

God is Provider Year 3

The Sea / Marine Life

God provides through His creation (Creation Day 5)

As God made the living creatures to inhabit the Earth, He first made those that could exist in water and in the air. Some Christians accept the theory of evolution, believing that if each day was millions of years, then the 'lower forms' of life, birds and fish, existed millions of years before 'higher' land animals. However, the Bible speaks of the passing of 'evening and morning', (Genesis 1), before each new day of creation. These passages point to 24-hour days.

God said that His creation was good. To believe that birds and fish developed into higher land animals, through evolution, one must believe that there was death and suffering. That is to say, one species died out and gave way to a new species. It is therefore impossible to believe that God created animals over millions of years, involving death and suffering, (fossils), and at the same time, believe that God's creation was 'good'. A perfect creation does not involve death and suffering. Death and suffering came into existence after the creation of man, at the point of His fall from God's perfection.

Key questions

- What does it mean to be created 'according to its own kind'?
- What does God mean when He said His creation was 'good'?
- How can we help to take care of God's creatures?
- How does God use the ocean to provide for us?
- What is an ecosystem?
- Why would we call the ocean an ecosystem?

Activities

- Classify different type of sea creatures e.g. mammals, crustaceans, fish, whales, coral, mollusks.
- Visit a sea shore if possible and observe shore life.
- Compare life on rocky shores, sandy shores, coral reefs.
- Compare differences in sea life between tropical waters and Arctic/Antarctic waters.
- Make a study of whales. Chart their migration.
- List types of sea creatures used for our food.
- Discuss problems of over fishing and impact of pollution on sea life.
- Discuss impact of rising sea temperatures on marine life including coral reefs.
- Discuss near extinction of rare species. What can be done?
- Make a poster to encourage care and protection of marine life.

Values education Year 3

God is Provider

Faith

We can have faith that God will provide all our needs.

Faith is...

- putting our trust in someone
- believing that a person will do as they say
- believing that someone or something will act as they are meant to act
- being confident that someone is trustworthy

Who can we trust?

We can only trust those who have proven themselves trustworthy. God, our Heavenly Father can be trusted more than anyone.

Activities

1. We can say that we trust a chair because it always supports us. We know that it won't collapse under us. Name three other things that you trust and say why you trust them.
2. Name three people who you can trust.
3. Name someone you would not trust.
4. Why can we trust God?
5. Name three Bible characters that had great faith. What did they trust God for?
6. What miracles can God do for His people today when we trust in Him?

What does the Bible say about faith?

Philippians 4:19 God will supply all your needs according to His riches in Christ Jesus.

Hebrews 11:6 Without faith it is impossible to please God.

Matthew 17:20 Faith as a grain of mustard seed.

Matthew 21:21-22 If you have faith, you can say to this mountain, 'move' and it will move.

Practical Science: Finding out about salt water

Make an Egg Float in Salt Water

<http://www.sciencekids.co.nz/experiments/floatingeggs.html>

An egg sinks to the bottom if you drop it into a glass of ordinary drinking water but what happens if you add salt? The results are very interesting and can teach you some fun facts about density.

What you'll need:

- One egg
- Water
- Salt
- A tall drinking glass

Instructions:

1. Pour water into the glass until it is about half full.
2. Stir in lots of salt (about 6 tablespoons).
3. Carefully pour in plain water until the glass is nearly full (be careful to not disturb or mix the salty water with the plain water).
4. Gently lower the egg into the water and watch what happens.

What's happening?

Salt water is denser than ordinary tap water, the denser the liquid the easier it is for an object to float in it. When you lower the egg into the liquid it drops through the normal tap water until it reaches the salty water, at this point the water is dense enough for the egg to float. If you were careful when you added the tap water to the salt water, they will not have mixed, enabling the egg to amazingly float in the middle of the glass.

Practical Science: Fresh or salty?

Discussion:

Have you ever tasted sea water? What is it like? What makes it taste the way it does? What do we know about salt? After this experiment write down what you have found out.

What you need:

- Two 1-litre bowls of water.
- Salt
- A spoon
- Two squares of cotton cloth
- Soap
- A water-proof pen

 <p>Pour half a cup of salt into one bowl of water. Stir until no more salt will dissolve.</p>	 <p>Write <i>salty</i> on one piece of cloth. Soak it in the bowl of salt water for a few minutes.</p>
 <p>Write <i>fresh</i> on the other piece of cloth. Soak it in the bowl of fresh water for a few minutes.</p>	 <p>Dry the pieces of cloth in the sun or a warm place.</p>
 <p>Look at the pieces of cloth. Feel them. How are they different?</p>	 <p>Use the soap to wash your hands in each bowl. Does the soap work better in fresh water or salt water?</p>

Art Year 3

God is Provider

Topic: The Sea

Biblical connection: God has provided for us through the sea.

Bible art as a wall display: The great catch: Luke 5:1-11: Make a collage of the boat, nets, disciples and fish. Use netting from sacks to represent nets, or if you can't find any, glue string to the page in a crisscross design to look like a net. Draw a boat and cut it out. Children can add paper fish.

Phil 4:19 My God shall supply all your needs.

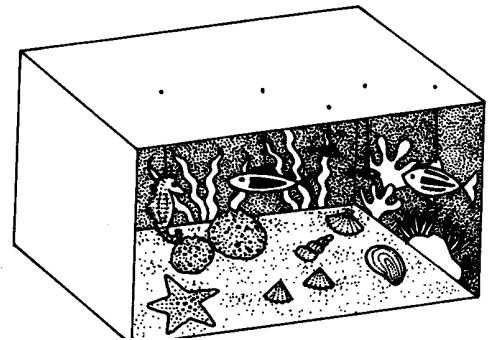
1. Drawing, painting and collage

Ask students to:

- Create a sea with thin paint, Draw colourful fish and sea creatures. Cut them out and stick them on the painted sea background.
- Make a line drawing showing a stormy sea

2. Construction

- Make mobiles of sea creatures, e.g. a matching pair of fish shapes can be placed back-to-back, glued or stapled half way around, stuffed with shredded paper, then gluing/stapling is completed to make a 3D fish which can be hung from the ceiling.
- Make a seashore scene in a sand tray or in a cardboard box. Crabs can have concertina folded legs. Add sea shells and smooth stones. Make sea weed from paper.



Make an underwater coral reef scene from egg cartons.

Coral reef

Use a piece of lace to make fan coral. Stiffen it by painting over it with Polyfilla. Let it dry, then paint it

Use a polystyrene ball and broom bristles for a sea urchin

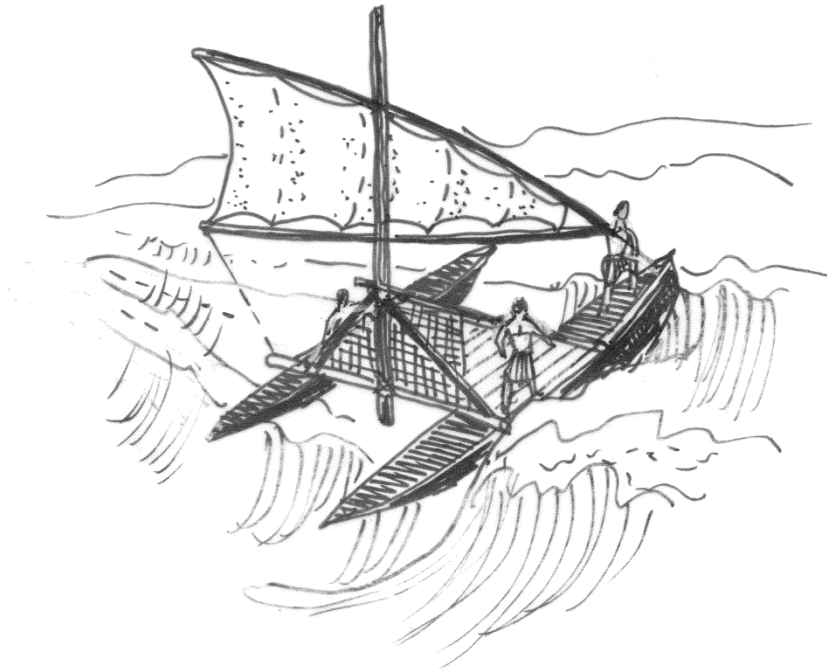
Egg-box base: open the box out like this

Use pinkish shears to make an egg-box section into a model of a coral animal

Decorate the box with coral animals, fishes and other sea creatures

Elikana of Tuvalu

Biography



“There’s a big storm coming up over there. I hope we can reach Rakaanga before it hits us,” observed Elikana anxiously. He was the leader of a group of nine people who were paddling home by canoe to Rakaanga from Manihiki, a journey of about thirty miles. They had been attending a special conference of their church. in the Penrhyn Islands group, about 1000 miles north-west of Tahiti. There were six men, two women and a child in the group. It was the year 1861.

“That’s Rakaanga straight ahead. You can just see the mountain through the rain over there. Perhaps we can get home before the storm hits,” said another man.

“The black clouds are blowing in very quickly,” commented a third, “We need to move fast to avoid it.”

The men strained hard to steer the canoe. The wind blew stronger and colder. The rain-filled clouds rolled across the waves towards them, blocking their view of the island. Suddenly the storm hit their vessel and they were being tossed about on a raging sea. Their two canoes, each about 16 metres long and 2 metres wide, were joined together using lengths of timber. Boards were laid over these to form a deck which was protected from the sun and rain by a shelter of woven coconut leaves.

But there was little protection for anyone now as powerful gusts of wind tossed the canoe about. Darkness fell as the men worked hard to keep their vessel on course for Rakaanga but the strong winds were against them.

“Let’s turn and go back to Manihiki,” suggested one of the men, an experienced sailor. “The wind is blowing us that way, anyhow.”

The others agreed, so they turned the canoe about and steered it all night in the direction of Manihiki, or so they thought. By daybreak the storm had passed, but to their dismay, when the sun rose there was no sign of land anywhere.

“This is serious,” said Elikana gravely. “We’re out on the open ocean, with not much food and water. Worst of all, we don’t know where we are.”

“The canoes aren’t really strong enough for the open ocean,” commented another man. “They’re both leaking so badly we’ll have to have two men baling full time.”

All six men kept baling, steering or resting in turn. After a long discussion the men agreed they should steer south in the hope of reaching Samoa or Rarotonga or some other island. For days they continued heading south without once sighting land.

“There are rain clouds over that way,” observed Elikana at the end of a week. “We need to collect more water for drinking.”

He spoke to the women, “Could you have one of those canvas sails ready? When the rain comes, collect it in the sail and store it in the water gourds.”

Once again they were tossed about in the heavy seas blown up by strong winds. Once again they lost direction and decided to turn north again. Another week passed. Then there came a cry from the steersman. “I see land ahead! Someone else please come and help me steer to that island!”

The men tried with all their combined strength on the steering oar to reach it, but the weather was wild. Time after time they would be near the shore, then the wind would blow them away from it again. Night came and their efforts had been in vain. They were back on the open sea.

The following day the same thing happened. Land was in sight, they steered anxiously towards it, straining hard on the steering oar, but rough weather carried them away from it. For a few more days they continued steering the canoe, but the day came when Elikana spoke to them all. “There’s nothing more we can do. I’m going to pray that God will save us. We can’t save ourselves.”

Then he prayed, “Lord God, You made the sea and the wind and the currents that carry us through the seas. We give ourselves to Your care and trust that You will use the wind and currents to steer us to where You want us to land.”

They stopped using the steering oar and just allowed the canoe to be carried by the winds and current. Their small supply of coconuts had dwindled to only six. Occasionally one of the men managed to catch a fish or a bird that settled on the edge of the canoe. For six long weeks they just drifted on the ocean. At the end of that time they decided they should give

themselves up to God for whatever He wanted to do with them. They could see no other end to their predicament.

“I’m not giving up hope of being rescueded,” one man spoked up. “I’m willing to keep on baling one canoe if someone else will bale the other one. They are both in bad shape so it’s no use baling one without the other.”

“I’ll help with the other one,” offered another man.

“These two will be doing the hard work,” said Elikana; “I think we should allow them to have the remaining six coconuts to give them strength. Do you all agree? The rest of us will keep trying to catch fish and birds as we have been doing.”

During the next two weeks they caught two sharks and a sea bird which provided them with enough food to stay alive. At the end of the eighth week they looked at the food situation again.

“There’s only half a coconut left,” said Elikana. “When that is gone there’s only what we can catch from the sea. And we’re getting too weak to manage that.”

During the whole eight weeks of this journey they had held worship every morning and evening. On Sundays they had special worship times. On the Sunday evening, at the end of the eighth week at sea, Elikana prayed a special prayer, “Lord, we commit ourselves into Your Hands and ask You to do Your will with each one of us.”

It was a clear, calm, beautiful evening, with not a cloud in the sky. As daylight faded Elikana scanned the horizon, quite expecting this to be their last night.

“Look friends,” he said quietly, afraid of raising their hopes again only to be disappointed, “Look over there. Isn’t that land?”

The others gazed in the direction Elikana was pointing and all agreed it was land in sight. Hopes were mixed with fear as they saw the land so near.

“We’ve been this close to land before,” they thought, “but the wind blew us away from it. What if that happens again?”

The wind blew up, bringing a shower of rain which refreshed the weary travelers. Then it passed and a stronger wind sprang up, blowing them towards the land. Hoisting the one remaining sail they ran straight in for the land. It was midnight when they struck the breakers and knew they were passing over the reef. But on they went, through the dark, roller after roller carrying them forward till at last they reached the shore.

As they were tossed around by the breakers four of their members were lost overboard. The remaining five managed to wade through the shallow water on to the first solid ground they had stood on for a long time. It was Nukulaelae, an island in the Tuvalu (Ellice Islands) group. They lay exhausted on the sand until daylight, when they hung up their wet clothes on the bushes nearby.

Faivaatala, a man from the nearby village, noticed the wet clothes hanging on the bushes and came to investigate. When he found the five survivors all looking so wretched, hungry and exhausted he took pity on them and went quickly to get some green coconuts to relieve their hunger and thirst. When they had gained enough strength, Faivaatala brought them to his village by canoe to cook food for them and give them shelter in his house.

The village people gathered around these strangers who had appeared in their midst, curious to know how they had arrived there. They soon discovered that the local language had much in common with Samoan. On further enquiry they learned that a group of Samoans had lived with them on Nukulaelae some years before, so communication was not difficult.

With all the care and attention of the villagers the five survivors soon recovered from their ordeal and Elikana, who was a minister in his local church, began telling them about God the Creator and Jesus His Son.

“Please tell us more,” they pleaded whenever Elikana told them Bible stories. “We love to hear about your God.”

“You seem especially interested in the stories of Jesus,” said Elikana one day. “What is it that attracts you?”

“We’ve heard some of your stories before,” explained a village chief. “Some time ago a man named Stuart, from a trading ship that visited our islands, spoke to us about the true God. He told us that God doesn’t like idols and he advised us to burn them and to turn and worship the true God. So we did; we burnt all our idols, but we didn’t know what to do next.”

It was evident that for some time God had been preparing the hearts of these people to receive the gospel of Jesus Christ, so the five survivors taught the villagers all they could of the Christian message for as long as they were with them.

After four months a ship called at Nukulaelae so Elikana and his friends prepared to return to their home at Rakaanga. The island chief was sad to see his new friends leaving them for they had taught his people so much about the one true God.

“I understand that you must go back to your homes and your families. They will be surprised to see you again after all this time” he said; “but please could you send someone back here to teach us more about God and Jesus His Son?”

Elikana was so happy that the people wanted to know more about God. “I must go back to my people,” he replied, “but I promise to come back and bring more teachers with me so you can learn more about our God.”

The chief was satisfied with this promise so the five survivors boarded the trading ship, leaving behind a group of growing Christians on Nukulaelae. Before he left, Elikana took his Rarotongan New Testament and hymn book, which had survived the stormy journey in the canoe. He had been using them to teach the villagers to read. Dividing the books up into small portions he shared them among the households, so that everyone could have access to a little bit of God’s word. These portions were treasured by the new Christians.

It was four years before Elikana returned to Nukulaelae, for he first had to spend three years teacher training at Malua, in Samoa. When he returned he was accompanied by a white missionary, Mr. Murray, and two Samoan teachers with their wives. The people were surprised and delighted to see their old friend back again and gave him a great welcome.

But, as Elikana looked around, he noticed there weren't as many people as there had been when he was there before.

"Where are all the men?" he asked, puzzled at their absence.

There was an air of gloom about the people as the tragic story was told.

"A slave ship from Peru came here," explained an old man. "The slave traders took off two hundred men. There were only about three hundred men here altogether, so we have been left with only a few men to carry on the village work."

"At first our men refused to go with the traders on the ship," continued another man," but a bad man named Tom Rose promised our men that they would take them where they could get more Christian teaching. Then they would bring them back to their island home again. They went on board the ship and we've never seen them since."

One piece of good news in this sad story was that before the men left they were each given a portion of Elikana's New Testament and hymn book which they carried away with them as prized possessions.

The people living in the Ellice Islands (Tuvalu) were all eager to have Bible teachers in their villages and gradually more Samoan teachers were brought out. Altogether thirty-six trained pastors and teachers from Samoa, with their wives and families, served in these islands. Because the languages and culture were so similar, it was easy for them to live together happily. The people of the Ellice Islands readily accepted the Christian message brought by the Samoans.

A Samoan named loane, arrived in 1875. He persuaded the people to give up work on Sundays and to worship God instead. He challenged them still further. "You have sacred objects and idols in your houses. They are made to represent fish, birds, the stars, sun and moon. These are all things that the great Creator God made. If He made them, then He must be greater than they are. So He wants you to worship Him, not the things He made."

The chiefs thought about this; they discussed it among themselves and finally came to loane. "You come with us into the bush. We want to show you something," they said.

There they showed him some of their sacred objects.

"We understand what you are saying to us, loane," said their chief spokesman, "but we're afraid to actually destroy any of these things of our old religion in case the gods destroy us."

"I'll do it for you then," offered loane.

The following day he called all the people together and removed the sacred necklaces from the five chiefs. The people watched in awe as the broken symbols of their ancestor gods fell to the ground. Seeing there was no reaction from any of the offended gods the chiefs said to loane, "There are god-houses here are full of sacred objects. You can strip them of their idols."

loane began clearing out each family's god-house, turning out skulls, sacred stones, clubs and spears and wooden images dedicated to the feared shooting star.

"You should bury the skulls in the proper burying place for your families," directed loane, "and the spears and clubs would be useful for making a fence around your meeting place, the court-house."

The people realized as this cleansing process went on that, in spite of their fearful expectations, these idols were not going to harm them, and they responded by coming to worship on the following Sunday in even greater numbers. They agreed to meet for worship in their court-house with the new fence made of spears and clubs they had surrendered. Almost one hundred attended.

loane and his fellow pastors gradually brought these people out of the darkness of idol worship to worshipping the Creator God, Father of Jesus Christ. Then, week by week he taught them the new Christian way of living which transformed their village life as well as their individual lives.

This tiny nation, now Tuvalu, which has a population of around 5000, has sent out at least 80 missionaries to eight other regions of the Pacific, from Tokelau in the east to Papua in the west. So, through the misfortune of a small group of God's people, He has brought about His purposes for, not only the people of Tuvalu, but also Kerebati to the north and countless others in distant islands of the Pacific.

Adapted from:

The History of the London Missionary Society, R.Lovett, O.U.P., London, 1899

To live Among the Stars, John Garret, Institute of Pacific Studies, University of the South Pacific, Suva, Fiji

The sea 1

List 5 things that could never be placed in water.

The sea 2

What if:

All fish disappeared

The sea 3

List the disadvantages of, and make improvements to:

A fishing rod and reel

The sea 4

Draw a row boat. Now make it:

Bigger

Add something to it

Replace something

The sea 5

How many ways can you:

catch a fish?

The sea 6

Find 10 different uses for:

A fishing net

<p style="text-align: center;">The sea 7</p> <p>“People should not be allowed to go swimming at the beach.”</p> <p>Why might someone say this?</p>	<p style="text-align: center;">The sea 8</p> <p>Think of things that are the same:</p> <p>A wave A plastic drink bottle</p>
<p style="text-align: center;">The sea 9</p> <p>“coral” is the answer.</p> <p>Make up 5 questions.</p>	<p style="text-align: center;">The sea 10</p> <p>Brainstorm solutions for:</p> <p>How to encourage people not to litter on beaches.</p>
<p style="text-align: center;">The sea 11</p> <p>Design a machine for:</p> <p>Digging worms out of the sand</p>	<p style="text-align: center;">The sea 12</p> <p>Design a crab catcher using:</p> <p>String A plastic container Seaweed A rock</p>

Fish

Draw a picture in each box.

1

A fish has gills to breathe with.

2

People cannot breathe in water.
We have no gills.

3

Scales are hard. Scales give a fish a
hard coat.

4

When the water is warm, the fish's
blood is warm. A fish is as warm
as the water it swims in.

9

When the water gets cold, the
fish's blood gets cold.

10

Because a fish's blood can get cold
fish are called cold blooded
animals.

11

Fish have bones.

12

Some fish are narrow. They can swim fast in the water.

5

A fish has fins and a tail to swim with, and steer with.

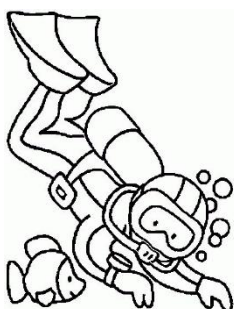
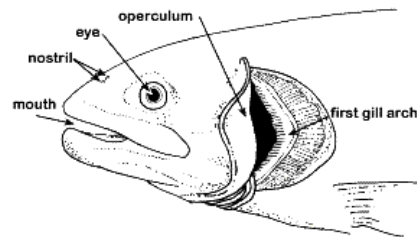
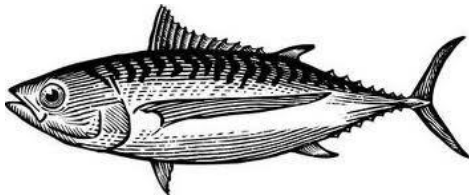
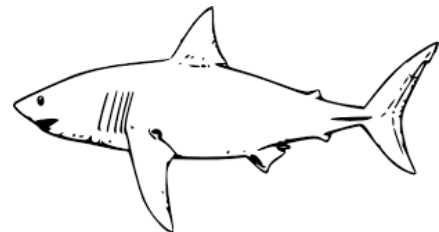
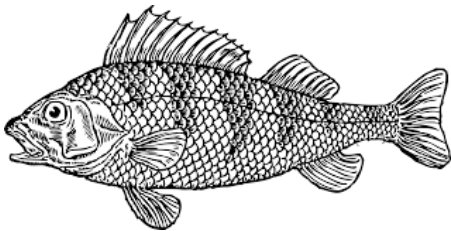
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Some fish eat seaweed. Some fish eat insects.

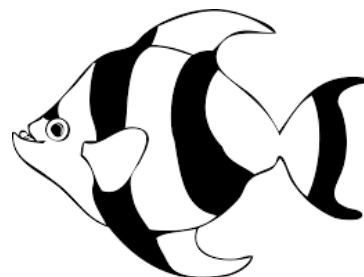
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Some fish eat other fish.

8



15



Oceans of Fun

Welcome to my island home, Fiji.
I love the world beneath the sea.

Our beach has lots of soft smooth sand,
with pretty shells to hold in your hand.

Under the ocean waves we will see,
Beautiful corals and fishes free.

Sea stars watch fish playing in schools,
darting in and out, while we are cool.

Graceful manta-rays float by,
with flippers like wings,
they seem to fly.

They pass pretty pearls in oyster shells,
sparkly treasures we love so well.

Beyond the shore in the deep blue sea, the turtles swim so
peacefully.

Shellfish

Draw a picture in each box.

1

Some shellfish have only one shell.

2

Some shellfish have two shells.
These shellfish can open and close
their shells.

3

Most shellfish with one shell live on
rocks. These shellfish have a large foot
to help it cling to the rocks.

4

The shellfish also uses its foot to
move with.

5

Most shellfish with two shells live
in the sand or the mud.

6

These shellfish use their large foot
to dig in the sand.

7

A clam hides from other animals by
doing this.

8

Some shellfish eat tiny plants and animals that float about in the water.

9

Most shellfish live in the sea.

10

Some shellfish live in rivers or lakes.

11

Shellfish belong to the snail family. Snails live on land.

12

Many shellfish are good to eat. Some people eat snails too.

13

Fish like to eat shellfish too.

14

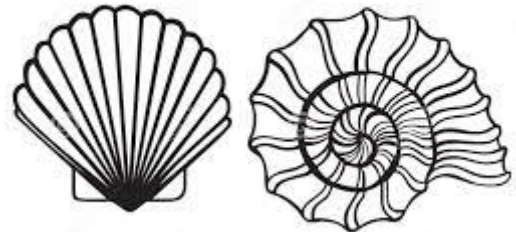
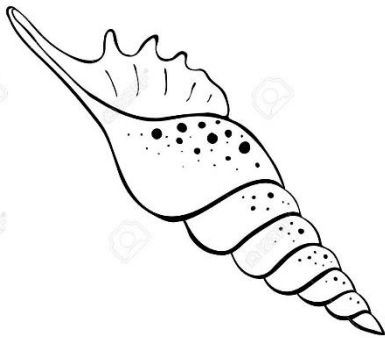
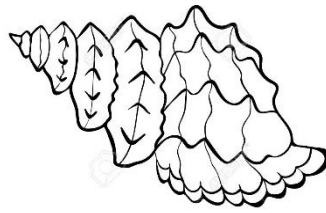
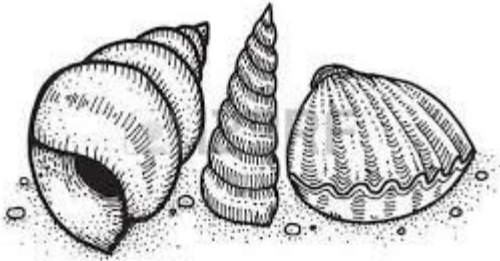
The shell of a shellfish protects it from small fish.

15

A shellfish does not have a backbone. It has a shell instead.

16

Shellfish picture collection



Work sheet 1

Fish are vertebrates

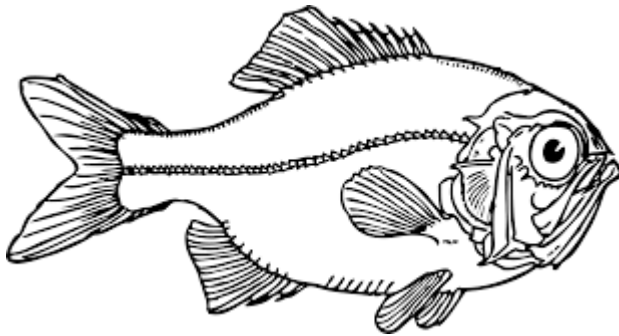
This means that they have backbones.

A Fish's skeleton is joined to its backbone.

Most fish have skeletons made of bone.

But sharks and stingrays have a skeleton made of cartilage.

Cartilage is softer than bone. It can bend, but it is very strong.

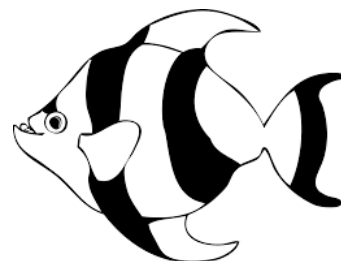


1. Draw a fish with a backbone.
2. What do sharks and stingrays have instead of bones?

Fish are cold blooded

Their body temperatures change with the water around them. Fish swim to a new area when the water temperature changes.

Fish that live in lakes will swim at the bottom of the lake in winter because the water is warmer there. Then they will swim to the surface of the lake in summer because the water is no warmer there.



1. Why do fish swim to a new area when the water temperature changes?
2. What other animals do you know of that are cold blooded?

Work sheet 2

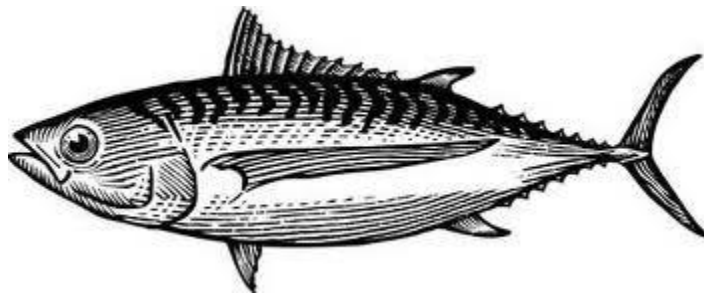
The body of a fish

All fish have a body, a head and a tail.

Some fish like tuna have a torpedo shaped body. This is a long, narrow shape which helps them swim quickly through the water.

Fish have fins. Fins help a fish move through the water. Angelfish use their fins to swim between rocks.

Fish have scales. Their skin is covered with scales. Some fish have scales that are smooth. Others have rough scales that look like tiny teeth. Scales help protect fish from predators. (Predators are other animals that want to eat the fish.)



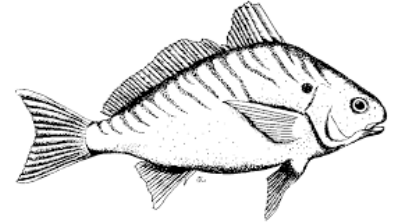
1. What is a torpedo shape?
2. How does a torpedo shape help some fish?
3. How do fins help fish?
4. How do scales help fish?

Work sheet 3

How fish breathe

All living things need air to stay alive. We breathe air through our lungs. Air is made up of several gases including oxygen. The main gas that we need to breathe is oxygen.

Sharks and other fish breathe the air that is in the water. Water moves through a fish's mouth and over its gills.



The gills take oxygen from the water. The oxygen enters the fish's blood. Animals need oxygen in their blood to live.

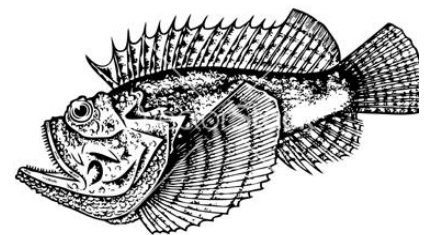
1. Draw a fish and label the gills.
2. What do fish use their gills for?
3. What is oxygen?
4. Where do we find oxygen?

What fish eat

Fish eat many kinds of food. Most fish eat other animals including other fish. Some fish eat plants.

Poisonous fish

Some fish are poisonous to eat. Some have a poisonous sting when you step on them. The stone fish has spines along its back which are attached to sacs of venom. Stone fish live in tropical coral reefs.



1. What do fish eat?
2. What might happen if you stand on a stone fish?
3. Where do stone fish live?

Worksheet 4

Eggs and young

Most fish hatch from eggs. Female fish usually lay many eggs at one time. Other fish eat many of the eggs before they can hatch.



Some fish, like sharks, give birth to baby sharks. The baby shark grows inside the mother shark's body until it is born.

1. How are most baby fish born?
2. How are baby sharks born?

Some fish do not look like fish

Is a seahorse a fish?

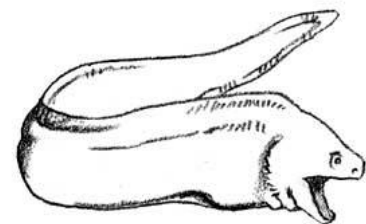
Yes! Even though it may not look like one, a seahorse is a type of fish.



A seahorse can twist its curly tail around things to stop it from being washed away in the sea's current.

Is an eel a fish?

Yes! Although it looks like a snake, an eel is a type of fish.



One type of eel is a moray eel. It has a flat body like a ribbon with fins along the top and bottom to help it swim.

1. Draw a seahorse using its tail.
2. Moray eels have f___ like other fish.

Work sheet 5

How fish protect themselves

Schools of fish

Some fish swim in schools because they are much safer from predators than if they were swimming alone.

Fish swimming together in one group look like a big cloud. This scares away hungry predators.

Fish can change colour.

Some fish are pale and striped during the day but at night the stripes disappear and the body turns red.

Red cannot be seen in the dark, so at night the colour red keeps the fish safe from predators.



1. What is a predator?
2. Why is it good for a fish to swim in schools?
3. Why are red fish safer at night?