chain | Food Web, Food Chain, Web Energy, Food Web Game | Dependency Types, Food Web Game, Organism screens | Build-a-Desert Game, Organism screens |
| | Demonstrate an understanding of a food chain as an energy system, construct food chains and classify the animals as types of consumers | Food Web Energy, Consumers, Producers, Food Web Game | Dependency Types, Dependency Web Game | Build-a-Desert Game |
| | Describe structural adaptations of plants and animals developed in response to the environment | Animal Adaptations | Habitat, Ant Symbiosis, Dependency Types, Organism screens | Plant and Animal Adaptations |
| | Recognize that animals and plants live in specific habitats because they are dependent on those habitats and have adapted to them | Animal Adaptations, Organism screens, Migration | Habitat, Ant Symbiosis, Dependency Types, Organism screens, Niches | Plant and Animal Adaptations |
| | Classify plants and animals that they have observed in local habitats according to similarities and differences | Animal Adaptations, Organism screens, Migration, Food Web Game | Species, Habitats, Organism screens, Niches | Organism screens |
| | Describe ways in which humans are dependent on plants and animals | Food Chains, Consumers, Conservation, Pollution | Food (dependency), Rainforest Riches, Global Benefits | Human Impact, Organism screens, Deserts of the World screens |

Ontario Science & Technology - Grade 4 cont'd

| Reference | Expectations | The Wetlands | The Rainforest | The Desert |
|---|--|---|--|---|
| | Students will: | | | |
| Life Systems: Habitats and Communities | Describe ways in which humans can affect the natural world | Conservation, Pollution, Endangered Wetlands | Global Benefits, Rainforest Riches, Endangered Rainforest, Climate | Human Impact, Desertification |
| | Construct food chains that include different plant and animal species and humans | Food Web Game, Food Chains | Dependency Web Game, Dependency Web | Build-a-Desert Game |
| | Show the effects on plants and animals of the loss of their natural habitats | Pollution, Conservation, Migration, Habitat | Niches, Habitat, Organism screens | |
| | Investigate ways in which the extinction of a plant or animal species affects the rest of the natural community and humans | Pollution, Conservation | Web Game | Build-a-Desert Game |
| Earth and Space Systems: Rocks, Minerals, and Erosion | Describe the difference between minerals and rocks | | | Rocks and Minerals |
| | Recognize that there are 3 classes of rocks; igneous, sedimentary, and metamorphic | | | Rocks and Minerals |
| | Describe the effects of wind, water, and ice on the landscape), and identify natural phenomena that cause rapid and significant changes in the landscape | | | Landscape Formation screens; Weathering, Wind screens, Water screens, Landform Quiz |
| | Investigate and describe ways in which soil is formed from rocks | | | Weathering |
| | Distinguish between natural features of the landscape and those that are the result of human activity | Relate to: Endangered Wetlands, Wetland Types | Relate to: Rainforest Types, Endangered Rainforest screens | Landform Quiz, Human Impact screens, Desertification |
| | Determine positive and negative effects of human alteration of the landscape | Endangered Wetlands | Endangered Rainforest screens | Human Impact screens, Desertification |

Ontario Science & Technology - Grade 5

| Reference | Expectations | The Wetlands | The Rainforest | The Desert |
|-------------------------------------|---|--------------|----------------|--|
| | Students will: | | | |
| Earth and Space Systems: Weather | Demonstrate an understanding of the major climatic factors & patterns associated with weather | | Climate screen | Climatic Influences screens |
| | Explain the difference between weather and climate and the factors that influence both of these systems | | | Climatic Influences screens |
| | Explain the formation of clouds and the effects of different cloud formations on weather and climate | | | Climatic Influences screens |
| | Describe the water cycle in terms of evaporation, condensation, and precipitation. | | | Climatic Influences: High Pressure Zones, Rain Shadows, Cold Ocean Currents, |
| | Identify patterns in air movement (e.g., low pressure and high pressure) | | | Climatic Influences, High Pressure Zones |
| | Describe the ways in which energy from the sun affects weather conditions (e.g., evaporation of water results in condensation, which in turn results in precipitation) | | | Climatic Influences, High Pressure Zones |
| | Identify the effects of air pressure (e.g., low pressure air masses are associated with mild temperature and create conditions that cause storms or clouds; high pressure air masses are cooler and are often associated with clear weather conditions. | | | Climatic Influences, High Pressure Zones |

Ontario Science & Technology - Grade 6

| Reference | Expectations | The Wetlands | The Rainforest | The Desert |
|---|--|---|--|---|
| | Students will: | | | |
| Life Systems: Diversity of Living Things | Demonstrate an understanding of ways in which classification systems are used to understand the diversity of living things | Food Web, Producer, Consumer, Decomposer, Web Game, Food Chains | Biodiversity, Organism screens, Dependency Web, Dependency Web Game | Organism screens |
| | Investigate classification systems and some of the common life processes | Organism screens, Migration, Food Chains | Organism Screens, Botany screens, Plant screens | Organism screens, Plant and Animal Adaptations |
| | Recognize differences between cold- and warm-blooded animals in regulating body temperature | Organism screens: Green Frog, Salamander, Mammal & Bird screens | Red-Eyed Green Frog, Iguana, Fer de Lance, Mammal & Bird screens | Animal Adaptations, Animal Organism screens |
| | Identify, describe and classify vertebrates into five classes | Organism screens featuring animals | Organism screens featuring animals | Organism screens featuring animals |
| | Identify, describe and classify invertebrates into phyla | Caddisfly, Damselfly, Daphnia, Dragonfly, Giant Water Bug, Mosquito, Waterboatman | Ant, Beetle, Butterfly, Moth, Scorpion, Spider, Termites | Arthropod screens |
| | Compare the characteristics of vertebrates and invertebrates | Organism screens featuring animals | Organism screens featuring animals | Organism screens featuring animals |
| | Compare the characteristics of different kinds of arthropods | Caddisfly, Damselfly, Waterboatman, Mosquito, Dragonfly, Daphnia, Giant Water Bug | Ant, Beetle, Butterfly, Moth, Scorpion, Spider, Termites | Arthropod screens (12 arthropods featured) |
| | Describe microscopic living things using appropriate tools to assist them with their observations | Link to: Daphnia, Green Algae, Wheel-Animalcule | Link to: Organism Screen: Green Algae, Botany Screens: Algae, Bacteria | |
| | Identify inherited characteristics and learned or behavioural characteristics. | Organisms Screens: Behavior, Lifecycle | Animal screens, Organism screens: Behavior, Lifecycle | Adaptations, Plant & Animal Adaptations, workbook |
| | Describe specific characteristics or adaptations that enable each group of vertebrates to live in its particular habitat and explain the importance of maintaining that habit for the survival of the species. | Animal Adaptations, Organism Screens | Organism screens, Niches, Biodiversity screens, | Adaptations, Animal Adaptations, Organism screens (Animals) |
| Describe ways in which micro-organisms meet their basic needs | Daphnia, Green Algae, Wheel-Animalcule | Green Algae (organism), Botany: Algae, Bacteria | | |

Ontario Science & Technology - Grade 7

| Reference | Expectations | The Wetlands | The Rainforest | The Desert |
|--|--|---|--|--|
| | Students will: | | | |
| Life Systems: Interactions with Ecosystems | Demonstrate an understanding of the interactions of plants, animals, fungi and microorganisms in an ecosystem | Organism screens, Migration, Food Chains, Food Web, Web Game | Organism screens, Niches Dependency Web section,, Dependency Web Game, | Organism screens, Build-a-Desert Game, Plant & Animal Adaptations |
| | Investigate the interactions in an ecosystem and identify factors that affect the balance among the components of an ecosystem (e.g., forest fires, parasites) | Web Game, Wetland Mechanisms, Nutrient Cycles, Productivity | Web Game, Rainforest Types, Succession, Tree Fall Gaps, Mechanisms of a Rainforest: Water Cycles, Productivity | Build-a-Desert, Climatic Influences screens, Wind screens, Water screens, Weathering, Water Availability |
| | Demonstrate an understanding of the effects of human activities, technological innovations and naturally occurring changes on the sustainability of ecosystems | Conservation, Pollution | Human Impact, Impact screens | Human Impact, Impact on the Desert, Desertification, World Deserts screens |
| | Identify living and non-living elements in an ecosystem | Web Game. Organism screens,, Nutrient Cycles | Web Game, Organism screens, Mechanisms | Build-a-Desert, Organism screens, What is a Desert? |
| | Identify populations of organisms within an ecosystem and the factors that contribute to their survival | Organism screens, Habitat Migration, Nutrient Cycles, Animal/Plant Adaptations, | Organism screens, Mechanisms of a Rainforest, Ant Symbiosis, Pit Viper | Organism screens, Plant & Animal Adaptations, |
| | Identify and explain the roles of producers, consumers and decomposers in food chains and their effects on the environment | Food Chains, Food Web, Producers, Consumers, Decomposers, Food Web Game, Photosynthesis | Organism screens, Botany Screen: Fungi, Web Game | Organism screens, build-a-Desert |
| | Explain the role of microorganisms in recycling organic matter | Organism: Green Algae | Botany Screens: Algae, Bacteria, Fungi | |
| | Identify microorganisms as beneficial and/or harmful | Organism screens: Green Algae, Wheel-Animalcule | Botany Screens: Algae, Bacteria, Fungi | |
| | Interpret food webs that show the transfer of energy and evaluate the effects of the elimination or weakening of the food web | Web Energy, Food Web, Food Chains, Food Web Game | Dependency Web, Niches, Dependency Web Game, | Build-a-Desert |
| | Describe the process of cycling carbon and water in the biosphere | Photosynthesis, Nutrient Cycles | Water Cycles | Relate to: Water Availability |
| | Investigate how natural communities change & explain how the changes can affect animal or plant populations | Animal Adaptations, Plant Adaptations | Habitat, Epiphytic Lifestyle, Biodiversity screens | Desertification |
| Identify signs of ecological succession in a local ecosystem | | Succession, Tree Fall Gaps | | |

Ontario Science & Technology - Grade 7 cont'd

| Reference | Expectations | The Wetlands | The Rainforest | The Desert |
|---|--|--|---|---|
| | Students will: | | | |
| Life Systems: | Investigate the impact of the use of technology on the environment | Conservation, Pollution | Human Impact, Impact screen | Human Impact screens |
| Interactions with Ecosystems | Investigate the bio-economical costs and benefits of the recycling and waste disposal industries | Conservation | Impact screens, Statistics, Biodiversity Endangered, | |
| | Explain the importance of plants as sources of energy, as producers of carbohydrates and oxygen, and as habitats for wildlife | Photosynthesis, Producers, Food Chains, Food Web Energy, Food Web | Plants, Botany screens, Plant Organisms, Productivity, Niches, Climate, Web Game | Build-a-Desert Game, |
| | Describe the conditions in an ecosystem that are essential to the growth and reproduction of plants and microorganisms, and show the connection between these conditions and various aspects of the food supply for humans | Photosynthesis, Organism screens which feature plants, Wetland Types, Wetland Mechanisms | Botany Screens, Organism screens which feature plants, Pollination, Seed Dispersal, Succession, Rainforest Riches | Plant Adaptations screens, What is a Desert?, Build-a-Desert Game |
| | Explain the long term effects of the loss of natural habitats and the extinction of species | Conservation, Pollution, Migration | Endangered Rainforest screens, Habitat | Impact on the Desert, Human Impact, Desertification |
| | Identify and explain economic, environmental and social factors that should be considered in the management and preservation of habitats | Conservation, Pollution, Migration | Impact screens, Rainforest Riches | Impact on the Desert, Human Impact, Desertification |
| Earth and Space Systems – The Earth's Crust | Investigate the formation of the physical features of the earth's crust | | | Landscape Formation |
| | Classify rocks and minerals, using their observations, according to their characteristics and method of formation | | | Rocks and Minerals |
| | Distinguish between rocks and minerals and describe the differences in their composition | | | Rocks and Minerals, relate to Landforms Quiz |

Ontario Science & Technology - Grade 7 cont'd

| Reference | Expectations | The Wetlands | The Rainforest | The Desert |
|---|--|--|---|--|
| | Students will: | | | |
| Earth and Space Systems -The Earth's Crust | Identify the geological processes involved in rock and mineral formations | | | Landscape Formation, Rocks and Minerals |
| | Explain the rock cycle (e.g., formation, weathering, sedimentation, and reformation) | | | Rocks and Minerals |
| | Describe the process of soil formation by relating the various meteorological, geological, & biological processes involved | | | Weathering |
| | Analyse, through observation, evidence of geological change (e.g., fossils, strata) | Bog formation (glacial) | | Landscape Formation, Water screens, Wind screens, Landform Quiz |
| | Describe, using simulations or models, the origin and history of natural features of the local landscape (e.g., lakes, river flats) | Bog Formation | | Water screens, Wind screens, Landform Quiz |
| | Investigate the effect of weathering on rocks and minerals. | | | Weathering, Rocks and Minerals |
| | Use appropriate vocabulary, including correct science and tech terminology, to communicate procedures, ideas, and results (e.g., crystallization, sedimentary rock, magma, igneous rock, weathering, transportation, and sediments) when describing the rock cycle | | | Landscape Formation, Rocks and Minerals, Weathering, Landforms Quiz, Wind screens, Water screens |
| | Identify the factors that must be considered in making informed decisions about land use | Endangered Wetlands, Conservation, Habitat, Pollution, Migration | Human Impact, Impact screens, Biodiversity screens, Global Benefits | Human Impact, Impact on the Desert, Desertification |
| | Investigate some of the ways in which humans have altered the landscape to meet their needs (e.g. farming, urban development, roads) and assess the environmental and economic consequences. | Endangered Wetlands, Conservation, Habitat, Pollution, Migration | Human Impact, Impact screens, Biodiversity screens, Global Benefits | Human Impact, Impact on the Desert, Desertification |

Ontario Science & Technology - Grade 8

| Reference | Expectations | The Wetlands | The Rainforest | The Desert |
|--|---|--|---|--|
| | Students will: | | | |
| Life Systems: | Investigate basic cellular processes and certain specialized cells in plants | Photosynthesis | Botany screens | Plant Adaptations, Plant Organism screens |
| Cells, Tissues, Organs and Systems | Identify unicellular organisms and multicellular organisms | Organism screens, Migration | Botany screens: Algae, Bacteria, Fungi, Organism screens | |
| | Investigate ways in which unicellular organisms meet their basic needs | Organism screens: Green Algae, Wheel-Animalcule | Botany Screens: Algae, Bacteria, Fungi, Organism screen: Green Algae | |
| | Explain the function of selectively permeable membranes in cells | Photosynthesis | Botany screens: Stomata, Roots, Leaves | |
| | Describe and explain the structure and function of specialized cells and tissues in different parts of plants | | Botany screens | Plant Adaptations screens (e.g. Storing Water, Protection, |
| | Recognize that cells in multicellular organisms need to reproduce to make more cells to form and repair tissues | | Botany screens | |
| | Explain how the structures of a plant permit the movement of food, water and gases | Nutrient Cycles, Plant Adaptations | Botany screens: Roots, Stems, Leaves | Plant Adaptations screens, Plant Organisms screens |
| | Compare the structures of different plants which enable them to live in specific conditions | Organism screens: Algae, Plants, Wetland Types, Classifications | Botany screens: Algae, Bacteria, Fungi, Flowering Plants, Trees, Vines, Epiphytes | Plant Adaptations screens, Plant Organisms screens |
| | Describe, using observation, the movement of gases and water during diffusion and osmosis | Nutrient Cycles, Photosynthesis | Botany screens: Stomata, Stems, Roots, Leaves | Plant Adaptations: Water Efficiency |
| | Describe similar and different functions of comparable structures in different groups of living things | Organism screens, Migration | Organism screens, Botany screens | Organism screens, Plant and Animal Adaptations |
| Earth and Space Systems: Water Systems | Demonstrate an understanding of how the earth's water systems were formed, the similarities and differences among them, and how they influence the climate and weather of the region in which they are located. | Wetland Types, Swamp, Marsh, Carr, Peatland, Bog, Fen, Groundwater, Flooding, Water Cycle, Bog Study section, Bog Formation animations | Water Cycle, | Water Availability |

Ontario Science & Technology - Grade 8 cont'd

| Reference | Expectations | The Wetlands | The Rainforest | The Desert |
|---|---|--|---------------------------|--|
| | Students will: | | | |
| Earth & Space Systems: Water Systems | Investigate the major features of the earth's water resources (e.g., oceans, rivers, lakes, glaciers, ice-caps, snowfall, and clouds) and the effects of large bodies of water on global climate and ecosystems. | Wetland Types, Swamp, Marsh, Carr, Peatland, Bog, Fen | Water Cycle, Climate | Climatic Influences, High Pressure Zones, Rain Shadows, Continental Interiors, Cold Ocean Currents, Water Availability |
| | Examine how humans use resources from the earth's different water systems and identify the factors involved in managing these resources for sustainability. | Endangered Wetlands, Conservation, Habitat, Pollution | | Water Availability, Human Impact |
| | Identify the various states of water on the earth's surface and the conditions under which they exist (e.g., glaciers, snow on mountains, and polar ice-caps are solid states of water, oceans, lakes, rivers, and groundwater are liquid states of water; the atmosphere contains water in its gaseous state.) | Water Cycle, Solid – Bog Formation & Succession (glaciers) Liquid - Wetland Types, Swamp, Marsh, Carr, Peatland, Bog, Fen Gas – Water Cycle | Liquid, Gas -Water Cycle, | Solid- Deserts of the World – Polar Liquid – Water Availability, Liquid / Gas – Climatic Influences screens |
| | Describe the distribution and circulation of water on the earth (e.g., oceans, glaciers, rivers, groundwater, the atmosphere) | Water Cycle | Water Cycle | Water Availability, Climatic Influences screens |
| | Describe wave formation and the effects of waves on coastal features (e.g., bays, rocky headlands, beaches) | Erosion | | |
| | Investigate how large bodies of water affect the weather and climate of an area (e.g., lakes affect snow precipitation) | | | Cold Ocean Currents, Continental Interiors (absence of large water body) |
| | Investigate, using simulations or models, the movement of ocean currents and their impact on regional climates (e.g., Gulf Stream, Labrador Current, Alaska Current) | | | Cold Ocean Currents |