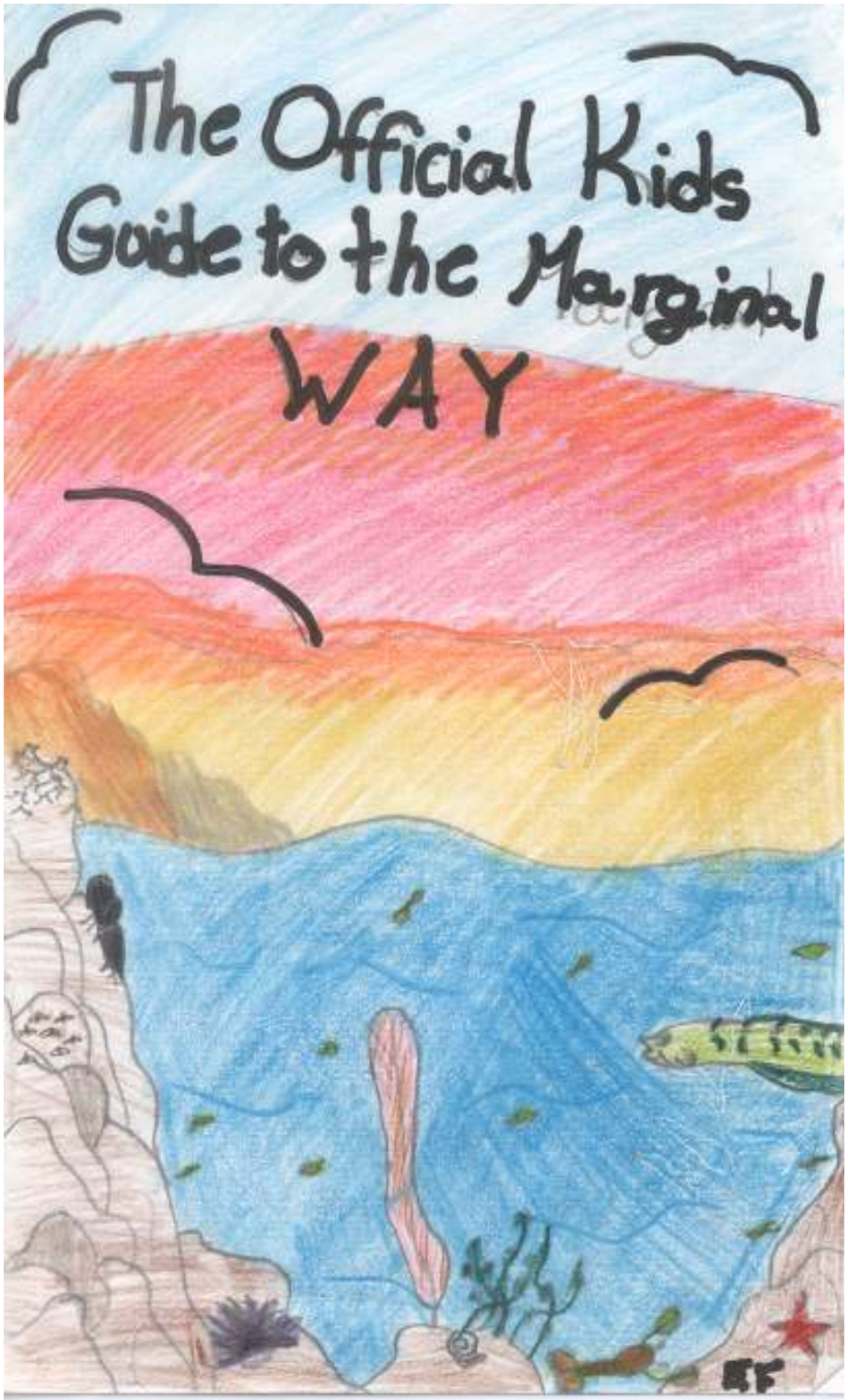
The Official Kids Guide to the Marginal Way



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Dedicated to the Honorable Josiah Chase whose deed to the Town of Ogunquit made the Marginal Way available for us all to enjoy.

By the Fifth Grade Classes of 2000 and 2003

Miss Gaidimas and Mrs. Condon

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Preface

Three years ago the first edition of The Official Kids Guide To The Marginal Way was written and printed. Ever since then, people have been asking the fifth grade class at Ogunquit Village School to create another version. This edition incorporates some of the first book as well as new things we have learned over the past few years. We hope you will enjoy learning about the history, geography, rocks, plants, and animals along the Marginal Way. We have put together information about what you might see, where to locate a variety a creatures and tips on handling the wildlife you might find. We also gathered some facts about when the Marginal Way first began and changes that have taken place over time. The fifth grade class has taken walks on the Marginal Way to find artifacts and researched using a variety of sources to create this book. We hope that you like the second edition of The Official Kids Guide To The Marginal Way.

-2003 Ogunquit Village School fifth grade class

In 2004, when the Ogunquit Village School was officially closed, The Official Kids Guide To The Marginal Way was entrusted to the Ogunquit Chamber of Commerce for safekeeping. The Ogunquit Chamber of Commerce makes the book available to the public, in the hope that visitors of all ages will come to love and respect the Marginal Way and will help us to preserve and protect our natural treasure.

-2009 Ogunquit Chamber of Commerce

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The History Of The Marginal Way

The Marginal way is 1 ¼ of a mile walk along the Ocean. It begins at the Sparhawk Motel and ends at Perkins Cove. It is so named because it runs along the margin between the land and the ocean. Many visitors come to the Marginal Way each year to enjoy its beauty.

The Marginal Way has seen many changes since it originated. Early in its history it was used as an Indian trail. In the 1900's Josiah Chase herded his cattle on this dirt path to grazing land. Josiah Chase gave the path to the Corporation of Ogunquit in the year 1925. The town has made many improvements over the years. They put in a fence, benches and paved over the dirt. In 1991 a huge storm hit it and destroyed parts of the path. Citizens in the area helped raised money to rebuild it. You can find their names on a huge plaque on the Marginal Way. People today still donate money to help keep the Marginal Way restored and beautiful.

Directions to the Marginal Way

When you are in the center of town you will see Bessie's Restaurant on your right. Cross the street and walk down Shore Road towards Perkins Cove. Keep going till you see the Sparhawk Motel on the left. It has a long rock wall with bushes. Turn left onto a pathway to the Marginal Way. Walk to down a path till you can see the ocean. You are now on the Marginal Way. If you walk to the end, you come out at Perkins Cove. Then you can take a trolley back or walk back to town. If you get lost you can go to the police station which is on School Street, right next to the school.

Things to Think About

1. Leave the animals where you find them. They will not survive in your home. Remember they are living animals just like you and me!
2. Bring a camera to capture all the amazing animals.
3. Please do not bring any dogs. Animals are not allowed on the Marginal Way in the summer.
4. Don't run on the rocks.
5. Take your trash with you. Do not throw your trash on the ground, because that is littering.
6. Walk carefully. Make sure you are careful on the sea-weed because it is very slippery.
7. Wear proper clothing like-sneakers, a T- shirt, wind breaker jacket, and a hat so you don't get sun burned.
8. Turn the rocks over carefully. There are animals living under the rocks and you could hurt them.
9. Many of the animals are very delicate. If you find that it is soft or not very stiff, you should stop touching it and put it down.
11. Some tide pool animals attach themselves to rocks and are meant not to come off. Don't pry them off.

Introduction to Tide Pools

Tide pools form when seawater fills the pools enclosed by rocks around the shoreline. They are the homes of many sea creatures. The conditions in the tide pools are always changing. Animals have to adapt to changes in tides, temperature, and saltiness. There are three laws of survival at the tide pools: Keep from being washed away by the waves at high tide, keep from drying out by the sun at low tide, and keep from being eaten. All the animals that live in the tide pools have so many problems they must be very hardy and tough. For example, a crab can grow back a lost claw. Also, a starfish could be cut in half, and then turn into two starfish.

There are five zones within the intertidal zone, the area between low and high tides. The subtidal zone is always underwater. The lower zone is usually underwater except at very low tides. The middle zone is underwater during high tide, and exposed at low tide. Upper zone is only underwater on very high tides, and the splash zone is never fully underwater. Each zone has different plants and animals. For more information, look at the chart found on the next page.

Tide pools give us a chance to explore the lives of sea creatures. Within the tide pools you can watch a crab eating a meal, or a starfish opening a mussel for food. You can see a whole ocean world in this tiny environment.

Tidal Zones

Zone	Characteristics	Biotic Features
Sub-tidal Zone	always under water	kelp, jingle shell
Lower Zone	usually under water, exposed briefly during the lowest of low tides.	Irish sea moss, whelk, lobster, crabs, sea urchins, red algae
Middle Zone	under water and exposed during every tide.	rockweed, mussels, sea lettuce, slipper shell, springtails, hermit crab, limpet, boring sponge, sea stars
Upper Zone	under water only during the highest of tides.	barnacles, spring tail, periwinkles, green algae, scuds, sea stars
Splash Zone	wet from wave splash but never under water.	blue green algae

Barnacles

Description: A barnacle is a gray round crustacean with a shell-like covering. It attaches itself to rocks and ships and is protected by its hard shell.

Habitat: It lives on rocks in the upper zone.

Diet: A barnacle eats plankton.

Protection: A barnacle protects itself with a hard shell.

Reproduction: The eggs are fertilized inside the shell and hatch into larvae.

Interesting facts: The barnacle eats with its feet when the tide comes in. Once a barnacle sticks to a rock, it never comes off.

Dog Whelk

Description: Dog whelks have a spiral shaped shell the regular size is right around 4 cm. long.

Distinguishing Characters: They chemically soften their preys' shell . Then they scrape it with their radulae to make a hole in the shell. Then they extend their proboscis into the hole and tear out their victims' tissue.

Habitat: It lives in the lower zone.

Diet: It eats mussels and barnacles.

Protection: It uses its shell to shield itself from its sea predators.

Reproduction: It lays eggs.

Interesting facts: It is fully a formed dog whelk from birth.

Periwinkles

Description: Periwinkles are small sea snails. Their shell is usually in a spiral shape. They have a head and sensory tentacles. They move by a muscular foot.

Size: Most periwinkles are 3-cm. long and 1-cm. wide.

Color: Usually periwinkles are an olive-brown to tan with dark bands and a creamed colored shell.

Habitat: A periwinkle lives in the middle zone.

Diet: A periwinkle eats algae film off rocks.
A periwinkle is at the bottom of the food chain.

Protection: Periwinkles protect themselves by hiding in their shell.

Reproduction: A periwinkle reproduces by laying eggs and attaches the eggs to a rock by a jelly coating that keeps the eggs moist at low tide.

Interesting Facts: When you hum to a periwinkle, they usually come out of their shell. A periwinkle can live up to 10 years.

Rock Gunnels
(Rock Eel)

Description: The rock gunnel is a fish that looks like an eel. They grow to be 30 centimeters long, but you will only find small ones in our tide pools. They are yellow-olive with a pale belly and black and brown spots.

Distinguishing Characteristics: They squirm like an eel.

Habitat: Middle and lower zones. Mostly found under rocks, mats of rockweed and in crevasses at low tide.

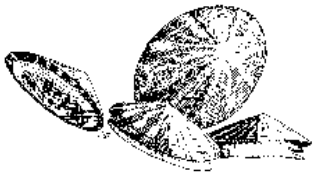
Diet: shellfish, shrimp and worms.

Protection: Very slimy so when something grabs them, they can slip away.

Reproduction: They lay eggs.

Interesting facts: Their nickname is "butterfish" because of its sliminess.

Limpets (China Caps)



Description: They can grow to be 1 inch long and are cream or blue-gray in color with a dark brown center. They have a very hard shell but the insides are very soft. They have a small head and two antennas. They are related to sea snails, abalones and mussels.

Predators: Sea stars are the enemy.

Habitat: They live on the middle and lower levels of rocks in the middle zone.

Diet: They scrape microscopic algae off rocks using their radulae.

Protection: The hard shell protects the soft insides.

Reproduction: The eggs and sperm are released in the water.

Interesting Facts: If a limpet is dislodged, it will most likely die. **Do not pick them off the rocks because you will kill them.**

Skeleton Shrimp

Description: The skeleton shrimp is about 2 cm long. It is a tan/pink color.

Habitat: It lives in the middle zone.

Diet: The skeleton shrimp eats small prey or plankton.

Protection: It uses camouflage as its defense.

Interesting facts: The skeleton shrimp is translucent. It clings to the red algae, as it waits for its prey.

Lobster

Description: Lobsters have a hard shell called an exoskeleton. When you cook lobster they turn red because it is the only pigment left after boiling. When free in the wild, lobster are olive-green brown with some black, or occasionally blue.

Diet: Clams, mussels, shells, sea worms.

Habitat: It lives in the lower zone among the rocks and crevices.

Reproduction: Lobsters lay eggs. They are zooplankton in their early stages. Other animals eat them at this stage.

Protection: You might not find a lobster in a tide pool, but you can always find one in a good local restaurant.

Mussels

Description: Mussels have blue-black hinged shells with a flat, oblong shape. They are usually stuck together and can grow up to 3 inches long. Mussels have long life spans.

Habitat: Middle zone, usually near or on the rocks or bedded in clay or mud.

Respiration: Their shells open slightly and they use their gills and filaments.

Ribbonworm

Description: Ribbonworm can grow up to 15 cm long. The average color is red or olive-green.

Habitat: You will often find a ribbonworm in the middle zone. You might find it in crevices, mussel beds and under beds of rockweed.

Interesting facts. The ribbonworm is really skinny. It also has a self-generative slime that it uses to glide over surfaces. It can regenerate lost parts.

Green Sea Urchins

Description: Sea urchins are olive-green round creatures with movable spines that grow out of their shell. They have 5 rows of reddish-purple feet that hold bits of algae and shells close to the spine. They have 5 triangular teeth for eating. They grow about 8 cm wide and 3 cm high at the most.

Habitat: You can find them in the lower Zone.

Diet: algae.

Protection: They use camouflage and fierce looking spines. They often travel in groups. Even though they look tough, they are eaten by lobsters, codfish and herring. Humans enjoy eating them as well.

Hermit Crabs

Description. Hermit crabs make their home in periwinkle or whelk shells. When their bodies get too big, they have to find new shells that fit right. They grow to about 3 cm in size and are red-dish-brown.

Habitat: Hermit crabs are found in the middle zone.

Diet: seaweed, sea lettuce, plankton, and any dead animal they can find.

Reproduction: They lay eggs inside their shell. Once the eggs hatch they become plankton. The larvae go through several stages before they settle on sea floor and become baby hermit crabs.

Interesting facts: There are 500 different species of hermit crabs in the world. They have tiny claws to grip things and can go a long time without eating.

Sea Stars (Starfish)

Description: Sea stars are shaped just like stars. Sea stars are 5 cm (2 in.) across and some are 3 feet long. Sea stars can be orange, purple to mottled rust and creamy yellow. The spiny star of the North Atlantic eats other sea stars.

Habitat: You will see sea stars in the lower zone.

Diet: The sea stars eat small animals, plants, algae, oysters, clams, and little fish.

Protection: Sea stars blend in with other things and hide in seaweed. They change color so it makes itself look like seaweed.

Reproduction: The sea stars reproduce when two sea stars come together. One shoots out sperms and the other shoots out eggs. The sperm and the eggs float in the water. Then after a while they will meet. After awhile they will become larvae.

Interesting Facts: Sea stars can regenerate new legs. The sea stars' stomach comes out and goes into the mussel and eats the whole thing.

Green Crabs

Description: The rock crab is 7.5 cm wide with three very sharp teeth. It is green with yellow and black on top and yellow on its belly.

Habitat: Middle and lower zones. It lives among the rocks, in crevasses and under seaweed.

Diet: worms, mussels, periwinkles, sea stars and sea urchins

Protection: It hides under rockweed and brandishes its claws when startled.

Reproduction: Females carry fertilized eggs until they hatch.

Sand Dollar

Description: The diameter of a sand dollar is about 1 ½ to 2 inches. The thickness of a sand dollar is about 3/16 of an inch. When a sand dollar is alive it is fuzzy. The colors of a sand dollar range from green to purple, and brown. The way a sand dollar moves is very different from a human. It moves with little suckers under its body. It has spines all around its body that feel very velvety.

Habitat: If you want to find a sand dollar you should look on top of a sandy area. You will usually find a sand dollar when it is low tide.

Diet: A sand dollar doesn't eat much. It eats the tiny bits of food that fall where they live.

Interesting facts: Something interesting about the sand dollar is that it actually has teeth inside it's body, but you can't see them. A sand dollar also has five lines usually making a star on its back.

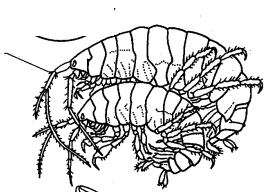
Scud

Description: Scuds are 3 cm. long with an arched back. They can come in amber, olive green, and a reddish-brown color. They lie on their sides under rocks. They scurry by flexing their back and kicking their legs. A scud is a type of amphipod.

Diet: Scuds like to eat isopods and worms.

Protection: They hide under rocks, grass like, long mats of rockweed, and in the cracks between rocks. If an enemy finds it they quickly scurry on its side away from its enemy.

Habitat: They could live in estuarine conditions but mostly live the rocks, mats of rockweed and crevices. Scuds live in the middle and lower zone.



Sea Anemones

Description: A striped sea anemone is usually 2 cm high, 5 cm wide. The colors of a sea anemone are brown or olive green and the colors of their stripes are orange, yellow or red. A striped sea anemone looks like a sea flower.

Habitat: If you want to find a striped sea anemone, you would probably find it stuck to rocks down in a lower level. It can also be stuck to rocks under seaweed.

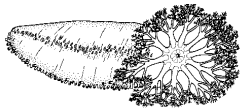
Diet: A Sea anemone may be pretty, but it is actually very nasty when it comes to food. Sea anemone eats any animal flesh it can swallow.

Protection: A sea anemone protects itself by stinging and paralyzing little marine animals. It stings these animals with its tentacles you see at the top of its mouth. It can sting you if you touch it so I wouldn't if I were you.

Reproduction: There are two different ways a striped sea anemone can reproduce. One way is just by laying eggs. But the unusual way is by actually cutting itself in half. When it lays eggs, the eggs hatch and the babies are now free-swimming larvae. After a while they find a place to attach to a rock. When the sea anemone cuts itself in half, both halves turn into a new sea anemone.

Enemies: crabs, starfish, fish, sea spiders, and large sea slugs.

Sea Cucumber



Description: The sea cucumber is about 2.5 cm. It has a brown leathery skin with either an orange, red, or purple gloss over the skin. The sea cucumber has five rows of orange suction cup feet.

Habitat: It usually is in the lower zone in a cave or crevice. The young hide under rocks or in a cave or crevice.

Food: It eats at night trapping particles in mucus on its bushy tentacles around its mouth.

Protection: It sticks out its organs and, when predators try to eat, it tastes the gross and they give up. It takes time to grow back the organs.

Seaweed Along the Marginal Way

Tide pools are a great place to observe seaweed. You can find many different types of seaweed in the tide pools of the Marginal Way. Seaweed comes in many different colors depending on the type. You can see red, yellow, green and brown seaweed in our tide pools. Seaweed provides food and protection for many tide pool dwelling animals. Seaweed comes in many different sizes, shapes, colors, and textures. Seaweed is even found in products such as ice cream and toothpaste.

Rockweed

Description: Rockweed is brownish green. Two types that you might find in our tide pools are knotted wrack and bladder wrack.

Knotted wrack has narrow leathery blades with side branches that are yellow-green. These drop off in the summer. The blade has a single oblong air bladder. It is found in the middle zone attached to rocks.

Bladder wrack has flat blades with oblong air bladders in pairs. Blades end in swollen pockets. It is found in the middle zone.

Thread-Like Green Algae

Description: It has tufts to about 15 cm long. You can find it attached to rock in the middle and lower zones.

Feathery Red Algae

Tubed Weed

Description: It is a red-pink to brown seaweed that has branching threads that grow up to 30 cm long. The ends are pincher shaped. There are two types of feathery red algae. One is the banded weed that grows up to 30 cm in length. It has pincher-shaped ends and connects to rocks and rockweed. The other type connects to knotted wrack and is called tubed weed.

Banded Weed

Habitat: In the lower zone of the tide pools.

Kelp

Description: Kelp is brown-green seaweed that is feathery. It has three parts. The blade is the large main part of kelp. The stipe is a narrow piece that connects the blade to the holdfast. Finally the holdfast connects the seaweed to rocks.

Size: Up to 3 meters.

Habitat: Lower and subtidal zones. It sometimes washes up on shore

Texture: Slippery and thin

Used for: paint, soap, cosmetics and medicines.

Geology of the Marginal Way

Plate tectonics and glaciers were two major geological forces that created and shaped the Marginal Way. The Marginal Way can trace its roots back 440 million years ago when layered

sediment from sand and mud beds was deposited and later changed by heat and pressure to become the metamorphic rock we see today. In Devil's Kitchen, an inlet south of Lobster Point, you will find two types of metamorphic rock called quartzite and phyllite. As you walk along the Marginal Way, you will see places where the rocks look folded. This occurred during a time of compression, when a small continent called Avalonia collided with ancient North America 385 billion years ago. When the super continent Pangea started to break up between 210 and 130 million years ago, molten magma shot up through the cracks and created the dikes, sills and basalt we see today. As the plates moved apart the continent of North America was formed. You see many examples of dikes in the stripes of red igneous rock along the Marginal Way.

Finally, during the last two million years, glaciers reshaped the Marginal Way. The last major ice sheet left its mark about fifteen thousand years ago. The ice scraped the land removing thick layers of rocks and soil. You can see how the glaciers moved because of the grooves in the rock. The glaciers carried large boulders far from their original home. These boulders were deposited in a variety of places when the glaciers melted.

Weathering, storms and erosion continue to change the face of the Marginal Way today.

Types of Rock

There are lots of different kinds of rocks on the Marginal Way. Rocks are made out of two or more different kinds of minerals. Rocks fall into three major groups; igneous, sedimentary, and metamorphic. They tell how the rocks were made.

Igneous rock started as melted rock deep within mantle of the Earth. As it cools it forms into a rock with a mixture of crystals. If it cools on the Earth's surface, then it is called volcanic igneous rock. And if it cools under the ground it is called plutonic. To identify a plutonic igneous rock, look for crystals that are very large and visible. Volcanic igneous rock is very small and not really visible. Granite and basalt are examples of igneous rock.

Sedimentary rock is made from the sediment out of the Earth' crust. It is formed by the erosion, transportation and deposition of exiting rocks and organic sediments. The breakdown of rock is called erosion. After a certain amount of time the sediment hardens and turns into rock. You can see layers of sedimentary rock in rock cuts along the highway. Sandstone and shale are examples of sedimentary rock.

Metamorphic rock is formed by heat and pressure. It is like folded layers. The crystals are parallel to one another. In time, a sedimentary or an igneous can turn into metamorphic rock when heat and pressure is applied. Phyllite and gneiss are examples of metamorphic rock.

So take a walk along the Marginal Way and you will be able to find the three groups of rocks (igneous, sedimentary, and metamorphic). You will be very amazed by you can see.

Common Rocks on the Marginal Way

Basalt

Basalt is probably the most common rock on the Marginal Way. It is a dark color, (usually gray or black) smooth rock. Feldspar, pyroxene, and calcicplagioclase are common minerals in basalt. This rock is igneous rock which means that it is made from cooled lava. You won't just see basalt on the Marginal Way. You will also see it in other places since this rock is the most common rock in the world.

Phyllite

Phyllite is a pale, grayish-green rock. It has a sheen on its surface because the mica and chlorite content is very high. Phyllite can be compared with slate because of its layered look. Did you know that phyllite, in Latin, means leaf stone?

Granite

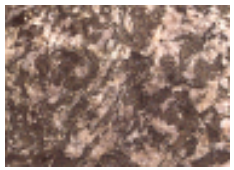
There are two types of granite that are common on the Marginal Way. The two types, pink and white, are different in appearance, but they are made of the same minerals. They are both igneous rocks. The pink granite is a coarse grained rock, with spots (attached minerals) of gray, pink and black bigger than 3/16 of an inch stuck on a peach surface. The white granite is a coarse grained rock with tiny black and gray spots (attached minerals) on its white surface. Granite is made of silica, quarts and feldspars orthoclase and microcline.

Folded Gneiss

Gneiss is a metamorphic rock that was changed by heat and pressure. It has course grains and is easy to identify because the minerals are separated into bands. These layers may be folded or irregular where the rock has folded under pressure.

Common Rocks Continued

Gabbro



Gabbro, an igneous rock, is a dark rock in which has little quartz content. There is not much silica in gabbro. The main minerals are plagioclase, pyroxene, magnetite, feldspar, olivine, and augite. Gabbro forms in large crystals with feldspar, which is a popular building stone.

Shale

Shale, a sedimentary rock is formed once clay turns to stone. The color of shale depends on where it is located. Red shale is formed where there is a lot of oxygen. Green and black shale is formed where there is very little oxygen. Some shale contains oil. Shale has some quartz and it is very small grained.

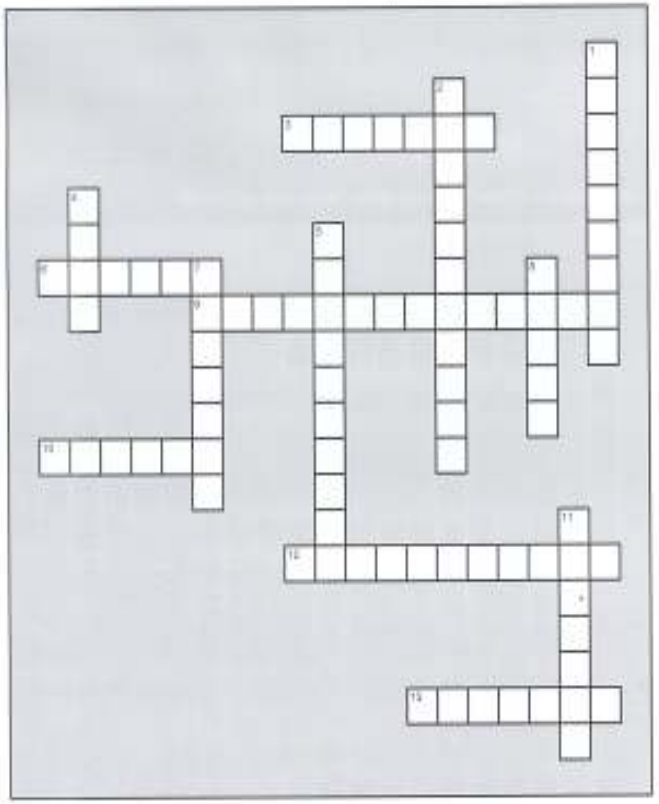
Quartzite

Quartzite, a metamorphic rock, that is mostly made up of quartz. Formed when buried sandstone is heated, quartzite may look like sandstone because of the horizontal and diagonal lines. It is a pinkish tan, with small white spots. Quartzite is a lot harder than sandstone because the crystals are interlocking. There is barely any space between them.

Marginal Way

Crossword

Solve the crossword using the list of words and the clues.



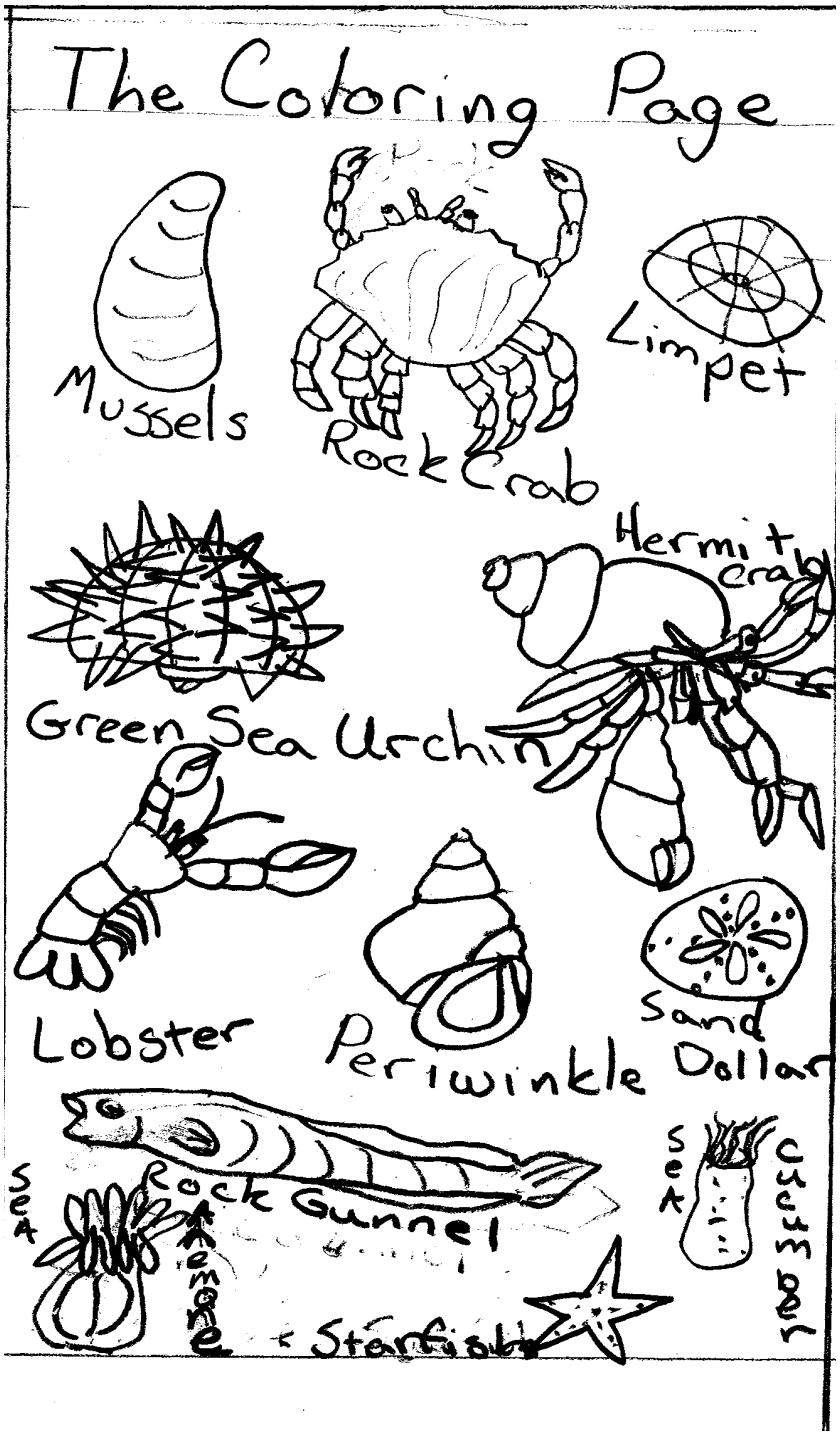
rocks
Marginal Way
glacier
basalt
mussel
sea star
scud
limpets
sea anemones
seaweed
intertidal zone
barnacles
periwinkle

Across

3. Commonly known as a starfish.
6. A relative of the clam that is blue in color.
9. The area between low and high tides.
10. The most common rock on earth.
12. A sea creature that looks like a flower.
13. A moving mountain of ice and rock.

Down

1. These creatures latch onto rocks and boats for life.
2. A 1 1/4 mile walk along the ocean from the Sparhawk Motel to Perkins Cove.
4. Looks like a shrimp
5. A sea snail.
7. They stick to the rocks of the tide pools for life and look like hats.
8. Folded gneiss, basalt, and granite are common _____ on the Marginal Way.
11. Rockweed falls in this category.



Marginal Way Word Search

F	O	E	Y	H	W	A	Z	G	N	E	I	S	S	G	H	E	S	S	Y	A	J	F	H
E	Y	W	N	I	H	C	R	U	A	E	S	Q	S	U	E	P	L	E	P	E	O	U	O
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L	O	F	I	C	X	W	T	N	W	M	C	V	U	Q	H	L	Z	A	W	D	Q	H	A
C	S	D	C	H	P	Q	K	T	E	P	G	U	K	P	N	E	T	E	M	E	G	R	R
D	W	K	T	L	C	W	Y	C	P	E	H	T	Q	J	P	C	L	E	L	E	L	A	O
Z	F	S	E	W	T	R	M	C	O	F	R	Y	T	D	D	J	S	K	T	W	C	T	L
Q	A	K	E	E	J	N	U	X	P	R	W	G	L	K	O	W	V	I	L	Z	F	S	E
G	J	W	P	T	U	B	S	A	N	D	D	O	L	L	A	R	N	A	P	K	J	A	S
E	H	M	U	F	E	C	A	H	E	W	G	O	N	L	I	A	Q	K	L	R	K	E	S
W	I	Q	V	Z	E	E	T	A	L	S	K	Q	K	K	R	T	D	F	N	E	P	S	U
L	O	I	I	S	U	Y	A	H	R	P	R	E	G	G	C	F	E	Z	M	S	X	R	M
H	J	Q	G	U	C	W	T	M	E	R	W	H	P	E	E	R	F	C	R	X	S	V	H
B	P	Q	E	C	T	I	L	N	U	J	E	U	F	K	X	A	C	R	E	C	V	A	F
H	W	I	D	J	Z	C	O	H	N	C	F	O	Z	G	L	O	B	S	T	E	R	G	O

barnacle
lobster
sea urchin
basalt
phyllite
gneiss
granite
sea urchin
minerals
limpet
hermit crab
kelp
mussel
sand dollar
rockweed
green crab
rock gunnel
periwinkle
dog whelk
sea star
sea cucumber

Word Scramble

1. ILEPTM _ _ _ _ _ _
2. IESALMRN _ _ _ _ _ _ _ _
3. ASDN OLDALR _ _ _ _ _ _ _ _ _ _ _
4. EKLP _ _ _ _
5. RCKO ACBR _ _ _ _ _ _ _ _
6. IPKLNREWEI _ _ _ _ _ _ _ _ _ _
7. ROKC GNULNE _ _ _ _ _ _ _ _ _ _ _
8. RBSLOET _ _ _ _ _ _ _
9. AIHSRSTF _ _ _ _ _ _ _ _
10. TEGAIRN _ _ _ _ _ _ _
11. ITHEPLYL _ _ _ _ _ _ _ _
12. ENLAARCB _ _ _ _ _ _ _
13. ETHRMI ABRC _ _ _ _ _ _ _ _ _ _
14. AES HUCIRN _ _ _ _ _ _ _ _ _
15. NSISGE _ _ _ _ _ _
16. SLBATA _ _ _ _ _ _
17. SAE CCMEUBRU _ _ _ _ _ _ _ _ _ _ _
18. EUSSLM _ _ _ _ _ _
19. GOD KHWLE _ _ _ _ _ _ _
20. WOEKCRDE _ _ _ _ _ _ _ _

Scavenger Hunt

How Many Things Can You Find?

- ☐ Barnacle
- ☐ Basalt
- ☐ Brown Algae, Rockweed
- ☐ Feathery Red Algae
- ☐ Folded Gneiss
- ☐ Granite
- ☐ Green Sea Urchin
- ☐ Hermit Crab
- ☐ Kelp
- ☐ Limpet (China Cap)
- ☐ Lobster
- ☐ Mussel
- ☐ Periwinkle
- ☐ Phyllite
- ☐ Ribbonworm
- ☐ Rock Crab
- ☐ Rock Gunnels (Rock Eel)
- ☐ Scud
- ☐ Sea Anemone
- ☐ Sea Cucumber
- ☐ Sea Star/Starfish
- ☐ Shale
- ☐ Thread Like Green Algae

Notes and Observations

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