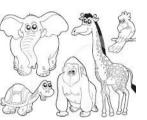
Living Things 1 How do we know that something is living?

A living thing

- grows
- breathes
- has babies



What are the main types of living things?

- humans
- animals (mammals, birds, reptiles, frogs, minibeasts, sea creatures, germs)
- plants

How do humans and animals grow?

- eat food
- drink water

How do plants grow?

• take in food and water through the roots and leaves

How do humans and animals breathe?

• Humans and most animals breathe through lungs.

What do lungs look like?

How do plants breathe?

• take in air through small holes in the leaves

Living Things 2 What is a mammal?

Mammals are animals that

- have warm blood
- have backbones
- have babies that grow inside the mother and are born
- have babies that feed on their mother's milk
- do not lay eggs

Here are some examples of mammals:

- humans
- tigers
- cows

WAIT!

There are just two mammals that DO lay eggs! They are from Australia.

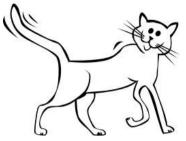
- echidna
- platypus

Most mammals have hair, wool or fur.

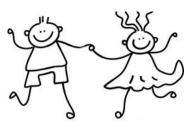
WAIT!

There are two mammals that do not have hair, wool or fur.

- whales
- dolphins



Living Things 3



Why are people special?

People are different from animals because

- we are God's special creatures
- God made us to be His friends
- God loves us more than anything else in His creation
- we can do very special things that animals cannot do
- we can talk to God and God can talk to us
- we have been told by God to look after all of His creation

Some Bible verses from the Good News Bible:

Then God said, "And now *we* will make human beings; they will be like us. They will have power over the fish, the birds and the animals." (Genesis 1:26) God created them male and female, he blessed them and said, "Have many children so that your children will live all over the earth. I am putting you in charge of the fish, the birds and the wild animals." (Genesis 1:27 -28)

Who made the world? (Remember that God is made up of three people – that's why the Bible says '*we* will make human beings'.

What can we do to look after God's creation?

Living Things 4 **About birds**

What makes a bird a bird?

- has warm blood
- lays eggs
- makes a nest
- keeps its eggs warm
- has a backbone
- has wings
- can fly

WAIT!

A few birds have wings but cannot fly:

- emus from Australia
- ostriches from Africa
- kiwis from New Zealand
- penguins

What do birds eat?

- some eat only seeds.
- some eat insects and worms
- some eat fish or small animals

What kinds of birds live in your area? What different kinds of beaks do they have? What kind of nests do they make? What do they eat? How can birds fly?



Living Things 5 **About reptiles**



What makes a reptile a reptile?

- cold blooded
- breathes with lungs
- has a backbone
- lays eggs
- has scales on the skin

Which reptiles crawl on short legs?

- lizards
- alligators
- crocodiles
- turtles and tortoises
- chameleons

Which reptiles crawl with no legs?

• snakes

How do tortoises and turtles protect themselves?

Why do reptiles like to lie in the sun?

How do reptiles survive when it is cold?

• hibernate (go to sleep)

Living Things 6 What is an amphibian?



- lives on land some of the time and in water some of the time
- lays eggs
- babies hatch in water

Frogs and salamanders are amphibians.

Find out what kind of frogs live in your area. What do frogs eggs look like? What do they hatch into?

• tadpoles

How do tadpoles breathe?

• They breathe underwater with gills, like fish.

How do frogs breathe?

- They breathe with lungs, like we do.
- They also breathe through their skins.

How does a frog swim?

- with its legs and feet
- The feet are webbed to help it swim.

What do frogs eat?

- worms and insects
- They catch insects with their sticky tongues.

Living Things 7 About fish



How does a fish breathe?

• has gills to breathe under water

What kind of body does a fish have?

- scales on its skin
- a backbone and smaller bones
- most fish have a narrow body.
- some are streamlined to help them swim fast.

How does a fish swim?

• tail and fins

What do fish eat?

- seaweed
- insects
- shellfish
- other fish

Is a fish warm blooded like a human?

- No. Fish are cold blooded like reptiles.
- Their blood is the same temperature as the water.
- Tropical fish cannot live in very cold water.

What kinds of fish live in the sea or rivers in your area?

Living Things 8 What is an insect?

- an animal
- a mini-beast with six legs

What is special about its body?

- three parts head, chest and tail part
- the tail part is the stomach.
- insects do not have backbones but a hard covering.

Do all insects have wings?

• No Which insects have wings?

Do ants have wings?

• only some

How do these insects help us?

- bees
- insects that eat other insects

Why are these insects a pest?

- flies
- mosquitoes

Do insects lay eggs? Yes. **Have you seen any insect eggs?**

Living Things 9 About spiders

What is a spider?



- an animal
- a mini-beast with 8 legs

What is special about a spider's body?

- Two parts: head and chest together as one part; the stomach is the other part
- Spiders do not have backbones but a hard covering.

Why do spiders bite?

• to kill the insects they catch

Why do spiders spin webs?

• to catch insects

How do spiders spin webs?

• They have silk that comes from tiny holes at the tail end.

Do all spiders spin webs?

• No. Some have holes in the ground with a trap door at the top.

What kinds of spiders live in your area? Are any of them poisonous to humans?

Living Things 10 About crabs

What is special about a crab?

- a sea creature with ten legs
- a crustacean
- front legs have claws or nippers
- does not have bones
- has a strong thick shell to protect it
- carries its eggs under its body
- breathes with gills like fish do

What does the crab use its nipper for?

- to pick up food
- to fight other crabs

What do crabs eat?

• dead fish and dead sea animals

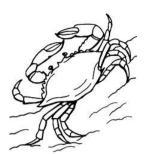
What is special about crab's eyes?

- on the end of stalks
- can see in all directions
- can see when there is danger

How does a crab hide when there is danger?

• digs itself under the sand

Did you know that slaters are in the same family as crabs?



Living Things 11 About shellfish



Some shellfish have one shell. Some have two shells.

What is special about shellfish with one shell?

- live on rocks
- have one large foot for clinging on to the rock
- move along with its foot

What is special about shellfish with two shells?

- live in sand or mud
- have one large foot that's used to dig into the sand or mud

Which of these have one shell? Which have two shells?

- oyster
- sea snail

What do shellfish eat?

- sea weed and tiny sea plants floating in the water
- other shell fish

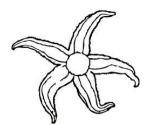
Do all shellfish live in the sea?

• No. Some live in rivers.

Is a land snail a shell fish?

• No, but it belongs to the same animal family.

Living Things 12 **About starfish**



Are starfish really fish?

• No. They are also called sea stars.

How does a starfish move?

• with many tiny feet under its arms

How does a starfish cling on to rocks?

- with its feet
- feet are suction tubes

What does a starfish eat?

• shellfish, seaweed and dead sea animals

What does a starfish use its arms for?

• to open shellfish

How does a starfish eat?

- has a mouth in the middle of its body
- mouth is on the underside

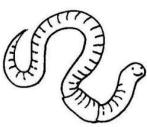
How many arms do starfish have?

• most have five but can have more

What happens if a starfish loses an arm?

• can grow another arm

Living Things 13 About earthworms



What job does the earthworm do for us?

- breaks up the soil to help our plants grow
- makes little tunnels under the soil so that the plant roots can get air

An earthworm has no eyes, ears or feelers so how does it know when there is danger about?

• feels vibrations in the earth

How does an earthworm move?

- uses bristles on his body to help it wriggle along
- stretches out long and thin, then shrinks again

What is special about an earthworm's body?

- made up of 16 sections
- has five hearts (in sections 7,8,9,10,11)

What does an earthworm eat?

• soil that has dead plants in it (compost)

How does an earthworm produce babies?

• lays eggs in a cocoon around its middle

What colours are earthworms?

• red or grey

Living Things 14 About green plants

Why are plants different to animals?

- cannot move along
- do not eat

What are the parts of a plant?

• leaves, roots, stems, flowers

How do green plants get their food?

- green parts of the plant are like a food making factory
- use air, sunlight and water to make sugar which gets stored

Why are leaves important?

- to make food for the plant
- so that the plant can breathe

What are roots for?

- to hold the plant in the ground
- to get water and nutrients for the plant

Why are stems important?

• to hold up the plant so it can get sunlight

Why are the flowers important?

• their seeds make new plants



Living Things 15 About flowering plants



What makes up the bright coloured part of the flower?

• petals

What is in the middle of the flower?

• the seed box

What is around the seed box?

• yellow stalks that have pollen on them

Seeds in the seed box need the pollen to grow. How does the pollen get into the seed box?

- Bees take it there when they feed from the flower.
- Pollen sticks to the bee's furry body.
- Sometimes wind moves it into the seed box.

Why do most flowers have bright colours?

- God gives us colour to make us happy.
- Bees can see the bright colour and go to the flower.

Why do some flowers have a strong smell?

• Bees can find the flower because of its smell.

Once pollen is in the seed box, the seeds need to find some soil to grow in. How do seeds travel? (birds, animals, wind)

What kinds of flowers grow in your area?

Living Things 16 About green plants with no flowers



Not all plants have flowers. Some plants do not need bees and flowers for their seeds to grow.

Pine trees do not have flowers.

They have cones. When the cones are dry the seeds fall out and start new trees.

Where do pine trees grow?

Ferns do not have flowers.

Ferns have little brown spots on the back of their leaves. Seed dust comes from these spots. It falls to the ground and makes new ferns.

Where do ferns grow?

Moss does not have flowers.

It does not need seeds to grow. If you break a piece off and plant it, it will grow into a new plant.

Where does moss grow?

Living Things 17 About fungi



What colours are fungi?

• brown, red, orange, white, black, purple, pink

Fungi are not green plants so they cannot make their own food.

What do fungi need to grow?

- dead plants, dead animals or animal droppings in the soil
- water
- most don't need sunlight

What types of fungi are there?

• mushrooms, toadstools, mould, yeast and more

Fungi do not have flowers, so how are new fungi made?

• spores underneath drop into the soil and start a new fungi

What kinds of fungi can we eat?

What kinds of fungi are poisonous to eat?

What kinds of fungi grow in your area?

Living Things 18 About germs



What are germs?

• tiny living things that can act like plants or animals

Where do germs live?

• everywhere on the earth – even on you

Are germs good or bad?

- There are good and bad germs.
- Bad germs make you sick.
- Bad germs rot your teeth.
- Good germs can help us.
- Yoghurt is made by putting good germs into milk.

What do germs eat?

- everything that humans eat
- dead stuff, dirty stuff
- fungi

How do bad germs spread?

- flies and mosquitoes
- dirty water, dirty hands, decayed food
- dirty dishes, dish cloths and tea towels
- coughs and sneezes

How do we stop bad germs from making us sick?