









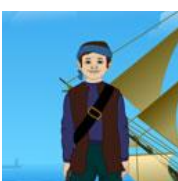










Grade K					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	Naming and locating the senses	After completing this lesson, students should be able to name and locate the senses	Pacific Ocean	Crab Boat	S0101
	How do I use my senses?	After completing this lesson, students should be able to know how they use their senses	Pacific Ocean	Tiki Lounge	S0102
	Observing the human body using your senses	After completing this lesson, students should be able to observe the human body using senses	Pacific Ocean	Easter Island	S0103
	Human development (baby to old person)	After completing this lesson, students should know about human development (baby to old person)	Pacific Ocean	Bikini Atoll	S0104
	Human body - Body parts and their function	After completing this lesson, students should: •Understand that people have similar human body parts •Find and name the basic external parts of the human body (hands, finger, arm, head, leg, toe, foot, nose, eye, tongue, mouth)	Caribbean Sea	Mexican Diner	S0201
	Animals - bodyparts	After completing this lesson, students should be able to: •Identify how humans and other animals are different as well as similar •Find and name the main external parts of an animal's body	Caribbean Sea	Diving School	S0202
	Animals - how do animals move	After completing this lesson, students should be able to list the various ways animals move: jump, run, crawl, slither, swim, etc	Caribbean Sea	Pirates	S0203
	Plants - what are plants and what parts do plants have? What do plants need to grow?	After completing this lesson, students should be able to: •Understand that plants are living things •Find and name the major basic parts of a plant (observing real plants and models): roots, stem, leaves	Caribbean Sea	Turtle Beach	S0204








Grade K					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	Human, animals, plants: characteristics of living things	After completing this lesson, students should be able to recognize the characteristics of living things (such as needing oxygen, reproduction, growing, eating, stages of development)	Caribbean Sea	Surfing	S0205
	Seasonal changes- name the different seasons	After completing this lesson, students should be able to: •Recognize the different seasons •Name the different seasons	Atlantic Ocean	South Africa- Kaap de goede hoop	S0301
	Seasonal changes - name the characteristics of the seasons	After completing this lesson, students should be able to: •Identify the different seasons by their characteristics •Name the seasons and their different characteristics	Atlantic Ocean	Canary Islands	S0302
	Day and night - the sun	After completing this lesson, students should be able to explain the properties of the sun	Atlantic Ocean	Rio de Janeiro	S0303
	Day and night - the sky the moon and other planets	After completing this lesson, students should be able to: •Examine what can be seen in the sky during daylight and nighttime •Understand there are other planets in the universe and that we live on earth •Explain the difference between day and night	Atlantic Ocean	Center of the Ocean	S0304
	Day and night - planets	After completing this lesson, students should be able to: •Make a list of the most common planets •Understand that we live on earth and that there are other planets in the universe	Atlantic Ocean	Bermuda Triangle	S0305
	Primary colors	After completing this lesson, students should be able to recognize the primary colors and name them	Arctic Ocean	Fishing Boat	S0401






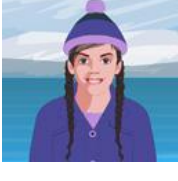
Grade K					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	Primary colors	After completing this lesson, students should be able to examine the changing of colors using dark and light	Arctic Ocean	Vikings	S0402
	Secondary colors	After completing this lesson, students should be able to: •List the basic secondary colors and name them •Mix and match secondary colors; examine results	Arctic Ocean	Fjords	S0403

Grade 1					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	Senses - 5 human senses	This lesson contains a recap of learning goals grade K about location and naming the 5 senses. After completing this lesson, students should be able to: <ul style="list-style-type: none"> ▪ Explore how human senses enable humans to be aware of the world around them ▪ Use senses to explore and talk about different materials 	Pacific Ocean	Crab Boat	S1101
	Senses - How can we protect our senses?	After completing this lesson, students should: <ul style="list-style-type: none"> ▪ Know the importance of senses ▪ Know how senses can be protected 	Pacific Ocean	Tiki Lounge	S1102
	Senses - Observation of living familiar things	After completing this lesson, students should be able to: <ul style="list-style-type: none"> ▪ Use particular senses in identifying and describing living things. ▪ Describe characteristics such as colour, shape, size, texture, smell and sound. 	Pacific Ocean	Easter Island	S1103
	Senses - Observation of familiar materials and objects	After completing this lesson, students should be able to: <ul style="list-style-type: none"> ▪ Use particular senses in identifying and describing familiar objects or materials provided. ▪ Be able to describe characteristics such as colour, shape, size, texture, smell and sound. 	Pacific Ocean	Bikini Atoll	S1104
	Senses - Observation of unfamiliar things	After completing this lesson, students should be able to: <ul style="list-style-type: none"> ▪ Use particular senses in identifying and grouping unfamiliar objects or materials provided, ▪ Describe characteristics such as colour, shape, size, texture, smell and sound. 	Pacific Ocean	Great barrier reef	S1105
	Human body - Body parts and their function	After completing this lesson, students should: <ul style="list-style-type: none"> ▪ Know that humans have bodies with similar parts ▪ Be able to locate and name the external parts of the human body (Head, shoulder, neck, hand, chest, arm, belly, waist, leg, foot. Eye, nose, mouth, tooth, nose, tongue. Hand, elbow, finger, arm. Ankles) 	Caribbean Sea	Mexican Diner	S1201
	Human body - How do I keep myself healthy? (rest, sport, activity, fresh air, clean)	After completing this lesson, students should be able to recognise that there are different ways to keep yourself and your body healthy	Caribbean Sea	Diving School	S1202
	Human body - How do I keep myself clean (hygenics)	After completing this lesson, students should be able to: <ul style="list-style-type: none"> ▪ Recognise the importance of keeping the body clean ▪ Know the correct way to wash your hands and brush your teeth 	Caribbean Sea	Pirates	S1203

Grade 1					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	Human body - Eating healthy	After completing this lesson, students should be able to: <ul style="list-style-type: none"> Recognise that we need to eat and drink to stay alive Recognise that there are different types of food Recognise that we need a balanced diet to grow healthy Give examples of food and drinks that are healthy Identify healthy choices from a variety of food and drinks 	Caribbean Sea	Turtle Beach	S1204
	Human body - Healthy and hygienic habits during the day	After completing this lesson, students should be able to name healthy habits and when to use them.	Caribbean Sea	Surfing	S1205
	Animals - How are animals similar to and different from one another?	After completing this lesson, students should be able to: <ul style="list-style-type: none"> Recognise the similarities and differences between animals Make comparisons 	Atlantic Ocean	South Africa- Kaap de goede hoop	S1301
	Animals - What do animals eat?	After completing this lesson, students should know that different animals eat different things. (some animals only eat plants, some animals only eat other animals (insects too), some animals eat plants and other animals (human))	Atlantic Ocean	Canary Islands	S1302
	Animals - Animals and their babies	After completing this lesson, students should be able to: <ul style="list-style-type: none"> Recognise that animals have different ways of reproducing (eggs, life birth, etc..) Recognise which baby animals belongs to which mother animal 	Atlantic Ocean	Rio de Janeiro	S1303
	Animals - Animals and their senses	After completing this lesson, students should be able to: <ul style="list-style-type: none"> Recognise the senses of animals Explore how senses enable animals to be aware of their surroundings 	Atlantic Ocean	Center of the Ocean	S1304
	Animals - How are animals and humans similar to and different from one another?	After completing this lesson, students should be able to: <ul style="list-style-type: none"> Recognise the similarities and differences between animals and humans Make comparisons 	Atlantic Ocean	Bermuda Triangle	S1305






Grade 1					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	Plants - What parts do plants have? And how do they differ from each other?	After completing this lesson, students should be able to: <ul style="list-style-type: none"> Identify and name the major parts of a plant, looking at real plants and models. Recognise different sizes and colors of the same parts of plants. (stem as in small plant, stem as in tree, tiny leaves, large leaves, different colors etc) 	Arctic Ocean	Fishing Boat	S1401
	Plants - How do plants grow?	After completing this lesson, students should be able to: <ul style="list-style-type: none"> Recognise that plants have seeds to reproduce Know the life cycle of a plant from seed to plant 	Arctic Ocean	Vikings	S1402
	Plants - What are some types of plants?	After completing this lesson, students should be able to recognise that there is a variety of plants that grow on different places (in the water, on the water, under water, on the land on other plants)	Arctic Ocean	Fjords	S1403
	Plants - Why do we need plants?	After completing this lesson, students should be able to identify the need of plants for humans, animals, each other, the earth. (oxygen, food, feeding ground for other plants, healing power, holding the earth together)	Arctic Ocean	Expedition	S1404
	How can we define living things? And non - living things?	After completing this lesson, students should: <ul style="list-style-type: none"> Know that there are living things and things that have never been alive Recognise and name common materials 	North Sea	The Little Mermaid (Statue)	S1501
	Where do materials come from?	After completing this lesson, students should be able to: <ul style="list-style-type: none"> Identify the properties of different materials Identify materials that exist naturally and materials that are man-made 	North sea	Netherlands	S1502
	How can we group living things based on characteristics?	After completing this lesson, students should be able to: <ul style="list-style-type: none"> Identify the properties of different living things. Sort objects into groups based on their characteristics 	North Sea	Loch Ness	S1503

Grade 1					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	How can we group non - living things based on characteristics/ purposes?	After completing this lesson, students should be able to: <ul style="list-style-type: none"> ▪ Recognise that materials are chosen for specific purposes on the basis of their properties ▪ Decide if a material is suitable for a particular purpose 	North Sea	Kilt Store	S1504
	What is earth made of?	After completing this lesson, students should be able to identify the different materials earth is made up from (land, water, air) and in what form you find it on earth.	Mediterranean Sea	Greek Theater	S1601
	Which types of bodies of water do we know?	After completing this lesson, students should be able to identify the different bodies of water: sea, ocean, rivers, canals etc. (natural versus unnatural)	Mediterranean Sea	Alexandrian Lighthouse	S1602
	Which types of landforms do we know?	After completing this lesson, students should be able to identify the different landforms, hills, mountains, valleys, dessert etc. (natural versus unnatural)	Mediterranean Sea	Pizza Restaurant	S1603
	Defining seasons all over the world	After completing this lesson, students should be able to recognise that seasons are not the same all over the world (arctic versus desert)	Mediterranean Sea	Atlantis	S1604
	What makes things move?	After completing this lesson, students should be able to: <ul style="list-style-type: none"> ▪ Explore and describe the movement of familiar things ▪ Observe and describe different ways of moving our body 	Indian Ocean	Pirates	S1701
	What is a force?	After completing this lesson, students should be able to recognise that pushes and pulls are forces.	Indian Ocean	Seychelles	S1702




Grade 1					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What can forces do?	After completing this lesson, students should be able to recognise that forces can cause things to start or stop moving, speed up, slow down or change direction.	Indian Ocean	Egypt (Suez Canal)	S1703
	What kind of natural forces do we recognise?	After completing this lesson, students should be able to understand that forces are present in nature as well.	Indian Ocean	Dolphin School	S1704
	Where do sounds come from?	After completing this lesson, students should be able to identify sources of sound.	Southern Ocean	Fishing boat	S1801
	How can we hear sounds?	After completing this lesson, students should know that we hear when a sound enters our ears.	Southern Ocean	Penguins	S1802
	How are sounds useful to us?	After completing this lesson, students should be able to recognise that we use hearing to sense danger as well as to communicate and to hear pleasant sounds.	Southern Ocean	Research Center	S1803
	Which types of sounds do you know?	After completing this lesson, students should be able to: <ul style="list-style-type: none"> ▪ Describe sounds using a range of appropriate vocabulary ▪ Identify different ways in which simple musical instruments make sounds 	Southern Ocean	Bay of Whales	S1804







Grade 2					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What living things can we find around us?	After completing this lesson, students should understand the factors which affect living things in their environment.	Pacific Ocean	Crab Boat	S2101
	What can we find in a garden?	After completing this lesson, students should understand how various plants & animals live in their local environment such as a garden.	Pacific Ocean	Tiki Lounge	S2102
	What can we find in a pond?	After completing this lesson, students should understand how various plants & animals live in their local environment such as a pond.	Pacific Ocean	Easter Island	S2103
	What can we find on a beach?	After completing this lesson, students should understand how various plants & animals live in their environment such as a beach.	Pacific Ocean	Bikini Atol	S2104
	How do environments affect living things?	After completing this lesson, students should be able to •Name the differences & similarities between local environments •Understand how environments affect animals & plants	Pacific Ocean	Great barrier reef	S2105
	Why must we care for the environment?	After completing this lesson, students should be able to find ways to care for the environment.	Pacific Ocean	Cruiseship	S2106
	What is a skeleton?	After completing this lesson, students should be able to: •Show the location of th skeleton in the body •Describe the function of the skeleton	Caribbean Sea	Mexican Diner	S2201
	How does a skeleton work?	After completing this lesson, students should be able to: •Locate several bones of the skeletal system •Understand that skeletons works together with muscles	Caribbean Sea	Diving School	S2202








Grade 2					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What are muscles?	After completing this lesson, students should be able to: •Find and name muscles in the body •Explain how muscles work •Explain the function of muscles	Caribbean Sea	Pirates	S2203
	How do healthy habits affect your bones and muscles.	After completing this lesson, students should be able to show how healthy habits affect the muscles & bones.	Caribbean Sea	Turtle Beach	S2204
	What is the weather like today?	After completing this lesson, students should be able to observe the weather.	Atlantic Ocean	South Africa-Kaap de goede hoop	S2301
	How do we describe the weather?	After completing this lesson, students should be able to make descriptions about the weather.	Atlantic Ocean	Red Crabs	S2302
	How does the weather affect plants and animals?	After completing this lesson, students should realize how weather affects different plants & animals in their environments.	Atlantic Ocean	Carnival Parade	S2303
	How can we predict the water?	After completing this lesson, students should be able to find and record weather data.	Atlantic Ocean	Titanic Shipwreck	S2304
	What are rocks?	After completing this lesson, students should be able to realize what rocks are.	Arctic Ocean	Fishing Boat	S2401








Grade 2					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What are some types of rocks?	After completing this lesson, students should be able to show various types of rocks.	Arctic Ocean	Vikings	S2402
	How can we use rocks?	After completing this lesson, students should be able to name the uses of different rocks.	Arctic Ocean	Fjords	S2403
	How can we change materials? How can forces change materials?	After completing this lesson, students should: •Understand that materials can be changed •Understand that you can change shapes of materials by bending, twisting, stretching & squashing	Arctic Ocean	Nova Zembla	S2404
	How can heat change materials? How can cooling change materials?	After completing this lesson, students should be able to explore and record how some materials change when they are heated or cooled.	Arctic Ocean	Inuit Village	S2405
	How can water change materials?	After completing this lesson, students should understand that some materials dissolve in water.	Arctic Ocean	The Huns	S2406
	What are some new materials we can get from natural materials?	After completing this lesson, students should: •Understand that some useful materials are collected from changing natural ones •Understand the importance of recycling materials	Arctic Ocean	Cruiseship	S2407
	What are light and darkness?	After completing this lesson, students should be able to: •Understand that darkness is the absence of light •Determine different light sources, including the Sun	North Sea	The Little Mermaid Statue	S2501




Grade 2					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	Why do we need light?	After completing this lesson, students should understand that light enables us to see things.	North sea	Netherlands	S2502
	What are shadows?	After completing this lesson, students should be able to identify shadows.	North Sea	Loch Ness	S2503
	Why do shadows change during the day?	After completing this lesson, students should be able to: •Investigate how shadows change •Recognize that the Sun appears to move during the day	North Sea	Kilt Store	S2504
	What makes day and night?	After completing this lesson, students should understand how the Earth spinning causes day and night.	North Sea	Winery	S2505
	What is electricity? What can electricity do? Where can we get electricity?	After completing this lesson, students should understand what electricity does.	Mediterranean Sea	Greek Theater	S2601
	What is an electric circuit?	After completing this lesson, students should: •Understand that a circuit does not work when broken •Understand the parts of simple circuits •Understand how a switch can be used to break a circuit	Mediterranean Sea	Alexandrian Lighthouse	S2602
	Why must we save electricity?	After completing this lesson, students should: •Understand that electricity is dangerous •Understand the importance of saving on electricity	Mediterranean Sea	Pizza Restaurant	S2603






Grade 2					
Lesson Icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What sort of energy is provided by the sun?	After completing this lesson, students should be able to: •Show the forms of energy that the sun provides •Describe the uses of energy that the sun provides	Mediterranean Sea	Atlantis	S2604
	What sort of energy is provided by the wind?	After completing this lesson, students should be able to show the uses of energy that the wind provides.	Mediterranean Sea	Dancing School	S2605
	What sort of energy is provided by water?	•After completing this lesson, students should be able to show the uses of energy that water provides.	Mediterranean Sea	Cruiseship	S2606







Grade 3					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What are the life processes in humans?	After completing this lesson, students should: - know that humans undergo life processes - know that life processes include movement, respiration, sensitivity, nutrition, excretion, reproduction and growth - be able to describe the various life processes in humans	Pacific Ocean	Crab Boat	S3101
	What are the life processes in animals?	After completing this lesson, students should: - know that animals undergo life processes - know that life processes include movement, respiration, sensitivity, nutrition, excretion, reproduction and growth - be able to describe the various life processes in animals	Pacific Ocean	Tiki Lounge	S3102
	What are the life processes in plants?	After completing this lesson, students should: - know that plants undergo life processes - know that life processes in plants include movement, respiration, sensitivity, nutrition, reproduction and growth	Pacific Ocean	Easter Island	S3103
	How can we tell living things from non-living things?	After completing this lesson, students should be able to understand and explain that the difference between living things and non-living things lies in the life processes that living things undergo which non-living things cannot, giving real life examples.	Pacific Ocean	Bikini Atol	S3104
	What is classifying?	After completing this lesson, students should: - know that living things can be sorted into different groups according to their features - know that there are four main groups of living things, which are animals, plants, fungi and bacteria	Caribbean Sea	Mexican Diner	S3201
	How can we classify animals?	After completing this lesson, students should: - know that six main groups of animals include mammals, birds, fish, insects, reptiles and amphibians - know animals can also be classified into vertebrates and invertebrates	Caribbean Sea	Diving School	S3202
	How can we classify animals? Part 2	After completing this lesson, students should: - know what common characteristics animals in each group have - be able to classify animals according to their characteristics	Caribbean Sea	Pirates	S3203
	How can we classify plants?	After completing this lesson, students should: - know plants can be classified into flowering plants and non-flowering plants - be able to classify plants in other ways	Caribbean Sea	Turtle Beach	S3204








Grade 3					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What are fungi?	After completing this lesson, students should know characteristics of fungi.	Caribbean Sea	Surfing	S3205
	What are bacteria?	After completing this lesson, students should know characteristics of bacteria.	Caribbean Sea	Under water city	S3206
	What are the different food groups?	After completing this lesson, students should: - know that food can be sorted into different groups - know that five main groups include grains, meat, eggs and beans, fruits, vegetables, and dairy products - be able to explore the nutrients contained in the foods and their functions	Atlantic Ocean	South Africa- Kaap de goede hoop	S3301
	What are the different nutrients in foods	After completing this lesson, students should be able to explore the nutrients contained in the foods and their functions.	Atlantic Ocean	Red Crabs	S3302
	Why is a balanced diet and regular exercise important?	After completing this lesson, students should be able to: - understand the essence of balanced diet and regular exercise and the ways to maintain them - describe the importance of balanced diet and regular exercise	Atlantic Ocean	Carnival Parade	S3303
	How can some foods be harmful to our health?	After completing this lesson, students should know consequences of over eating certain kinds of food.	Atlantic Ocean	Titanic Shipwreck	S3304
	What are the parts of a plant?	After completing this lesson, students should: - know a plant is made up of different parts - know that parts of a plants include roots, stems, leaves, flowers, seeds and fruits	Arctic Ocean	Fishing boat	S3401








Grade 3					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What are the functions of different parts of a plant?	After completing this lesson, students should be able to understand the functions of roots, stem, leaves and flowers.	Arctic Ocean	Vikings	S3402
	What do plants need to grow well?	After completing this lesson, students should: - know that plants need light, water, carbon dioxide and nutrients to grow well - be able to investigate how these factors affect a plant's growth	Arctic Ocean	Fjords	S3403
	How does temperature affect plant growth?	After completing this lesson, students should know that plants need warmth to survive.	Arctic Ocean	Nova Zembla	S3404
	What types of materials are out there?	After completing this lesson, students should be able to: - list common materials around them - know what objects are made by these materials	North Sea	The Little Mermaid Statue	S3501
	What is it made of?	After completing this lesson, students should be able to classify objects based on the material it's made of.	North sea	Netherlands	S3502
	What properties do materials have?	After completing this lesson, students should be able to: - understand some physical properties of matter - tell properties of different materials	North Sea	Loch Ness	S3503
	Classify by property	After completing this lesson, students should be able to classify materials based on properties.	North Sea	Kilt Store	S3504








Grade 3					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	How do we choose materials to make objects?	After completing this lesson, students should know how to choose suitable materials to make objects.	North Sea	Winery	S3505
	What are pushes and pulls?	After completing this lesson, students should: - know the difference between pushes and pulls - understand the effect of pushes and pulls on objects	Mediterranean Sea	Greek Theater	S3601
	What is a force?	After completing this lesson, students should: - understand what classifies as a force - understand how the size and direction of the force affect the effects of this force	Mediterranean Sea	Alexandrian Lighthouse	S3602
	What are the effects of forces?	After completing this lesson, students should be able to be able to describe what a force can do.	Mediterranean Sea	Pizza Restaurant	S3603
	Experiment with a force	After completing this lesson, students should: - understand how forces make objects start or stop moving - understand how forces can change the shape of objects - understand how forces including friction can make objects move faster, slower or change direction.	Mediterranean Sea	Atlantis	S3604
	What is the solar system?	After completing this lesson, students should know which objects there are in the sky, sun, planets, satellite, asteroid, comet, meteor, star.	Indian Ocean	Pirates	S3701
	What is the solar system?	After completing this lesson, students should: - know what the basic properties are of the sun - know what the basic properties are of the moon - know what the basic properties are of the earth - know what the basic properties are of the stars and planets	Indian Ocean	Seychelles	S3702





Grade 3					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	How do the sun, the moon and the earth revolve around each other?	After completing this lesson, students should understand how the earth moon and sun revolve around each other.	Indian Ocean	Egypt (Suez Canal)	S3703
	The sun the earth and the moon.	After completing this lesson, students should understand the earth takes 24 hours to revolve around its own axis.	Indian Ocean	Dolphin School	S3704
	When were cells first discovered?	After completing this lesson, students should know when and how cells were first discovered.	Southern Ocean	Fisher boat	S3801
	How are living things described?	After completing this lesson, students should know the different levels, organism, tissue, cells.	Southern Ocean	Penguins	S3802
	What do cells do?	After completing this lesson, students should understand that every cell has a different purpose.	Southern Ocean	Research Center	S3803

Grade 4					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	How do animals reproduce?	After completing this lesson, students should know why and how animals reproduce.	Pacific Ocean	Crab Boat	S4101
	What are the life cycles of some animals?	After completing this lesson, students should: - understand the different life cycles of animals - be able to identify the different stages in the life cycles of animals	Pacific Ocean	Tiki Lounge	S4102
	Why do young grow up to look like their parents?	After completing this lesson, students should be able to understand the effect of genes in animal development.	Pacific Ocean	Easter Island	S4103
	What is a habitat?	After completing this lesson, students should: - understand what a habitat is and how it relates to organisms - know some types of habitats	Caribbean Sea	Mexican Diner	S4201
	What are the environmental factors of a habitat?	After completing this lesson, students should: - know that environmental factors include living and non-living factors - be able to describe how the factors affect the survival of organisms in a habitat	Caribbean Sea	Diving School	S4202
	What are some common habitats?	After completing this lesson, students should understand the features of some common habitats and what organisms live in there.	Caribbean Sea	Pirates	S4203
	What is the identification key?	After completing this lesson, students should be able to identify organisms by using the identification key.	Caribbean Sea	Turtle Beach	S4204
	What is heat?	After completing this lesson, students should: - know that heat is a form of energy - be able to list some common sources and uses of heat	Atlantic Ocean	South Africa-Kaap de goede hoop	S4301


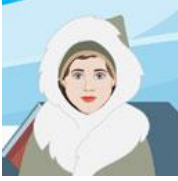




Grade 4					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What is temperature?	After completing this lesson, students should: - know that temperature is a measurement of the degree of hotness of an object - be able to measure temperature using thermometer - understand the differences between heat and temperature	Atlantic Ocean	Carnival Parade	S4302
	How does heat travel?	After completing this lesson, students should: - know that heat travels from a hotter to a colder place or object until both objects reach the same temperature - be able to relate the change in temperature of an object to the gain or loss of heat by the object	Atlantic Ocean	Titanic Shipwreck	S4303
	What happens when an object gains or loses heat?	After completing this lesson, students should understand the effects of heat gain or loss include expansion or contraction of objects; and change in state of matter.	Atlantic Ocean	Bermuda Triangle	S4304
	What are good and poor conductors of heat?	After completing this lesson, students should: - understand the properties of good and poor conductors - identify good and poor conductors of heat	Atlantic Ocean	Under water city	S4305
	What is matter?	After completing this lesson, students should: - know that matter is anything that has mass and occupies space - be able to classify matter and non-matter	Arctic Ocean	Fishing boat	S4401
	What is matter made of?	After completing this lesson, students should know that all matter are made up of particles.	Arctic Ocean	Vikings	S4402
	What are solids, liquids and gases?	After completing this lesson, students should: - know that matter can be solid, liquid or gas - understand the properties of the different states of matter	Arctic Ocean	Fjords	S4403




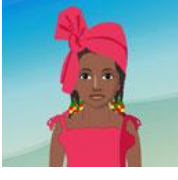
Grade 4					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What happens when materials are heated or cooled?	After completing this lesson, students should know that changes occur when materials are heated or cooled.	North Sea	The Little Mermaid Statue	S4501
	What are permanent and temporary changes?	After completing this lesson, students should: - know that changes can be permanent or temporary - know the differences and examples of permanent and temporary changes	North sea	Netherlands	S4502
	What happens when solids and liquids are heated or cooled?	After completing this lesson, students should: - understand state of matter can be changed when heated or cooled - understand melting and freezing process	North Sea	Loch Ness	S4503
	What is a magnet?	After completing this lesson, students should: - know what a magnet is - be able to differentiate magnetic and non-magnetic materials - know that there are different types of magnets	Mediterranean Sea	Greek Theater	S4601
	What are properties of magnets?	After completing this lesson, students should understand the properties of magnets.	Mediterranean Sea	Alexandrian Lighthouse	S4602
	How are magnets made?	After completing this lesson, students should know some ways in which magnets can be made.	Mediterranean Sea	Pizza Restaurant	S4603
	What are the uses of magnets?	After completing this lesson, students should be able to list the objects that use magnets.	Mediterranean Sea	Atlantis	S4604



Grade 4					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What is sound?	After completing this lesson, students should: - know that sound is produced by vibration - know that the volume of sound can be measured	Indian Ocean	Pirates	S4701
	How do we hear?	After completing this lesson, students should: - know that sound can travel through solids, liquids and gases - know that sound can be absorbed by materials	Indian Ocean	Seychelles	S4702
	What is pitch of sound?	After completing this lesson, students should: - know that sound can be high or low - understand how pitch can be changed in musical instruments	Indian Ocean	Egypt (Suez Canal)	S4703
	What is position and reference point?	After completing this lesson, students should: - know that position is the location of an object - know that the reference point is a place or object used to describe the position of an object	Southern Ocean	Fisher boat	S4801
	What is motion?	After completing this lesson, students should know that motion is any change in the position of an object.	Southern Ocean	Penguins	S4802
	What is distance?	After completing this lesson, students should know that distance is the length an object moves from its starting point.	Southern Ocean	Research Center	S4803
	What is speed?	After completing this lesson, students should know that speed is the distance an object moves divided by the time during which it moves.	Southern Ocean	Bay of Whales	S4804









Grade 5					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	Why do plants reproduce?	After completing this lesson, students should: - know why plant reproduce - know the different types of plant reproduction	Pacific Ocean	Crab Boat	S5101
	What happens in the life cycle of a flowering plant?	After completing this lesson, students should recognise that flowering plants have a life cycle including seed production, germination, flower production, pollination, and fertilisation.	Pacific Ocean	Tiki Lounge	S5102
	What is seed dispersal?	After completing this lesson, students should know why and how plants disperse their seeds.	Pacific Ocean	Easter Island	S5103
	What are body systems?	After completing this lesson, students should: - know the level of organisation of the human body - know that there are different body systems working with one another to help the body function	Caribbean Sea	Mexican Diner	S5201
	How do we move?	After completing this lesson, students should: - know that skeleton grow as humans grow - know that skeletons support and protect the body - know that humans and animals have muscles attached to the bones - understand why a muscle has to contract and relax to make a bone move and that muscles act in pairs	Caribbean Sea	Diving School	S5202
	How do we digest food?	After completing this lesson, students should know the main functions of the major organs in the digestive system and why they are essential to the human body.	Caribbean Sea	Pirates	S5203
	What controls our body?	After completing this lesson, students should: - know the main functions of the major organs in the nervous system and why they are essential to the human body - know that how we use human senses to learn about the world around us	Caribbean Sea	Turtle Beach	S5204
	Why do changes in state take place?	After completing this lesson, students should: - understand that heating or cooling is needed for a change of state to take place - know that the boiling point of water is 100°C and the melting point of ice is 0 °C	Atlantic Ocean	South Africa-Kaap de goede hoop	S5301









Grade 5					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What is boiling?	After completing this lesson, students should understand that water turns into steam when it is heated to 100 °C, but upon cooling, the steam turns back into water.	Atlantic Ocean	Carnival Parade	S5302
	What is evaporation?	After completing this lesson, students should: - know that evaporation occurs when a liquid turns into gas - know that when a liquid evaporates from a solution, a solid is left behind	Atlantic Ocean	Titanic Shipwreck	S5303
	What is condensation?	After completing this lesson, students should: - know that condensation occurs when a gas turns into a liquid and that is the reverse of evaporation - know that air contains water vapour and when water vapour loses heat it will condense	Atlantic Ocean	Bermuda Triangle	S5304
	What is the water cycle?	After completing this lesson, students should understand how the water cycle works.	Atlantic Ocean	Under water city	S5305
	Why do we need to conserve water?	After completing this lesson, students should understand the importance of water as a resource.	Atlantic Ocean	Cruise ship Canary Islands	S5306
	What is electricity?	After completing this lesson, students should know how the electrical current flows.	Arctic Ocean	Fishing boat	S5401
	What is an electric circuit?	After completing this lesson, students should: - know how to construct a complete circuit and represent it using symbols - know that an electrical device will not work if there is a break in the circuit	Arctic Ocean	Vikings	S5402
	What happens when parts of a circuit are changed?	After completing this lesson, students should know the effects of making changes to circuits, including changing the length or thickness of wire and the number and type of components.	Arctic Ocean	Fjords	S5403








Grade 5					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What are conductors and insulators of electricity?	After completing this lesson, students should: - know that metals are conductors of electricity while most other materials are not - know why metals are used for cables and wires while plastics are used to cover wires and as covers for plugs and switches	Arctic Ocean	Expedition	S5404
	How can we use electricity safely?	After completing this lesson, students should know how to use electricity safely.	Arctic Ocean	Inuit Village	S5405
	How does light help us see things?	After completing this lesson, students should: - know that we see light sources because light from the source enters our eyes - know that we can see objects around us because these objects reflect light to our eyes	North Sea	The Little Mermaid Statue	S5501
	How does light travel?	After completing this lesson, students should know that light travels in straight lines.	North sea	Netherlands	S5502
	What happens to light when it is reflected?	After completing this lesson, students should: - understand why a beam of light changes direction when it is reflected from a surface - discover that mirrors can reflect light well and change its direction, thus have many uses	North Sea	Loch Ness	S5503
	How are shadows formed?	After completing this lesson, students should be able to: - observe that shadows are formed when the path of light is blocked - discover what causes the size, length and position of shadows to change	North Sea	Kilt Store	S5504
	Why can we see through some objects but not others?	After completing this lesson, students should be able to explore how opaque materials do not allow light to pass through and how transparent materials allow most light to pass through.	North Sea	Winery	S5505

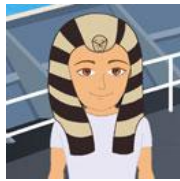

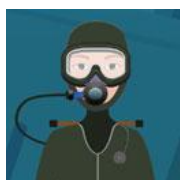

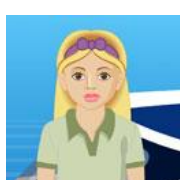


Grade 5					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	How do we measure the intensity of light?	After completing this lesson, students should know that the intensity of light can be measured.	North Sea	Under water city	S5506
	What is the solar system?	After completing this lesson, students should: - know the composition of the solar system - know the lives and discoveries of scientists who explored the solar system and stars	Mediterranean Sea	Greek Theater	S5601
	Why does the sun appear to move across the sky?	After completing this lesson, students should: - understand that the sun does not move - know that the apparent movement of the sun is caused by the earth spinning on its axis - know that the earth spins on its axis once every 24 hours	Mediterranean Sea	Alexandrian Lighthouse	S5602
	How long does it take for the earth to go around the sun?	After completing this lesson, students should: - know that the earth takes a year to orbit the sun - know that the earth is spinning as it goes around the sun	Mediterranean Sea	Pizza Restaurant	S5603
	What are some forces around us?	After completing this lesson, students should know about the various forces around them, such as elastic spring force, magnetic force, air resistance, friction and gravity.	Indian Ocean	Pirates	S5701
	What are mass and weight?	After completing this lesson, students should be able to: - distinguish between mass and weight - recognise that the unit of mass is kilogram(kg) and the unit of weight is Newton(N) - note that kilograms are used in everyday life	Indian Ocean	Seychelles	S5702
	What are the different parts of the universe and how do they influence each other?	After completing this lesson, students should be able to explain the different parts of the universe, the planets (earth with the moon), stars (main one the sun), meteors, asteroids, comets.	Southern Ocean	Fishing boat	S5801





Grade 5					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	How does the moon influence the tide?	After completing this lesson, students should be able to explain the pull of gravity of the moon on the earth generating tides.	Southern Ocean	Penguins	S5802
	Describe the life cycle of stars	After completing this lesson, students should be able to describe the different stages of a star's life cycle.	Southern Ocean	Research Center	S5803

Grade 6					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	Why do we need air?	After completing this lesson, students should: - know living things need oxygen to survive - know the constituents of air - understand the differences of inhaled and exhaled air	Pacific Ocean	Crab Boat	S6101
	What makes up our respiratory system and what is its function?	After completing this lesson, students should understand the function and structure of the respiratory system.	Pacific Ocean	Tiki Lounge	S6102
	What makes up our circulatory system and what is its function?	After completing this lesson, students should understand the function and structure of the circulatory system.	Pacific Ocean	Easter Island	S6103
	What if our respiratory and circulatory systems break down?	After completing this lesson, students should know some examples of respiratory and circulatory diseases.	Pacific Ocean	Bikini Atol	S6104
	What is energy?	After completing this lesson, students should: - know that energy is the ability to make things work or move - know that energy is derived directly or indirectly from the sun	Caribbean Sea	Mexican Diner	S6201
	What are the different forms of energy?	After completing this lesson, students should understand and list examples of the various forms of energy.	Caribbean Sea	Diving School	S6202
	What is energy conversion?	After completing this lesson, students should understand and investigate the different types of energy conversion.	Caribbean Sea	Pirates	S6203
	What is energy conservation?	After completing this lesson, students should understand the need to conserve energy in our everyday life.	Caribbean Sea	Turtle Beach	S6204

Grade 6					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	How do organisms get their energy?	After completing this lesson, students should: - know animals get energy directly from plants or indirectly from animals that eat plants - know and understand the terms 'producer' and 'consumer' - recognise that plants are food producer and the ultimate source of energy is from the sun - know the different types of food chains in a particular habitat	Atlantic Ocean	South Africa-Kaap de goede hoop	S6301
	How is energy transferred between organisms?	After completing this lesson, students should: - know how food chains can be used to represent feeding relationships in a habitat and present these in text and diagrams - know and understand the terms 'predator' and 'prey' - explore and be able to construct food chains in a particular habitat	Atlantic Ocean	Bermuda Triangle	S6302
	What happens when living things die?	After completing this lesson, students should know what happens when living things die and get decomposed.	Atlantic Ocean	Carnival Parade	S6303
	What are food webs?	After completing this lesson, students should know what food webs are and be able to construct them.	Atlantic Ocean	Titanic Shipwreck	S6304
	What are adaptations?	After completing this lesson, students should: - know that adaptations are special characteristics that organisms have to survive in their natural habitat - know that there are two types of adaptations: structural and behavioural adaptations - know that structural adaptations refer to the physical features of an organism - know that behavioural adaptations refer to the way an organism acts or behaves to stay alive	Arctic Ocean	Fishing boat	S6401
	How are animals adapted to their environment?	After completing this lesson, students should: - know how different animals adapt to the conditions in their natural habitats - know that animals have adaptations for various purposes: moving in water, breathing in water, flight, coping with extreme cold, coping with extreme heat, obtaining food, protection from predators and reproduction	Arctic Ocean	Vikings	S6402
	How are plants adapted to their environment?	After completing this lesson, students should: - know different plants adapt to their environment - know that plants have adaptations for various purposes: obtaining sunlight, obtaining water, dispersing seeds and pollination	Arctic Ocean	Fjords	S6403
	How are different organisms suited to their habitats	After completing this lesson, students should: - know how organisms are adapted to their habitats - know the adaptations that various organisms in the pond habitat have - know the adaptations that various organisms in the garden habitat have	Arctic Ocean	Nova Zembla	S6404

Grade 6					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What are natural resources and why are they important?	After completing this lesson, students should know the different types of natural resources and why they are important.	North Sea	The Little Mermaid Statue	S6501
	How has human activities negatively affected the environment?	After completing this lesson, students should explore how human behavior has positive and negative effects on the environment.	North sea	Netherlands	S6502
	How can we care for our environment?	After completing this lesson, students should be able to explore a number of ways of caring for the environment.	North Sea	Loch Ness	S6503
	What is the difference between renewable and nonrenewable resources?	After completing this lesson, students should be able to distinguish between renewable and nonrenewable resources.	North Sea	Kilt Store	S6504
	How does air pollution affect the environment?	After completing this lesson, students should: - know the different sources for air pollution - know the effect of air pollution on the environment	North Sea	Winery	S6505
	How is drinking water made?	After completing this lesson, students should: - know why water needs to be cleaned before drinking - know how water is cleaned to become drinking water	North Sea	Cruise Ship	S6506
	What are reversible and irreversible changes?	After completing this lesson, students should be able to distinguish between reversible and irreversible changes.	Mediterranean Sea	Greek Theater	S6601

Grade 6					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What are mixtures?	After completing this lesson, students should be able to explore how solids can be mixed and separated.	Mediterranean Sea	Alexandrian Lighthouse	S6602
	How can we separate solid mixtures?	After completing this lesson, students should be able to observe changes that occur when some solids are added to water.	Mediterranean Sea	Pizza Restaurant	S6603
	What happens when solids are mixed with water?	After completing this lesson, students should be able to explore how some solids dissolve in water to form solutions.	Mediterranean Sea	Atlantis	S6604
	How do we separate insoluble solids from liquids?	After completing this lesson, students should know how to separate insoluble and soluble solids.	Mediterranean Sea	Dancing School	S6605
	How can we separate soluble solids from liquids?	After completing this lesson, students should know how to separate soluble solids from liquids.	Mediterranean Sea	Harbor	S6606
	What are tectonic plates and how are they moving?	After completing this lesson, students should be able to describe the different tectonic plates and their different movements.	Indian Ocean	Pirates	S6701
	How are earthquakes formed and what is their effect?	After completing this lesson, students should be able to describe earthquakes and their effects.	Indian Ocean	Seychelles	S6702

Grade 6					
Lesson icon	Subject / Tags	Learning goals	Ocean/Sea	theme	Lesson code
	What are the different types of volcanoes and how does magma move?	After completing this lesson, students should be able to: - explain the different types of volcanoes - explain the movement of magma in the mantle	Indian Ocean	Egypt (Suez Canal)	S6703
	What forms the land?	After completing this lesson, students should be able to explain faulting and folding, the influence of water on the land as well as the forming of soil.	Indian Ocean	Dolphin School	S6704
	What are the different aspects of the weather?	After completing this lesson, students should be able to explain the different aspects of the weather: air pressure, humidity, sun and wind.	Southern Ocean	Penguins	S6801
	Describe different weather patterns.	After completing this lesson, students should be able to explain the different weather types: precipitation, cold fronts vs warm fronts, storms, tornados and hurricanes.	Southern Ocean	Research Center	S6802