



How great is our God!

Fifteenth Sunday after Pentecost 6 September 2015

Reading: Gen 1 and 2: 1- 3

Theme: Wonder at the greatness of our Creator

Memory verse: “When I consider your heavens, the work of your fingers, the moon and the stars, which you have set in place, what is man that you are mindful of him, the son of man that you care for him?” Psalm 8:3-4



Information for the teacher:

The Season of Creation is in line with the Johannesburg Diocese’s commitment to dedicating the month of September to developing a deeper appreciation of the interdependence of all creation. Part of this initiative is to develop and distribute materials on caring for Creation. Use this time during the Season of Creation to not only educate the children you teach on how to care more for God’s Creation, but also to reflect on how you can perhaps change your ways and the ways of the people around you in caring and protecting our precious environment. “Creation is holy, and we are called to serve and protect the earth now and for future generations.” Gen 2:15

The Season of Creation lessons for this year will be based on the Creation Story and our response to caring for God’s beautiful creation – God created Heaven and Earth; God created the skies and the seas and everything in it; God created land with plant bearing seed and living creatures - each according to their kind; God created man - man was given dominion over all these things. And God saw that it was good!

During today’s lesson we focus on the heavens that God created – the sun, the moon and the stars. When we gaze at the heavens, we can only wonder at the greatness of our Creator.

As the lectionary readings for year B tell the story of David, we will be incorporating psalms into this year’s Season of Creation lessons – this great collection of songs and prayers expresses the heart and soul of humanity.

Psalm 8: 3-4 encompasses the overriding theme for today’s lesson: “When I consider your heavens, the work of your fingers, the moon and the stars, which you have set in place, what is man that you are mindful of him, the son of man that you care for him?” Psalm 19:1 also expresses a beautiful truth: “The heavens declare the glory of God, and the sky above proclaims his handiwork.”

So let us join with all Creation in singing praises to our Creator!

Lesson Suggestions:



Younger Children (3 – 6 years):

Lesson Objectives:

- To learn about the Creation story
- To encourage children to marvel at the greatness of God, our Creator



Bible Story: The Creation – Genesis 1 and 2:1-3

With the start of Spring, we think about God's beautiful Creation – all that God made and what we need to do to look after it. Today we remind ourselves of the story of Creation – who knows where this story is found in the Bible?

Read the story to the children, preferably from a Children's Bible, or tell in your own words – perhaps allow the children to participate in the telling of the story if they wish and are familiar with the story.

The following activity is useful in helping to revise the story once you have read it from the Bible - The teacher prepares 7 paper bags, each containing something to represent each day of the Creation Story. Here are some examples of what can be put into each bag:

- Day 1 Flashlight – God created light
- Day 2 Ziploc bag, filled with air – God created the sky
- Day 3 Jar of water, sand, soil, flowers, leaves, fruit – God created land and sea and plants bearing seeds and fruit
- Day 4 Cut-outs of sun, moon, stars, planets – God created the sun, moon and stars
- Day 5 Feathers, plastic fish – God created creatures of the sea and air – fish and birds
- Day 6 Plastic animals, mirror (God created me!) – God created animals and man
- Day 7 Small pillow – God rested

The children use these clues to remind themselves as to what God created each day of the week.



Discussion

1. What have you learnt from the story today? *(Allow for responses but guide the children to the idea that God made everything and God made me!)*
2. This week, as you play outside or perhaps as you stare at the stars at night, remember that God made all these things.
3. How do you think we can thank God for this beautiful creation? *(By praising God and also looking after all that God has created)*



Songs: Let's praise God by singing a few songs:

- He made the stars to shine
- I love the sun, it shines on me
- He's got the whole world in His hands
- Our God is so big
- All things bright and beautiful

(The words to all these songs can be found at the end of the Season of Creation lessons for this year)



Prayer: Let's now thank God for all God has done for us. *Give the children a chance to say their own prayer and then conclude with the following prayer:*

Dear Lord God
Thank you for making everything!
Thank you that you made us!
Thank you that you love us!
We love you back!
Amen.



Craft: Today's craft focuses on the Heavens – the sun, the moon and the stars – the lessons over the next few weeks will focus on other aspects of creation.

Perhaps begin the craft session by asking the children how many stars they think are in the sky. Then ask the children to make as many dots as they can on a piece of paper in 1 minute. Ask them to count how many dots they have drawn. Explain that even if they carried on making as many dots as they could for the rest of their life, they would still not make as many dots as there are stars in the sky. Isn't that amazing!!

Children can draw stars and the moon on a white piece of paper, using a white crayon. They can then paint over the piece of paper with black or blue poster paint – the paint will reveal what they have drawn. You can emphasise with this craft that in the beginning, there was nothing, except God. God created the stars.

Another option is for children to cut out stars from paper (or Styrofoam trays) and colour them or decorate with glitter. The children can then either add all their stars to a bulletin board with a heading such as "He made the stars to shine" or each child can make their own star mobile as shown below –attach each star to another with a piece of string





Snack: The children would enjoy icing biscuits and then decorating using icing and hundreds and thousands. If possible the biscuits should be shaped as stars.

Another treat is for the children to butter white bread and then sprinkle hundreds and thousands – again if possible have a star shaped cookie cutter for the children to cut star-shapes out of their bread.



Physical activities: Perhaps before the lesson put a number of stars all over an area that the children can roam. Ask them to find how many stars you have put out for them to find.



Older children (7 – 13 years)

Lesson objectives:

- To briefly remind the children of the Creation Story
- To marvel at the greatness of God, our Creator



Attention Grabber: Begin by informing the children that over the next few weeks we will be celebrating the Season of Creation. During this time we will not only marvel at the world around us, but we will also discuss our role in Creation. Today we will begin the lesson by briefly reminding ourselves of the Story of the Creation.

For this activity, numbers 1 – 7, to represent the days of Creation, each need to be printed onto a separate piece of paper and then stuck onto the wall. Each child is given a picture or word of something that forms part of the Creation story e.g. star, land, elephant, tree, water, mountain, human, cloud, sky, day etc. The children then need to stand by the number that they think their object belongs to i.e. if they were given an elephant, they will stand by number 6, as animals were created on the sixth day.

The teacher then reads Genesis 1 & Genesis 2:1-3 – the children can then move themselves to the correct number if they initially made a wrong choice – check that everyone is in the correct position at the end of the reading. Ask why no-one is at Day 7 – on this day, God rested!



Discussion

1. Think about this! Imagine darkness and emptiness and nothing else... except God. God in His own time decides that He is going to create something wonderful. God speaks, and all Creation begins forming. Amazing!

Now think back as far as you can think. What's the first thing you can remember? (*Wait for answers.*)

Now, before you were born, there were your mom and dad. They can probably remember further back than you. And before them... were their parents, and their parents' parents... and on and on and on... all the way back... to...what? To the BEGINNING.

At first, a long, long, long, long time ago, before people, before animals, before the earth, before the stars, and before anything else... there was God.

Allow the children to make any comments they would like to, based on the discussion so far.

2. Show the children pictures which can be found at the end of this lesson. Again allow the children to make any comments they would like to, based on these pictures. They will hopefully have come to the realisation that we do indeed worship an awesome God!



Prayer: Today's prayer will include a time of meditation. People have been marvelling at the wonder of the universe for thousands of years. This is probably best expressed in the Psalms. When a psalmist looked at the night time sky, he, like you and I, must have marvelled at the beauty of Creation. He, like you and I, must have wondered where it all came from. Where did it all begin?

Psalm 148: 1-6 reflects some of the emotions this particular psalmist felt. *Read this psalm to the children.*

And here is another psalm, again probably reflecting our own thoughts. *Read Psalm 8: 1,3-4*

Allow for some quiet time as the children reflect on the lesson for today. If they wish, they may say a prayer aloud or in their hearts. Someone may also like to lead the group in a song of praise.

And so, as you go out into the world this week, do think about the seemingly simple miracles of nature that surround you everyday – the rising and setting of the sun, the constant coming in and going out of the sea tides, the same star studded sky that our psalmists stared at so many years before. As you look at the world with new eyes this week, may all that you see around you be a reminder of our great and awesome God!



Songs:

- How great Thou art
- How great is our God
- Our God is an awesome God
- When I look
- Awesome God

(Any song that tells of our Awesome God and Creator can be used. The words for some of the songs suggested above can be found at the end of the Season of Creation lessons for this year)

Activities:

1. You may like to give the children a choice as to how they would like to respond to today's lesson. Perhaps they would like to write their own psalm or song of praise. Perhaps they would like to present a well-known song to the class that tells of our Awesome God. Perhaps they would like to create a poster with a simple message, such as the last photo in our set of pictures used in the discussion, or the colouring-in picture that can be found at the end of this lesson, or illustrate the words from one of the psalms used today or they may like to learn the words of one of these psalms.

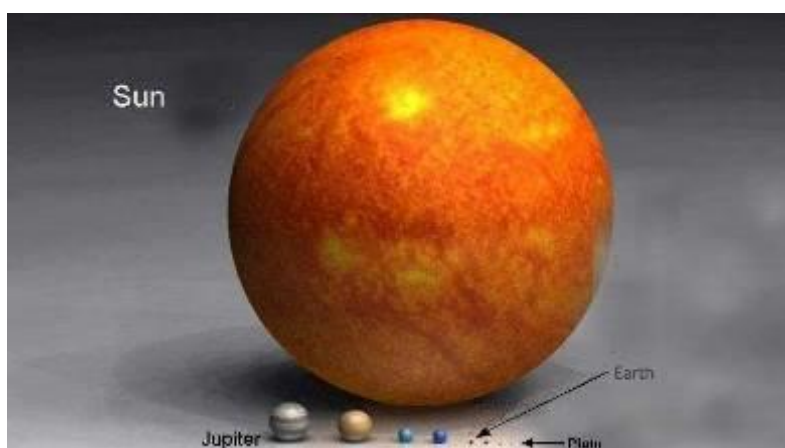
2. The following exercise will give the children an idea of how big the solar system is! You will need a measuring tape, although perhaps for the bigger distances the children will enjoy estimating the distance by “jumping” out the metres. Perhaps give each planet to a different child to measure out the distance that the planet needs to be placed from the sun. The children need to stay with their planet so that everyone can see how far away the planets are from each other. At the beginning of this exercise draw attention to the size of the planets relative to the sun.

Way far away - it's in Outer Space.

Outer space!! It's big and there's a lot in it!
Imagining distances is difficult – everything is so far apart
Billions & billions of stars - There are far more than you could count.

The nearest star is our sun. Did you know that if we could drive in a car to get to the Sun at 100 km/h it would take 171 years?! And to get to the next closest star, Proxima Centauri, would take 40,000 years! And most other things - billions and billions of stars - are much, much farther away than that!

But back to our Solar System, which is also VERY BIG and our planet earth is actually very small as shown in the following picture – the sun and the planets are made out of play dough to show the relative sizes.



The distance between the planets is also very big, as you will find in the following activity:

Sun – Use a soccer ball to represent the size of the sun – did you know that the sun is 300 000 times larger than earth?!

Mercury – Use a peppercorn to represent Mercury and place it 51 cm away from the “sun”

Venus – Use a peppercorn to represent Venus and place it 1.2 m away from the sun

Earth – Use a peppercorn to represent Earth and place it 2.5 m from the sun

Mars – Use a peppercorn to represent Mars and place it 4 m from the sun

Jupiter – Use a small marble and place it 15 m from the sun

Saturn – Use a small marble and place it 25 m from the sun

Uranus – Use a large bead and place it 36 m from the sun

Neptune – Use a large bead and place it 76 m from the sun

Pluto – Use a peppercorn and place it 200 m from the sun (NB: Pluto is no longer regarded as a planet but an asteroid)

Proxima Centauri – would be represented by a tennis ball and placed 700km from the sun!

3. Play hopscotch, with enough blocks for the number of planets in the solar system– the children need to try to remember the names and the order of the planets.

References:

www.rotation.org

www.SundaySchoolCenter.com

www.calvarywilliamsport.com/kids

Special thanks to Noeleen Mullett – JAIE / EcoAct



It couldn't just happen by chance.....

This is your home.

Can you find where we live?



Earth as seen from Mars



Scientists estimate there are hundreds of billions of galaxies in the universe.

The number of stars are estimated to be 10 billion trillion – that's more stars than the number of grains of sand on earth



The milky Way Galaxy is just one of billions of galaxies in the universe!



Tonight, when the sun goes down, look up. Depending on how dark it is outside you can probably see several thousand stars, all of which belong to our galaxy.

You may also be able to spot one of only a few galaxies other than our own that is visible with the naked eye





I the Lord of sea and sky

Sixteenth Sunday after Pentecost 13 September 2015

Reading: Gen 1:6-10; Gen 1:20 - 23

Theme: Water – source of all life

Memory verse: “You started the springs and rivers, sent them flowing among the hills” Psalm 104:10



Information for the teacher:

Water - God's great and wonderful gift is so necessary for both our bodies and our souls. Without water there is no life - Nothing can survive, grow and flourish. It is not surprising then, that water is a very significant image in the Bible.

Throughout the Old Testament, we learn that God provides his creation and us human beings with an abundance of water. As a matter of fact, the earth could be called 'The Water Planet' since it consists of so much water. Even our own bodies consist of more than 70 % water! The river from Eden flowed abundantly and supplied the garden with plenty of fresh and healthy water. The Psalms and the Proverbs and other books in the Bible also tell us about this wonderful abundance. It is clear that God provides us with enough water - even in a desert situation of Biblical lands.

Despite the abundance of water on the Earth, we humans have done a poor job of taking care of it. We abuse it for other purposes. We divert rivers and streams unnecessarily, we poison it, and waste it - indifferent to the consequences. Too many people, too little water - water in the wrong places and in the wrong amounts. 1.2 billion people in the world do not have access to clean safe drinking water, and 2.4 billion do not have adequate sanitation due to polluted waters. The World Council of Churches recently found out that 80% of all disease in poor countries is related to poor drinking water and poor sanitation. As much as 40% of the world's population goes thirsty every year, with some countries consuming more and more while others get less and less. Women and children in East Africa now walk an average of 21 minutes for each trip to collect water.

Today's lesson should be a celebration of the gift of water – the source of life, but also an awareness of our responsibility to looking after this precious resource.

As a wise man once said, “When the well is dry – we will then know the worth of water!”

Lord

Through the waters of the earth you meet our daily needs,

And through its existence open our eyes to the gift and life of your spirit

Help us to cherish our natural resources, as we would the wells of living water that you so generously offer,

Through Jesus Christ who reigns with you and the Holy Spirit, one God, now and forever.

Amen

Extract taken from Season of Creation

Lesson Suggestions:



Younger Children (3 – 6 years):

Lesson Objectives:

- To know that God created the rivers and the seas and all sea creatures
- To encourage the children to look after water – our precious resource



Attention Grabber: Without mentioning what the lesson is about today, show the children pictures of water – waterfalls, the sea, animals and people playing in water. You can discuss the pictures with the children. Some pictures of water can be found at the end of this lesson. Many nature magazines will also contain pictures of water which you can add to this collection, or look for pictures on the internet.



Bible Story: God created the waters and everything in it (Gen 1:9 -10 ; Gen 1: 20 -21)

Last week we learnt that God made the sun, the moon and the stars – and all was good! What do you think we are going to learn about today? *(Water!)*

Use a suitable picture, possibly from a children's bible, to show the children as you read the passage which follows:

God said, "Let the water under the sky be gathered to one place, and let dry ground appear". And it was so. God called the dry ground "land", and the gathered waters He called "seas". And God saw that it was good. And God said, "Let the water be filled with living creatures..... so God created the great creatures of the sea and God saw that it was good". (Gen 1: 9-10 and Gen 1:20-21)



Discussion

1. Today we are talking about water. What do we use water for? *(To bath in and wash our hands; to drink; to cool down in; to play in. Did you know that all plants and animals, including us, need water so that we can live?)*
2. Where does the water that we drink come from? *(Rivers, not just the tap!)*
3. *For the slightly older children:* Did you know that the water we use is the same water that the dinosaurs swam in millions of years ago?! No water has been made or destroyed since the beginning of the world. How is this possible? *(Briefly describe the water cycle – the story of a rain drop can be found at the end of this lesson)*
4. Water is very precious to us – without water we cannot live. We must look after our water and not waste it. What can we do to not waste water? *(Look out for leaking taps – either switch them off yourself or ask someone to do it for you. If you have running water at home, don't leave the tap running while you brush your teeth; have a shower instead of a bath full of water)*
5. Did you know that we also look after water if we do not litter? - We must put our litter into rubbish bins and not just drop on the ground. What do you think is the most dangerous sea

animal in the whole world? *(Allow the children to give answers. Then show the children the picture on page 100 or a bottle with a plastic bag crunched up in it, surrounded by water. The most dangerous sea animal is actually the plastic bag! Sadly, the plastic bag leads to the death of many sea animals (and land animals) every year. Even if you live far from a river or the sea, a plastic bag can easily get into a drain and make its way to a river or the sea. Do you think this is what God would want for His Beautiful creation? –NO!)*



Prayer: Dear God. We thank you for the precious gift of water you have given us. Without water we would not have this beautiful world. Please help us to always look after the world around us – help us to not waste water and to keep it clean. Amen



Songs

- He made the stars to shine
- I love the sun; I love the rain

(The words to these songs can be found at the end of the lessons on the Season of Creation)



Craft: *Colouring-in pictures of sea creatures can be found at the end of the lesson – refer to these pictures as you discuss the craft.* In today's lesson we learnt that God created water and sea creatures of every kind. Can you name these sea creatures? Which sea creature did we learn in our lesson today is the most dangerous? *(The plastic bag!)*

Each child can be given a sea creature to colour in and the class can create a sea scene. Don't forget to add in the "most dangerous sea creature". Give your scene a suitable heading. The picture below shows a sea diorama. For more information on how to create a diorama, go to:

http://www.firstpalette.com/Craft_themes/Animals/coralreefdiorama/coralreefdiorama.html



Another suggestion is for the children to simply paint or draw their own sea scene. If painting, they could use water colours.



Physical activities: Play the game “Sharkie, sharkie.” One person is the sharkie. All the others are fish who stand on one side of the play area. When sharkie says, “swim little fishies”, the fish need to make their way from the one side to the play area to the other. If a fish is caught, it becomes a shark. The game continues until there is only one fish left, who is declared the winner!

Offer the children a glass of water to drink when they are finished with this game to refresh them!



Older children (7 – 13 years)

Lesson objective: To celebrate the gift of water but to also create an awareness of our responsibility to look after this precious resource.

Before the lesson, look for a dripping tap on the church property or open a tap slightly so that it starts to drip. Put a bucket below the dripping tap. At the end of the lesson, you will measure the amount of water wasted from the dripping tap. This activity is in line with our overall objective today’s lesson which is to instil in our children an awareness of our responsibility to look after water – our precious resource.



Attention Grabber: As the class arrives today, perhaps offer them a glass of water. Have pictures of water stuck up in the class –some pictures can be found at the end of the lesson – these pictures can easily be found on the internet if you wish to enlarge them. You can also find pictures of water in a nature magazine to add to your collection. The children would particularly enjoy a slide presentation of all these pictures.



Bible Story: God created the waters and everything in it (Gen 1:9 -10 ; Gen 1: 20 -21)

Remind the children that during September we celebrate the Season of Creation. Last week we focussed on the Heavens – In the beginning God created the heavens and the earth - the sun, the moon and the stars, and all was good! Which part of God’s creation do you think we are talking about today?

God then went on to create the waters - our Bible reading for today. Read Gen 1:9 – 10.

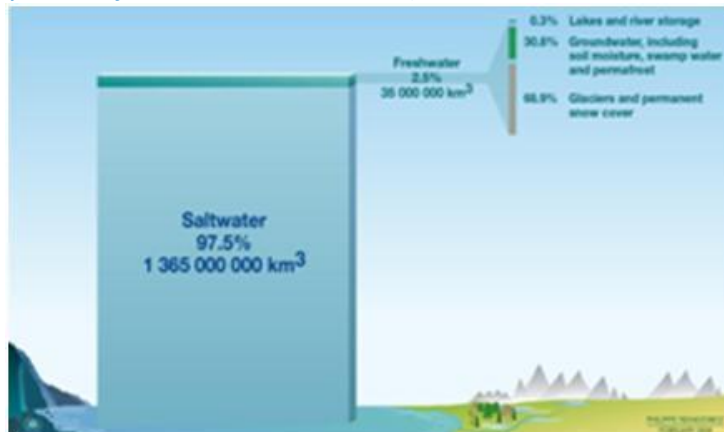
A little further in Gen1:20-21, we read that God said, “Let the water teem with living creatures”, and so God created the great creatures of the sea and every living and moving thing with which the water teems, according to their kinds, and God saw that it was good!”



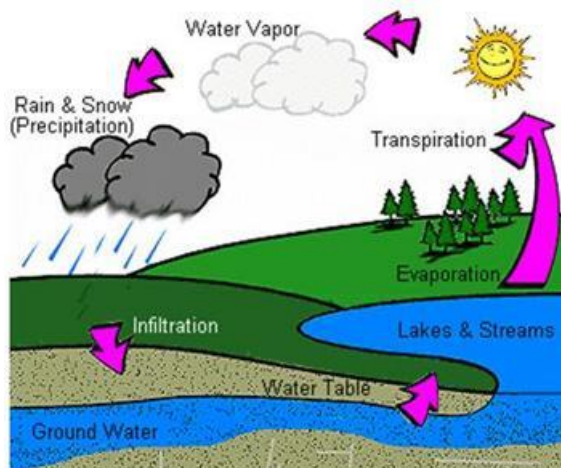
Discussion

1. What would we do without water? *(Water is the source of life –We, and all plants and animals would not be able to survive without water; we drink water; we use it to cool off; we use water to keep ourselves and our clothes and food clean; we also enjoy swimming in rivers and the sea; Water is indeed a gift!)*

2. Here are some amazing facts about water:
 - a. How much of the earth is covered in water? *(Answer is 70 %)*
 - b. How much of the earth's water is sea water? *(Answer is 97%)*
 - c. So, only 3 % of the earth's water is fresh water – water we are able to drink. How much of this fresh water is locked up in the ice caps? *(Answer: 66% of all fresh water can be found in the ice caps. Therefore only 1,2% of all the water on earth is in fact available for us to drink – You can demonstrate this using a 1 litre coke bottle –you can put 12 ml of water into the bottle – if all the earth's water could be represented by 1 litre of water, then only 12 ml of that 1 litre is drinkable!)*



Did you know that the water that God created at the beginning of time is still the same water that we use today? – No water has been created or destroyed over all these years. We are using the same water that the dinosaurs swam in millions of years ago! Isn't that amazing?! (You may want to briefly discuss the water cycle with your class as shown in the diagram below.)



3. Sadly, however, much of our fresh water is no longer drinkable. Who knows why? *(Pollution of rivers due to sewerage and litter; chemicals, insecticides, poisons, fertilisers, paint, oil is emptied into drains or enters the waterways via storm water drains – if you are not careful as to how you get rid of your waste, this will also end up in rivers.)*
4. Show the children pictures of rivers, dams and the sea which reflect the effect of pollution. Pictures can be found at the end of this lesson – you can find many more such pictures on the internet, or, if you have any pictures of polluted water in your particular area, then add this to the collection.

You can also ask the children if they have heard of the Great Pacific Garbage Patch? This is a patch in the Pacific Ocean where plastic, sludge and other debris have been trapped. The size of this area has been estimated to be at least the size of South Africa! Pictures of this patch can be found on the internet.

Do you think this is what God had in mind for his Creation?

Explain to the children that pollution of our waters is not only a threat to God's Creation, but to humankind as well! God's world is perfectly balanced – if part of it is disrupted, we are all affected – this is serious for us all!

Ask the children what they think is the most dangerous sea creature. This is, in fact, the plastic bag – it causes the death of many sea animals every year. You could have a plastic bag in a small bottle of water to arouse their interest as they debate this question or show them the picture on page 100. The other picture on that page shows a seal that was entangled in some plastic.

5. Many of the reasons for our rivers and seas being so polluted is not something we can do anything about – we can only hope that the government, local organisations and companies manage their waste to ensure that our environment is not harmed. However, we can all play our part in caring for the environment. After today's lesson, is there anything that you should change or that you should encourage those around you to change so that we can better look after our water systems? *(Don't litter because when it rains, this litter can end up in rivers, even if you don't live close to a river or the sea. Don't use poisons to get rid of pests. Don't pour oil down the drain. Also encourage those around you to behave responsibly when it comes to looking after our water supplies)*
6. Something else we all need to do, especially in South Africa, is to save water wherever we can. South Africa is one of the 20 driest countries in the world. It is predicted that if we continue to use water in the way we do, South Africa will run out of water between 2020 and 2040. How much water do you use every day? If you have running water at home, do you leave the tap running while you are cleaning your teeth? Do you take a shower, which uses 30 litres, a full bath which uses 150 litres, or wash in a basin which uses 10 litres? Do you make sure that you have properly closed the tap when you are finished with it? Do you report any taps that are leaking to your teacher, parent etc?

At this point you can take the class to check how much water has landed in the bucket under the leaking tap – take a measuring cup with you. Discuss how long it has been since you started measuring the leak. Discuss how much would therefore drip into the bucket in 1 day, 1 week, 1 month, 1 year. Once you have completed this discussion, throw the water into the garden, not down the drain!

7. Homework!! According to the World Health Organisation, people need a minimum of 7,5 litres of water per day, although 20 litres is recommended to take care of basic hygiene and food needs. Just for 1 day this week, make a list of how much water your family uses. When you flush the toilet, 7 litres of water is used – how many times a day do you flush the toilet? Try to work out a way to calculate how much water flows out of a hosepipe every minute when washing a car or watering the garden or how much water is used to wash dishes or clothes?

A famous person once said, "Only when the well is dry – then we will know the worth of water!"



Prayer: Today's lesson should be a celebration of the gift of water, but also an awareness of our responsibility to looking after this precious resource. Perhaps begin the time of prayer with Psalm 104: 5-18. The children can then be encouraged to say a prayer in response to what has been discussed today.

Psalm 104

O my soul, bless GOD!

You blanketed earth with ocean,
covered the mountains with deep waters;
Then you roared and the water ran away—
your thunder crash put it to flight.

Mountains pushed up, valleys spread out
in the places you assigned them.
You set boundaries between earth and sea;
never again will the earth be flooded.

You started the springs and rivers,
sent them flowing among the hills.
All the wild animals now drink their fill,
wild donkeys quench their thirst.
Along the riverbanks the birds build nests,
ravens make their voices heard.

You water the mountains from your heavenly cisterns;
earth is supplied with plenty of water.
You make grass grow for the livestock,
hay for the animals that plow the ground.

Extract taken from "The Message"



Craft ideas:

- Make a poster in response to today's lesson, encouraging others to save water
- Make a rain gauge, as shown in the diagram below.



Take an old plastic bottle – remove the lid. Carefully cut off the top third of the bottle. Place some stones in the bottom – this will stop the rain gauge from blowing over, and then fill with water until the stones are covered. Carefully mark this point with your pen. Use a ruler to mark up from this point, in centimetres, to make a scale. Place the upside down part of the top of the bottle into the bottom part, as shown in the diagram. Your rain gauge will need to be placed outside, somewhere in the open where it's not under any

overhanging trees or buildings. Check the rain gauge after it has rained and see if the water level has risen. Record the amount of rain water that has collected, then empty out and refill to the base level again. You can use your rain gauge to check whether we are receiving above or below average rainfall for a given month.



Physical activities: As mentioned before, today's lesson should also be a celebration of the gift of water, so today's activity involves a water game. Playing outside also waters the garden and helps to beautify our surroundings. Don't forget to offer the children a glass of water when they are hot to freshen them up!

An idea for a fun game, which also reminds children to save water, is to have a relay race where each team has a plastic coke bottle with holes in it – to make the game more difficult, you can make the holes in the bottle quite big. The aim of the race is to transfer one bucket of water from one side of the race to the other, using the leaking coke bottle. The bucket on the other side can be smaller, as some of the water will leak out the bottle during the race. The children can of course try to block the holes with their fingers as they transfer the water. The first team to fill the smaller bucket with water is the winning team.

References:

<http://www.firstpalette.com>

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Special thanks to Noeleen Mullett – JAIE / EcoAct

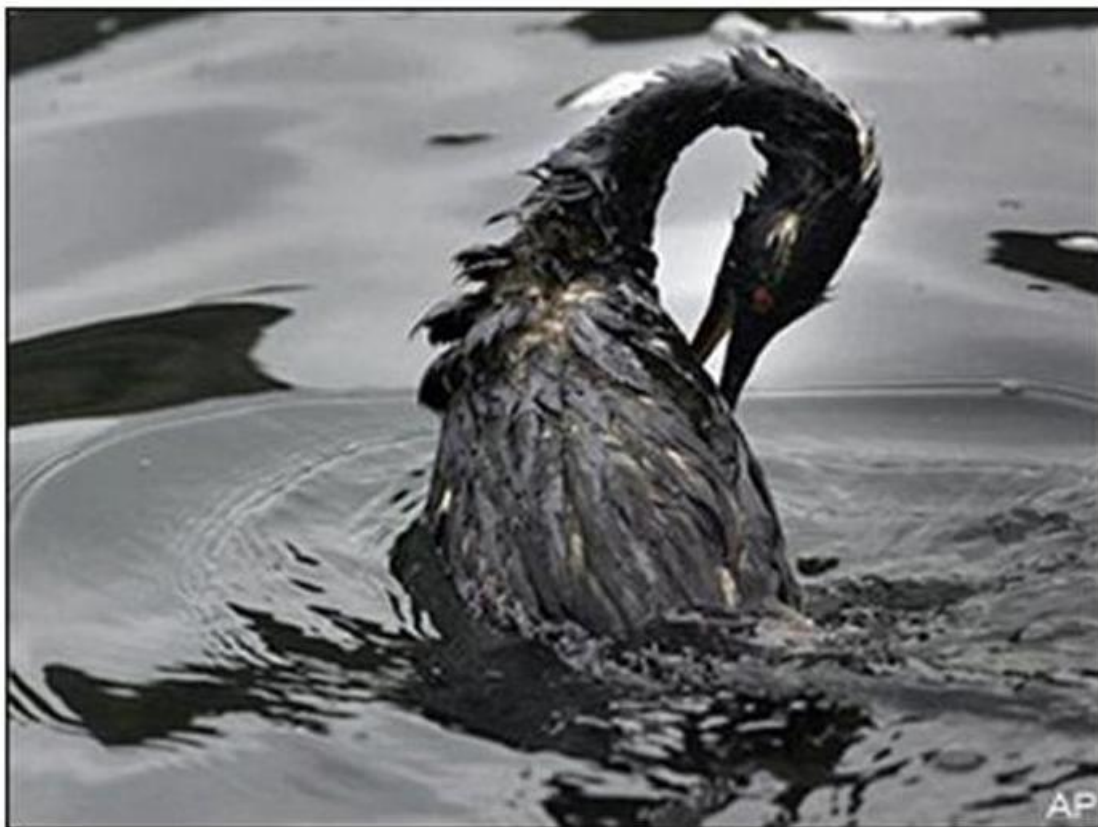




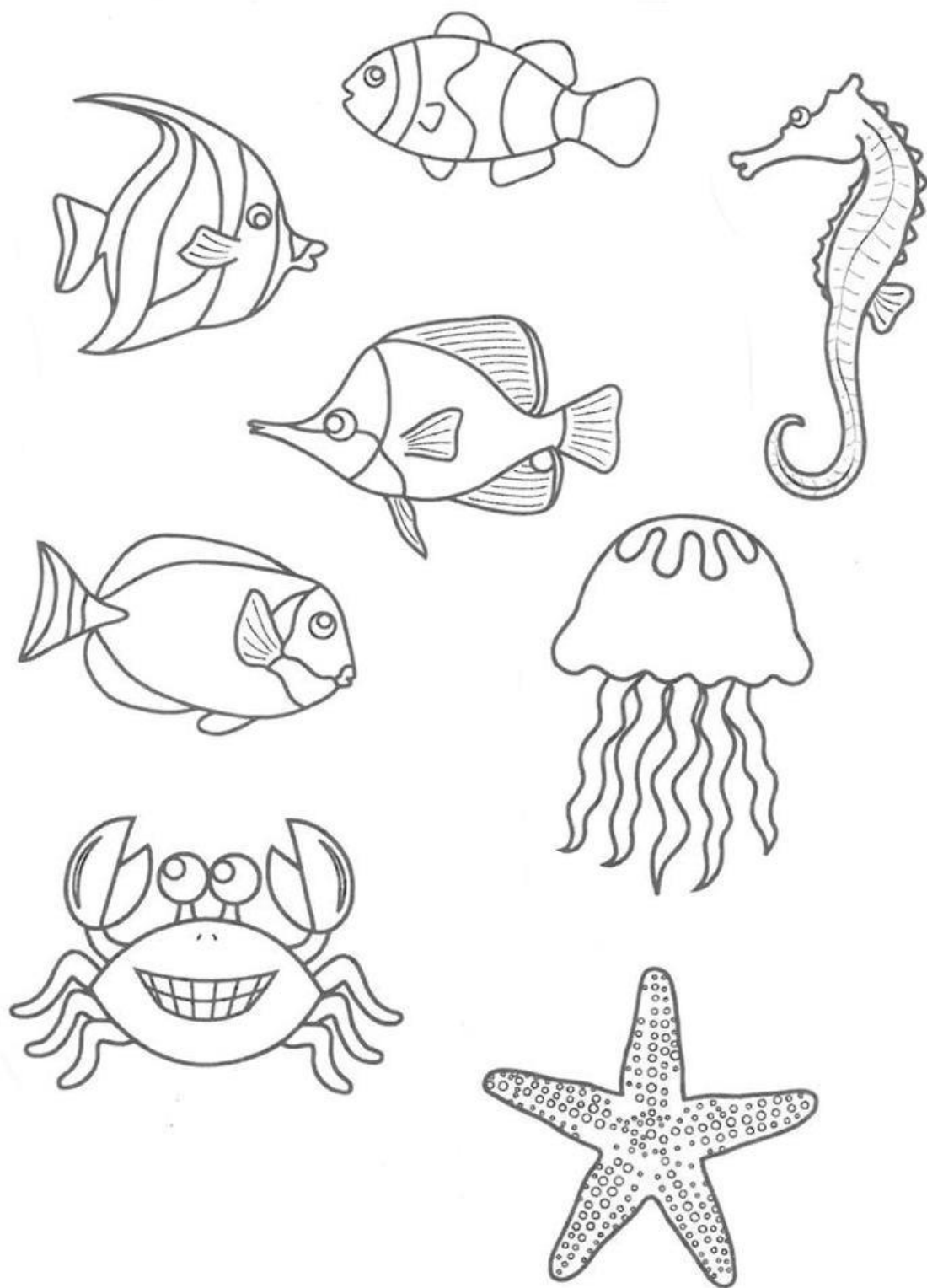


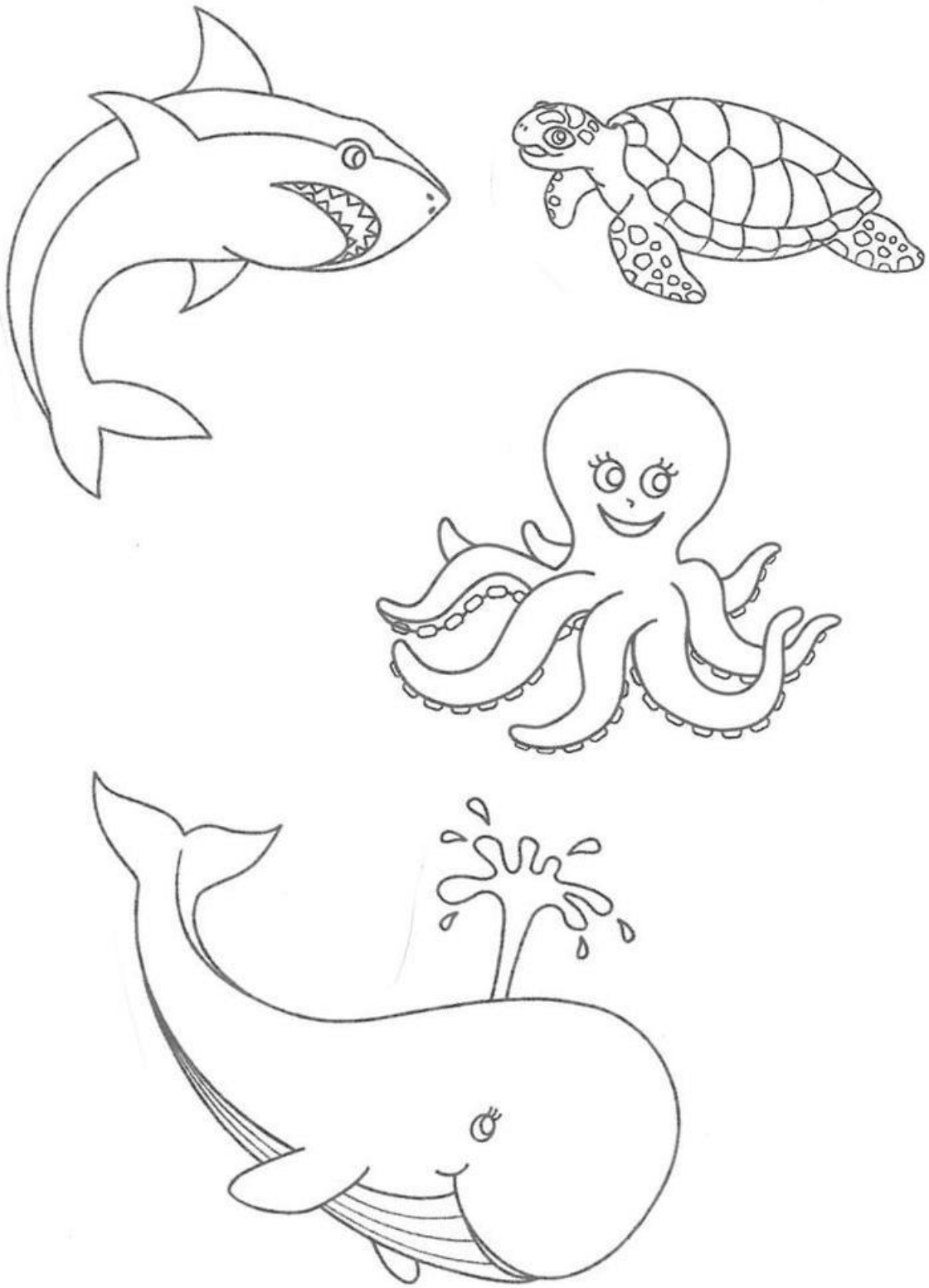






Pollution caused by oil spills





The Little Drop of Rain

Once upon a time there was a little drop of rain. It was floating around up in the sky with a whole lot of other drops of rain. This little drop of rain said, "I'm tired of hanging around up in this grey old cloud. I'm going down to earth!"

And this little drop of rain fell Eeeeeeeeeeeeeeeeeeeeeeeeeeeh right down to the earth and into a puddle. It landed - splash - right next to a tadpole.

"Oh! who are you?" said the tadpole.

"It's all right," said the raindrop, "I'm just like the rest of the water in this puddle."

"Good" said the tadpole, wiggling its tail, "I like lots of good, fresh water."

"I wish, I wish my friends up there in the cloud would come down and join me," said the raindrop. There was a whoosh of wind, a flash of lightning, a rumble of thunder and down came the rain. Soon hundreds and hundreds of the raindrop's friends were splashing down into the puddle. It wasn't long before there were so many rain drops in the puddle that they flowed out of the puddle and started to run down the hill.

"Weeeeeeeh! Let's go!" said the little raindrop.

They flowed through some moss, over tree roots and rocks and into a creek. In the creek there were crayfish, and frogs, eels and tortoises.

"Oh. Look. There's an otter. Oh it's so nice," said the little raindrop. "Let's stay here."

"No. Come on. It's downhill all the way to sea. Come with us." cried the other raindrops.

They flowed with the creek down over waterfalls and rapids, "Yahoo!" and into a river.

"Oh we're going slower now," said the little rain drop.

With the river they went past fish and ducks, boats and ships, and out into the great, salty sea.

"Oooh. All this salt. I bet the otter wouldn't like this," said the little raindrop.

"No but other animals do. Look at that shark and there's a whale," said an old raindrop who had been in the sea before.

The whale swam up and breathed out with a great wsssssssssh! The little raindrop went flying up into the air and splashed back down into the sea again.

"That was fun," said the little raindrop, "how can I get up into the air again?"

"Oh, just you wait for the sun to shine. Then some of us will float up again," said the old raindrop.

And sure enough when the sun came up it shone down on the sea and all the drops of water got warmer and warmer and started floating up into the air.

"Higher, higher, higher the water droplets floated right up into the sky.

"We're back. We're back up in the sky. We're in a cloud again. Hooray!"

And do you know what? It wasn't long before that little raindrop decided to fall right back down to the earth again.

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When through the woods and forest glades I wander.....

Seventeenth Sunday after Pentecost 20 September 2015

Reading: Gen 1:11-13

Theme: An appreciation of plant diversity

Memory verse: 'Then God said, "Let the land produce vegetation: seed-bearing plants and trees on the land that bear fruit with seed in it, according to their various kinds." And it was so.' Gen 1:11



Information for the teacher:

*When through the woods and forest glades I wander,
And hear the birds sing sweetly in the tress.
And when I look down, from lofty mountain grandeur,
And hear the brook and feel the gentle breeze*

These are words from the well-known hymn, "How great Thou Art". This hymn was written by Mr Carl Gustaf Boberg (1859-1940). He was a Swedish pastor, editor, and member of the Swedish parliament. Mr Boberg was enjoying a nice walk when a thunderstorm suddenly appeared out of nowhere. A severe wind began to blow. After the storm was over, Mr Boberg looked out over the clear bay. He then heard a church bell in the distance. And the words to How Great Thou Art began to form in his heart -- *O Lord, my God, when I in awesome wonder, consider all the worlds Thy hands hath made. I see the stars, I hear the rolling thunder, Thy power throughout the universe displayed.* Can you imagine what Boberg felt as he formed these words?

How often do we go about our daily chores, not noticing the nature around us? Do you stop to listen to the birds singing in the trees around you? Do you notice the butterflies and bees fluttering amongst the flowers? Does the environment in which you live and work even encourage birds and wildlife, or is it devoid of trees and plants?

South Africa is so rich in both plant and animal diversity. We have over 1000 kinds of trees, while the whole of Europe has fewer than 700. The Cape Fynbos is one of the world's most diverse floral kingdoms – Table Mountain alone hosts as many plant species as in the U.K. – all 1500 species of them – making the Western Cape more botanically diverse than the richest tropical rain forest in South America. Furthermore, the Cape Fynbos is a totally unique kind of vegetation – it is found nowhere else on earth!

We need to nurture and protect our environment. With growing urbanisation there is the tendency to remove the green belts of our surroundings. With that, millions of animals lose their habitat. The removal of grasslands and large forest areas is a worldwide phenomenon. Since the industrial era, more than half the world's original forests have been destroyed and millions of animals have been endangered. If this encroachment of the natural habitat is not regulated, more than half our plant and animal species will be extinct.

Today's lesson aims to instil within us all an appreciation for the nature around us, and an awareness of the plight of our fauna and flora. As a Sunday school, you may consider planning a hike or a picnic for the children to a nearby nature reserve or botanical garden, for it is in nature that we feel oneness with all creation!

*Then sings my soul my Saviour God to thee
How great thou art, how great thou art
Then sings my soul my Saviour God to thee
How great thou art, how great thou art!*

Lesson Suggestions:

Today's lesson plan is suitable for both younger and older children and so the activities have not been split into a younger and older children section. Once again, select activities from the ideas below which you feel would most suit your group of children.



Lesson Objectives:

- To gain an appreciation for our natural surroundings and the diversity of God's Creation
- To gain an awareness of the plight of our fauna and flora due to human settlement and behaviour
- To encourage our children to provide an environment which encourages plants and wildlife



Attention Grabber:

Before class, put the following items into a box so that it will be a surprise for the children during the story: Dish with water, a big rock, a couple of small plants and flowers, apple pieces- enough for each child with the seeds still in.

The Bible reading (Gen 1: 11 - 13) for today is incorporated into the attention grabber. Begin by asking the children if they remember what they learnt last week. (God created the oceans and the rivers)

⁹ God said, "Let the water under the sky be gathered into one place."
(Bring out the large dish and water. Pour the water into the dish.)

"Let dry ground appear." And that's exactly what happened.
(Bring out the large rock and place it in the middle of the dish...show the children how the water is separated.)

¹⁰ God called the dry ground "land." He called the waters that were gathered together "oceans." And God saw that it was good.

¹¹ Then God said, "Let the land produce plants."
(Bring out the plants and flowers and place them on the side of the dish.)

"Let them bear their own seeds. And let there be trees on the land that bear fruit with seeds in it. Let each kind of plant and tree have its own kind of seed." And that's exactly what happened.

¹² The land produced plants. Each kind of plant had its own kind of seeds. The land produced trees that bore fruit with seeds in it. Each kind of tree had its own kind of seeds.
(Bring out the apple pieces (or other fruit with a seed in it). Ask what the little dark things are (seeds). Ask the children what they know about seeds. Then let them enjoy eating them!)

God saw that it was good. ¹³ And there was evening, and there was morning — It was day three.

Discussion:

Today we will begin our lesson by going outside to look at the beautiful plants that God has created. Take the children outside to collect as many different green leaves as possible or, if your church does not have many plants, or many different types of plants, then bring a collection of leaves with you to your lesson.

Ask your children if they realised that there were so many different types of leaves. Guess how many plant species there are in the world? No-one knows for sure, although some estimate the number to be about 450 000. Isn't God amazing?!

- Did you know that there are over 1000 kinds of trees in South Africa? (The whole of Europe has fewer than 700.)
- Did you know that Table Mountain alone has as many plant species as in the U.K?
- Furthermore, did you know that the Cape Fynbos is a totally unique kind of vegetation – it is found nowhere else on earth except in the Cape?! *(Pictures of fynbos can be found at the end of this lesson)*

Do the children also know that plants are the homes to millions animals? Discuss which animals they think live in trees and amongst plants.

Now do the following activity:

Take a sheet (or a few pieces of newspaper), and lay it flat on the ground. You could also draw a large circle on the ground with a stick. The children must stand on the sheet or circle drawn in the earth – if you have a large group of children, perhaps just select a few to be part of this activity. Explain that they must imagine they are animals, birds and insects, living in a beautiful place with streams and food. Perhaps ask each child which animal they are in this game.

Notice how close together they are standing.

Slowly fold parts of the sheet over to make it smaller as you tell about what humans do to the natural habitat of animals:

- People decide to build a road (fold over part of sheet, or make the circle smaller)
- They then build housing (fold over part of the sheet, or make the circle smaller)
- They then need a huge shopping mall (fold over part of the sheet, or make the circle smaller)
- They then need a big farm to grow cattle for them to eat more beef burgers (fold over part of sheet, or make the circle smaller)

Ask the children how they think the animals feel about being squashed together. Is it comfortable?

Can they move? Can they breathe?

Did some of them fall off the sheet?

Explain that, sadly, this is what we are doing to animals, we are moving into their land and some of them die because they don't have enough food any more or space to grow.

Discuss that people remove or clear large areas of grassland or forests and related eco-systems. Often trees are not planted to replace the trees that have been cut down.

What do you think some of the reasons are for cutting down trees? *(Firewood to cook with and for heat in winter; to make paper; making furniture and buildings out of wood; making space for human settlement and urbanisation – space for homes, industries and roads. Do explain to the children that this is not to say that we shouldn't remove grassland to make space for us to live and to make use of natural resources, but it is still important to be aware of the effect we are having on the natural habitat.)*

Did you know that there used to be many more forests in the world? – it is estimated that less than half the original forests still exist. Ask the children what they think will happen if we continue to cut down trees and grasslands. *(If we do not stop destroying our grasslands and forests, more than half our plant and animal species will no longer exist. Trees are also the “lungs” of the planet – they provide oxygen for us to live. They also provide shade to keep us cooler.)*



Ask the children what they think we can do to help?

1. *Reduce, reuse, recycle! Try to reduce the amount of everything you use! Note that it is sometimes necessary to make use of wood, but we must be careful not to destroy all that God gave us. We should also try to replant what we cut down. In today's lesson we particularly focus on reducing our use of paper. If possible, encourage those around you to not buy newspapers and magazines –rather buy online, if you have the mean to do so. Put waste paper into recycling bins -Encourage your church to set up a paper recycling facility. Encourage those around you to not replace furniture, especially wooden furniture, unless it is completely necessary. Also encourage those around you to try to find ways to provide heat and to cook food other than using wood -Electricity, gas and solar power are better options, but are of course this is not always feasible.*
2. *We can also try to create our own miniature gardens where we live so that creatures in our surrounding area have a place to live and eat.*



Activities:

1. Provide the children with seeds, preferably indigenous – African daisies are cheap and grow quickly! The children can either plant the seeds in an empty tin can or a plastic cup, or make a newspaper planter – see end of lesson. They can then take their seeds home, or perhaps your church will give you an area where you can plant these seeds - Old tyres can be used to make large flower pots if your church is largely paved. The children must not forget to water the seeds! If the children take their seeds home, the seeds can be transferred into a bigger pot or into the garden. Perhaps you can also encourage your church to plant some trees.

Also explain to the children, especially the older ones, that it is better to plant indigenous plants – plants that are natural to your area. “Local is lekker!” – There are many beautiful indigenous plants! Indigenous plants do not need as much water and they don’t need fancy fertilizers. They are also more attractive to the local animal species, particularly butterflies, insects and birds.

Plants which are not indigenous also sometimes take over and destroy the natural habitat and should therefore not be encouraged. Sadly, the Cape Fynbos is under threat – this is due to agriculture, human development and invading alien plant species.

Also discuss with the children, again particularly the older ones, that the more nutritious the soil, the better the plants will grow. If possible, show the children what a nutritious soil looks like – it is crumbly, full of organic matter, retains moisture but also drains well, and has abundant life such as earthworms and insects. A picture of nutritious soil is shown in the diagram on the next page. It is important to regularly add compost to your garden – compost can be easily made from fruit and vegetable scraps e.g. egg shells, tea bags, coffee grounds and filters, even cardboard egg cartons. Don't add meat to your compost as this can attract rats. You can make a pile of these scraps somewhere which is not too visible to others. Give the pile a bit of water and perhaps cover with soil to keep it dark. With time, if you dig to the bottom of your compost pile, you will find lovely, nutritious compost to add to your garden.



2. Make a bird feeder. There are many ways in which birdfeeders can be made, as shown in the diagrams below, but perhaps the most fun is to use a pine cone – the first diagram shown below. The children will enjoy filling the pinecones with a mixture of birdseed and peanut butter, tying a piece of string to the cone and taking it home to hang on a tree.

Warning: Some children may be very allergic to peanut butter, so you may prefer to use lard or suet instead (available from most butcheries).



A less expensive idea is to thread unsalted and unbuttered popcorn onto garden wire, as shown in one of the diagrams on the next page.

You can also add a loop to the end of the wire before threading on some fruit – birds love paw-paw, apple etc and won't mind if you give them peels or bits that look a bit brown or over ripe – again see the next page.

For a really nutritious treat, get some old orange halves and thread through some wire to hang them from a tree. You can then put one part butter, at room temperature mixed with one part flour, two parts oats and one part birdseed to make the filling

Remember to also put some water out for the birds to enjoy, drink and clean themselves. Also encourage the children to put out bread crumbs for birds to eat.



3. Ask the children to count how many trees there are in the church yard. If there are not many, ask the children why they think this is so. Discuss the benefits of planting trees. If your church does not have many trees, perhaps take on a project as a Sunday School to encourage your church to plant more trees.



Prayer: Before beginning the prayer, ask the children what their favourite outdoor place is and why. Use these favourite places in a prayer of thanks to God for our beautiful creation. Pray that we may take care of God's creation.

Perhaps include the words of the following songs into the prayers:

- How great Thou Art
 - Think of a world without any flowers
- (The words to these songs can be found at the end of the Season of Creation lesson series)

Encourage the children to look out for birds and butterflies this week and to tell us about all they see in next week's lesson.



Craft: If time, the children can create a response to today's lesson. They may want to make leaf rubbings of the different leaves found. To do this, use white paper with a variety of coloured wax crayons. Do the rubbings at various angles, overlapping etc. These leaf rubbings can be used to make cards to give to others.

The younger children may like to make a nature bracelet, as shown in the diagram on the next page. Each child can be given a piece of masking tape to wrap around their wrist until it overlaps – with the sticky side on the outside. The children can look around the garden for little bits of nature to decorate their bracelets.



Another idea for the older children is to “colour” in a picture using dried natural materials and glue. Try using pictures of birds and try to match the actual colours as closely as possible.

References:

www.ministrytochildren.com

Season of Creation, Anglican Church of Southern Africa

Ryan the Rhino – The story of Creation, Anglican Church of Southern Africa

Special thanks to Noeleen Mullett – JAIE / EcoAct



How to make organic planting pots using old newspapers

This is a great way of making your own organic planting pots. The final product (ie the pots) are great for your small plants, they can be put very tightly together and when the plant is ready to be put into the ground you can plant it with pot still on. The paper will gradually break down in the ground.



You will need:

Newspaper
Bottle (tomato sauce bottle or similar)
Pair of scissors
Soil
Seed / cutting

Instructions:



1. Use your bottle as a guide to see where you should cut the newspaper. Place the bottle just more than halfway on the paper. You can cut several pages each time.
2. Wrap the paper around the bottle
3. Using your fingers, fold excess paper towards bottom of bottle and flatten
4. Carefully remove pot from bottle. If you look inside the pot the bottom will be raised. Use fingers or knuckles to press bottom flat.
5. Fill your pot with soil (This is what makes the pot steady. Without soil it will disintegrate in a few second.)
6. Plant your seeds, giving them a little water.
7. Make a tag to remind you what seed is in your biodegradable pot

When your seeds have grown and you are ready to plant it into the garden – plant the seeds in the little pot – this will provide some compost while it is growing!



And God made me!

Eighteenth Sunday after Pentecost 27 September 2015

Reading: Gen1:24 - 31

Theme: Diversity of God's Creation and our responsibility to take care of all creation

Memory verse: 'Then God said, "Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground". God saw all that He had made and it was very good.' Gen 1:26, 31



Information for the teacher:

On the sixth day, God created living creatures according to their kinds. Then God said, "Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, and over the livestock, over all the earth, and over all the creatures that move along the ground." Then God said, "I give you every seed – bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food. And it was so. God saw all that He had made, and it was very good. Thus the heavens and the earth were completed in all their vast array. (Gen 1:24-31)

Biodiversity is the term used for the variety of life on earth – it refers to the diversity of species of plants, animals, fungi, bacteria etc. It is estimated that there are 9 million species to be found on earth. South Africa ranks as the third most biologically diverse country in the world. South Africa occupies less than 2% of the world's land surface, but it has a rich and spectacular array of land and marine species and is home to 10 % of the world's bird, fish and plant species. Estimates of the total number of species in South Africa vary from 250 000 to 1 000 000! God truly saw that it was good!!

St Thomas Aquinas (1225 -1274) once tried to explain the reasoning for such diversity: "Because the divine could not express itself in any single being, the Divine created the great multiplicity of beings so that the perfection lacking to one would be supplied by the others. Thus the whole universe together participates in and manifests the divine more than any single being whatever."

What an honour to be bestowed on humankind – to be entrusted with God's Creation. With this, however, comes great responsibility! We have a pivotal role in the development and well-being of creation. When we fail, all creation suffers!

Some people think that the disappearance of natural species doesn't really matter much. There is also sometimes the perception that humanity is separate from the rest of creation. This is most definitely not the case – we are all part of the web of life. Whatever we do to the web, we do to ourselves. Sadly however, economy is often more important than ecology, and partly as a result of such a mindset, we are living through the sixth great extinction in the history of the Earth – and the first to be caused by humans. The current rate of extinction is said to be 100 or even 1 000 times above the natural level.

As we teach this lesson today, may we develop a true sense of the value of God's Creation and in our small way, try to dispel the apathetic, neglectful, uninformed, greedy and non-caring attitudes of our society.

Creator God, we praise you for the variety of your creation, and for the sanctity you have bestowed on all life through creation. May we know the sanctity of life and foster the conservation, and preservation of the variety of God –given life. May we never, knowingly or otherwise, be responsible for the extinction of a plant or an animal. May new life fill us all, through the gift of your Holy Spirit, to know your wonder, your love and the abundant life you give. Amen

Lesson Suggestions:



Younger Children (3 – 6 years):

Lesson Objectives:

- To be aware that God created all Creation and God made us!
- To know that we have been entrusted to look after all Creation



Attention Grabber: The children can sit in a circle and play the game, “I went to the zoo and saw a” The first child names an animal e.g. a monkey. The class then repeats, “I went to the zoo and saw a monkey.” The next child then names an animal e.g. a snake. The class then repeats, “I went to the zoo and I saw a monkey and a snake”. The next child then names another animal and the class repeats the sentence and adds in the next animal. This continues until the sentence gets so long that the children can’t remember the order of the animals. You can then restart the game or do another exercise, such as looking at a picture and identifying all the animals in the picture.



Bible Story: The sixth day of the Creation Story – Gen 1:24-31

Briefly discuss the past few weeks’ lessons – perhaps use some pictures to aid you in your discussion. Did the children remember to look out for birds and butterflies? If they did, ask them to tell everyone what they saw. Discuss with the children what happened on the sixth day of the Creation Story – perhaps read the story to them from a children’s bible.

Discussion:

God said we are to look after all the animals! Wow, God trusted us enough to look after all his animals – we definitely don’t want to disappoint God! So, how do we look after all the animals? *(Try to keep the world as God would like it to be. Don’t litter – put your rubbish in a dustbin. Don’t waste food and water. Look after all of God’s animals – don’t be cruel to God’s creatures, even the little ones, like snails and centipedes, and the ones you don’t like, like spiders, bats, snakes etc – have a brief discussion about which creatures the children don’t like and why. Explain that all these creatures have a place in God’s creation!)*

What will happen if we do not look after the animals? Our animals will die – imagine going to a nature reserve and there are no animals; imagine never seeing a bird – the world would not be nearly as interesting as it is now. Think of a world with no flowers; think of a world with no trees – wouldn’t that be sad?!



Prayer: Let’s say a prayer asking God to help us look after all Creation. *(Encourage the children to add to the prayer)*

Dear God. You made all things and called them good. We thank you for the beautiful earth that we call home. Help us to look after all you have given us – the birds in the sky; the fish in the sea; all the animals that roam in the veld; the beautiful flowers. Help us to keep your world as you would like it to be. Amen



Songs

If I were a butterfly

He made the stars to shine

He's got the whole world in His hands

This is the day

(The words to all these songs can be found at the end of this lesson.)



Crafts:

- Make a poster or a mural of God's Creation, to be put up in your class or in the church. Perhaps provide a background of green grass and blue sky to which the children can add animals and plants.

The children can perhaps collage the animals and plants i.e. give each child an animal or a flower or a tree and provide little pieces of torn paper of different colours which the children can paste onto their animals and plants, and then add to the poster. A few outlines of animals can be found on page 126 for you to use as a template, although you will need to enlarge. Many animals can also be drawn freely, such as a worm or a snail etc – use your imagination! Give your poster a suitable heading.

- The children would also enjoy making creatures out of play dough. Even more fun would be to make cheesy creature snacks as shown in the diagram below. This would require an oven, although you could perhaps send the children home with instructions on how to bake. The recipe for making play dough and the cheesy snacks can be found at the end of this lesson.



Once you are done with your craft, ask the children how they would feel if someone now tore up or destroyed what we have made. Discuss how they think God may feel if we do not look after all His Creation.



Physical activities: Go on a bug hunt – the children need to see how many living creatures they can find outside – they can call everyone when they make a discovery, so that the whole class can share in this.



Older children (7 – 13 years)

Lesson objectives:

- To be aware that God created all Creation and God made us!
- To know that we have been entrusted to look after all Creation



Attention Grabber: The Biodiversity game:

Get the children to line up in different ways - height order, oldest to youngest, names beginning A–Z. Discuss that everyone is different! There is no better or worse, only variety! Get students to guess how many different plants, animals, birds, insects, reptiles there are in the world.

(There are about 9 million species on earth! i.e. 9 million different types of creatures on earth!)

This is called biological diversity (biodiversity) – we will be discussing this a bit more in our lesson today.



Bible Story: The sixth day of the Creation Story – Gen 1:24-31

Perhaps briefly remind the children of the past few weeks' lessons. Did the children remember to look out for birds and butterflies? If they did, ask them to share with everyone what they saw. Then read Gen 1:24 -31



Discussion:

Ask the children to respond to the Bible reading for today. Encourage them to realise the gift that God has given to us in the form of this beautiful creation.

When the Bible tells us that the Lord made plants and living creatures, each according to their kind, do we realise how many plants and animals that is? As has already mentioned, scientists estimate that there are over 9 million different species (types) of plant and animals on earth. South Africa itself is very rich in both plant and animal life. Last week we learnt about the abundance of plant life in South Africa. Even though our country occupies less than 2% of the world's land, it is home to 10% of the world's bird, fish and plant species. Did you know that 11 000 marine species (i.e. plants and animals that live in water), are found in South African waters, and most of these species are found nowhere else in the world?! Guess how many different types of insects there are in South Africa? 50 000! There are 288 different types of reptiles in South Africa. We also have 800 different types of bird and more mammals than in Europe and Asia combined! God truly saw that it was good in South Africa – we have been blessed!!

We should be honoured but also humbled that God has trusted us to rule of all creation. However, with this honour comes great responsibility. How are we as a human race doing when it comes to looking after God's Creation and its resources? – not very well!

(At this point, you may like to present the skit found at the end of this lesson)

Show the children the pictures of animals found on page 128. Ask them to try to identify these animals. Once done, ask them if they know what all of these animals have in common – they are all extinct! – They no longer exist. (Information on these animals can be found on the page before the pictures.)

Do you know that we are currently living through the sixth great extinction in the history of the earth, and the first to be caused by humans? The current rate of extinction is said to be 100 or even 1 000 times above the natural level.

South Africa has also lost a few animals to extinction. Can the children name these animals? Pictures of these animals can be found on page 129.

Ask the children if they are aware of any animals in South Africa which are currently endangered i.e. close to extinction. Pictures and information regarding these animals can be found on pages 129 and 130.

So it is very sad that there are some animals that will never be seen again on this earth. The beauty and diversity of God's Creation is being lost – instead of a spectrum of many colours, we are depleting the range of nature. This can be compared to a painter who has a palette of colours to work from. If some of these colours are taken away, how will this affect the painting? It will become less interesting, less rich and less vivid.

Not only this, but each animal has a part to play in the eco-system. Remove an animal and the balance of nature is thrown – this will ultimately affect us too –we too can become endangered if we do not look after the web of life!

You may want to do the following activity with the children:

The children stand in a circle, holding hands. Go round the circle giving each child the name of a part of creation e.g. bird, worm, butterfly, fish, human, beetle, spider, ant, bee, flower, seed, apple, crab, leech, rhino, giraffe, lion, leopard etc. Ask each child to remember and say the name they have been given in the circle. They are all part of the web of life.

Then tell the children a story about humans destroying biodiversity e.g. a swamp is drained because people want to build houses (everything that lives in *water sits down*); the insects can no longer breed as they need water to do so (*insects sit down*); the birds can't survive because there are no insects for them to feed on (*birds sit down*); the flowers are no longer produced because they are not pollinated by the birds and insects (*flowers sit down*); seeds and fruit can no longer be produced because there are no flowers (*seeds and fruit sit down*); Herbivores, animals which eat plants no longer have food to eat (*herbivores sit down*); Carnivores which are meat –eating animals also die off because the animal population has decreased (*carnivores sit down*).

As the children sit down, gaps appear in the circle. Others have to stretch across the gaps to reach their neighbour and keep the chain complete by holding hands. (*They mustn't move their feet*) Explain to the children that as parts of Creation are removed, so it puts strain on the remaining parts of the web of life. Eventually there are just a few children (humans) left with gaps between them. With the food source severely depleted, eventually there will be nobody left standing.

Discuss what has happened. When one part of creation is disturbed, other parts suffer. Humans, as top of the food chain, may be last to suffer, but we need to act now to prevent these problems.

Here is a true example of how the balance of nature can lead to catastrophic results:

There was once a community in South Africa who lived by a river. One day, one of the members of the community was attacked by a crocodile. As a result the community decided to kill all crocodiles in their area. So their problem was solved, or so they thought!

A while later there was a malaria outbreak in their community. A group of scientists decided to investigate the situation. It was found that the malaria outbreak was due to an increase in the mosquito population. The mosquitoes were no longer being controlled by a small fish, known as the Tilapia, which usually ate the mosquito larvae. This was because the numbers of the small fish population had been severely depleted. And this was because of an increase in the numbers of a bigger more aggressive fish, the Barbel, which were eating the smaller fish. Why do you think the numbers of the Barbel had increased? Because there were no crocodiles to eat them – Crocodiles love to eat Barbel!!

Once the crocodile was re-introduced into the area, the numbers of the Barbel decreased; the numbers of the little fish increased, and the mosquito population was depleted. The mystery of the malaria outbreak was solved!!



The Tilapia



The Barbel

Here is a scary fact! Did you know that: “If the bee disappeared off the surface of the globe, then man would only have four years of life left. No more bees, no more pollination, no more plants, no more animals, no more man……. “ (Albert Einstein)

It is so important that we realise that we are part of creation, not separate from it! And so humans, while God has given us dominion over all things, have a pivotal role in the well being of Creation. It is clear that if we fail, all Creation, including us, suffers!!

So what can we do to help? *(Ask the children for suggestions – this discussion is a revision of the past few weeks)*

1. Generally respect the world and its resources – Aim to keep the world as God intended. The rivers should be crystal clear and teeming with fish, and the landscape should be left as unaltered as possible. Don't litter – don't leave plastic bags and other litter lying around. The plastic bag is sometimes described as South Africa's national flower because it is so prevalent on our landscapes – how sad! Besides being a danger to animals, a piece of litter detracts from the beauty of God's creation. Don't use pesticides and poisons to get rid of pests – this gets into the water system and is responsible for the death of many animals which we don't want to kill -rather use natural repellents if you have a pest problem, or just leave the problem to the balance of nature i.e. birds and other insects, spiders, frogs and lizards to sort out, just as God intended! Respect and look after all resources – don't waste water or food.
2. Organise cleanups of rivers and make sure your surrounding area is free of litter and other pollution. Fishing lines carelessly left at edges of dams and rivers wrap around legs and necks of water birds. Fishing hooks also kill and maim wildlife.

3. Look after all God's animals – don't be cruel to God's Creation, even the little ones like snails and centipedes, and the ones you don't like, like spiders, bats, snakes etc – discuss with the children which animals they don't like and why. Remember, all creatures have a role to play – a special job to do -in the web of life.
4. Support initiatives such as Rhino Conservation and other conservation groups who do wonderful work to look after our precious biodiversity.
5. Join a wildlife group or support your local SPCA or visit a zoo or a nature facility where you can learn more about wildlife and efforts that are being made to prevent animal extinction.
6. Do not encourage the use of bush meat – this is threatening the elephant and primate population. Do not eat endangered fish - www.wwfsassi.co.za gives a list of fish which are sustainable seafood or sms **079 490 4795** with the name of a fish and you will get an immediate reply. Also, do not buy products made of animal products e.g. fur, ivory, horn
7. Encourage your church to become an Eco-Congregation so that initiatives can be set up to educate the community on caring for the environment. Your diocese will have more information on this.
8. Encourage your church to plant an indigenous garden and trees– this will not only beautify your church grounds but also provide a home for local animal species.
9. Remember, your planet needs you!!



Crafts:

- The children can create a poster in response to today's lesson, and to highlight the plight of our wildlife. Perhaps provide pictures of extinct or endangered animals for the children to use so that the posters can have more impact. The posters should have eye-catching headings such as, "Going, going, gone" or "Now you see it, now you don't" or "Your planet needs you!"
- Make a class pledge stating what the children will do to protect the beautiful earth God has created.



Songs:

- Think of a world without any flowers
- How great thou art.
- All things bright and beautiful

(The words to these songs can be found at the end of this lesson)



Prayer: Perhaps begin by praying Psalm 148:1-12. You may then want to encourage the children to add to this prayer, based on the lesson for today. See the younger children's section for a prayer to end the session.

References:

Season of Creation 2, Anglican Church of Southern Africa
 Ryan the Rhino – the Story of Creation, Anglican Church of Southern Africa
www.newcommunityproject.org
 Special thanks to Noeleen Mullett – JAIE / EcoAct

Recipe for Play Dough

500ml cake flour
200ml salt
500ml water
30ml cream of tartar
30ml cooking oil
2.5ml vanilla

Mix all the ingredients in a pot and stir thoroughly.
Cook on a medium heat stirring the dough continuously and until it pulls away from the sides forming a ball.
After dough has cooled down store in a plastic bag in the fridge so that it doesn't dry out.

Cheesy snacks recipe

Ingredients:

150 g or 1½ cups self-raising flour
½ teaspoon salt
25 g or ¼ cup margarine
75 g or 2/3 cup cheese, finely grated
1 egg and 2 tablespoons of milk, beaten together
Raisins for eyes
A large bottle top
A greased baking or cookie sheet

This recipe makes about 8 snakes and 4 caterpillars. The children can of course make any creature they like!

Method:

1. Heat the oven to 200°C
2. Sift the flour and salt. Add the margarine and rub the mixture with your fingers until it makes fine crumbs.
3. Leave a tablespoon of cheese to one side. Add the rest of the cheese to the bowl. Stir everything together.
4. Put a tablespoon of the egg mixture into a cup. Stir the rest of the mixture into the flour. Mix it to make dough.
5. Sprinkle some flour onto a work surface, perhaps a paper plate. Roll out the dough until it is as thick as your little finger.
6. The children can perhaps use a blunt knife to cut strips and then bend into wiggles to make a snake. Pinch the one end to make the tail. To make a caterpillar, press the bottle top into the dough – cut out circles; then lay them in a line and overlap them slightly. Press them so that they stick together.
7. Brush the shapes with egg mixture; sprinkle them with cheese and press on raisins for eyes.
8. Put the shapes onto a greased baking sheet. Bake for 8 to 10 minutes until they are golden.

Skit: Caring for God's Creation

(A drama sketch written by Adrian and Lucy Thompson, Associates of the John Ray Initiative)

Scene: *A stand with a painting facing away from the audience. God is standing at the painting with a paint brush and set of paints, delicately putting some final touches. Man enters, and on seeing God painting, he goes to have a look.*

Man: Wow God, that's really brilliant. I love the way you've captured the sky, and those clouds. And those trees are fantastic, they must have taken you hours. And those birds, they are so colourful. You must have spent ages on this.

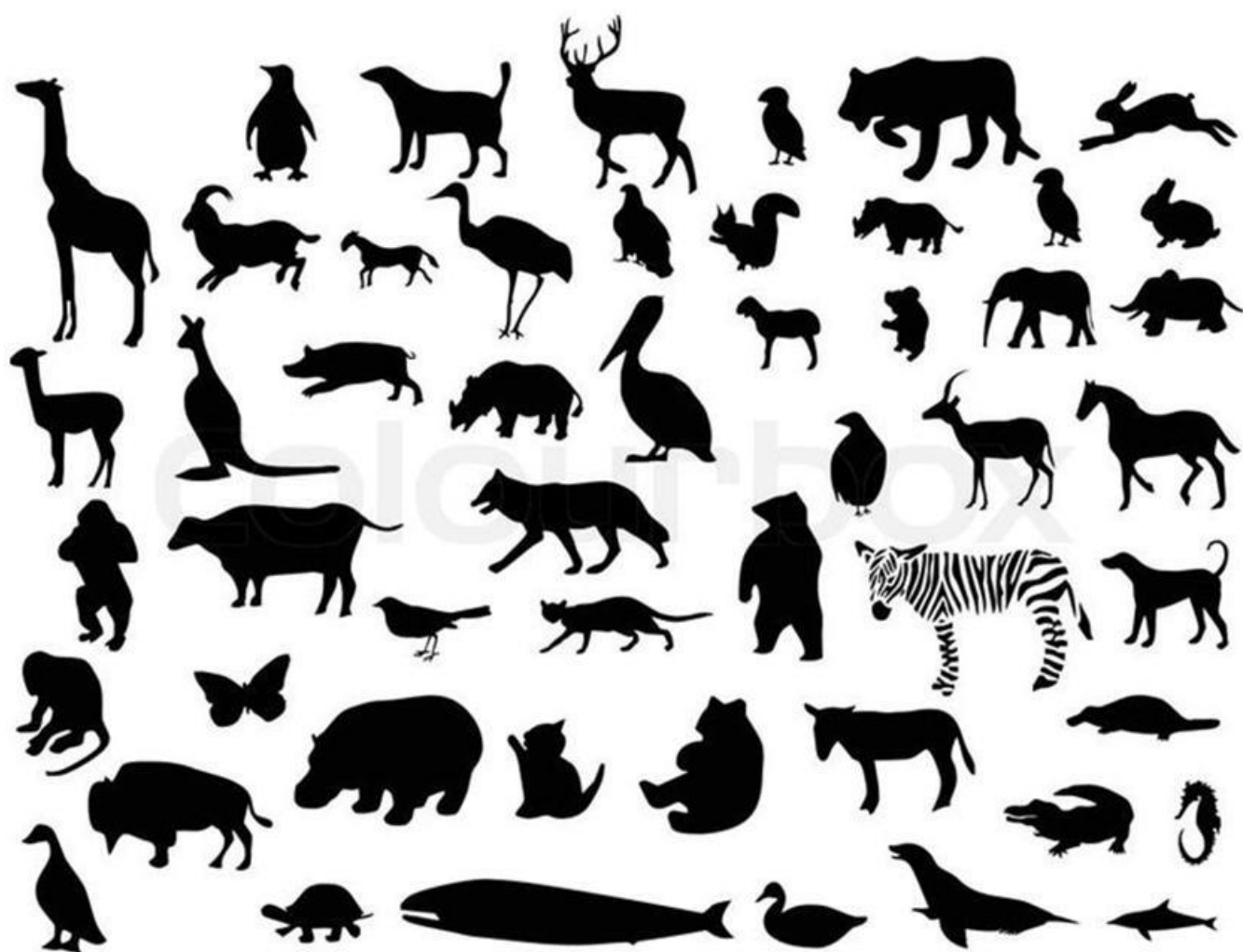
God: *(smiling)* Yes, a fair bit of time. I think it's more or less finished now. *(God stands back and smiles).* I have to admit I'm pretty pleased with it. I wasn't sure about the slugs at first, but I found a lovely shade of grey for them, and the hedgehogs do so like them. Still not sure about that ostrich though. Gabriel laughed for hours when he saw it. Now listen Adam, I want you do me a favour. Can I leave my painting with you, so you can keep an eye on it. In fact you can even add a few useful things if you like, the odd farm, a few houses maybe, but give me a shout first, and I'll give you a hand. God leaves stage and man stands and looks at the painting.

Man: *(thoughtfully)* Yes, it is wonderful. God's right though, it does need some houses, maybe even a town. I won't bother him now about advice, I'm sure this painting thing isn't as hard as it looks. Man picks up paints and brush and starts dabbing at the canvas. Hmm, I'm not quite, quite as good as God yet, but I'm sure with some practice I'll get there. *(He hums for a few seconds.)* The thing is - there are a lot of trees and I could do with some more towns and maybe some factories. I've got to get that essence of global economy into it. *(Man gets a spray can out of his back pocket.)* I'll just spray out a few of these forests. Woops, I didn't mean to do those birds as well. Now, I can paint over that! *(He paints again, for a second.)* Hmm not really what I wanted. I'll just put another road in. Oh blast, there's an oil slick in the middle of the sea where the paint has dripped. Oh, and the smoke from the factories smudged and the sky's gone all grey and yucky. *(He stands back)* Oh help, I didn't mean it to end up like this. Nearly all those lovely trees and animals have gone. God's going to be really mad when he gets back and finds this mess. *(Man frantically takes a tissue and tries to clean some of the paint off.)* It's dried! - I can't move it.

God: *(Gods enters back onto stage)* Hi Adam, how's my painting?

Man: *(Man hangs head.)* I'm really sorry God, I should have asked you for help when I tried to add a few things and it has all gone pear shaped. I guess I'm a pretty lousy artist.

God: *(God looks at painting and slaps man on the back).* I see what you mean, but there's still time to learn. *(God gives man brush and starts to guide his hand across the painting. Light dims and man takes painting off the stand and shows the audience - it is a picture of the earth.)*



Information on extinct animals

The following information relates to the pictures of the animals found on the next page of this lesson.

Laughing owl: The laughing owl was found in New Zealand. Plentiful when European settlers arrived in New Zealand it was largely or completely extinct by 1914.

Paradise Parrot: The paradise parrot was found in the grassy woodlands of eastern Australia. Once moderately common within its fairly restricted range, the last live bird was seen in 1927.

Passenger pigeon: As recently as around 200 years ago the passenger pigeon wasn't anywhere near extinction. The last Passenger Pigeon, named Martha, died alone at the Cincinnati Zoo at about 1:00 pm on 1 September 1914.

Golden toad: The first record of the Golden Toad was by herpetologist Jay Savage in 1966. None have been seen since 1989.

The Caribbean monk seal: The Caribbean monk seal was the first mammal to be discovered by Columbus and his company on the coast of Santo Domingo in 1494. It was officially declared extinct in 2008.

The Bubal Hartebeest: It once roamed throughout Northern Africa and the Middle East but European hunters began hunting them for recreation and meat. The last Bubal Hartebeest was probably a female which died in the Paris Zoo in 1923.

Javan Tiger: Javan Tigers were found on the Indonesian island of Java. In the early 19th century Javan tigers were so common, that in some areas they were considered nothing more than pests. The last specimen to have been seen was sighted in 1972.

The Baiji river dolphin: The Baiji population declined drastically in recent decades as China industrialized and made heavy use of the river for fishing, transportation, and hydroelectricity. Industrial and residential waste flowed into the Yangtze River. The dolphin was declared extinct after an expedition late in 2006 failed to record a single individual.



Endangered animals in South Africa

It is sad that South Africa also has many threatened and endangered creatures. It has already lost a number:

1. The Quagga used to inhabit the Karoo and Southern Free State of South Africa. The Quagga was ruthlessly hunted as they were seen as competitors for the grazing of their livestock, mainly sheep and goats. The only Quagga ever to be photographed alive is shown in the picture below. The last surviving Quagga died in at Amsterdam Zoo in 1883.
2. The Cape lion is thought to have once roamed freely on the slopes of Table Mountain. Trophy hunters and farmers protecting their livestock hunted the Cape lion to extinction by 1885.
3. The magnificent Blue Buck (Bloubok) was hunted to extinction by trophy hunters by the mid 1800's.



Here is a list of some species that are in danger of going extinct in the very near future - possibly even in your lifetime! Pictures of these animals can be found on the next page.

Wild dog: Endangered due to persecution and diminishing habitat – only small numbers safe in game reserves.

Riverine rabbit: One of the most endangered animals in the world – less than 45 individuals survive. Endangered due to habitat destruction for agriculture and destruction of vegetation by sheep and goats.

Roan Antelope: Endangered due to poaching, habitat loss, prone to disease and limited gene pool

Rhino: Poaching!

Cape Vulture: Endangered due to habitat destruction and poisoning

Blue swallow: Habitat destruction because of planting huge forests of pine trees

Roodepoort Copper Butterfly: Endangered due to habitat destruction and urbanisation

Geometric tortoise: The third most endangered tortoise in the world. Endangered due to habitat destruction and pet trade

Sungazer lizard: Endangered because of habitat destruction due to urban development and pet trade.

Rock Python: Killed for its skin, muti trade, superstition. Also endangered due to pet trade.

Addo flightless dung beetle: Endangered due to isolated populations, habitat destruction, climate trade and illegal pet trade

Knysna sea horse: Endangered due to pet trade, habitat loss, pollution and curios

Cape Parrot: Endangered due to loss of habitat, loss of food source, illegal pet trade

Table Mountain Ghost Frog: Endangered due to alien vegetation, frequent fires and inconsistent stream flow, soil erosion, habitat loss, climate change, disease, intensification of tourism

Pickergill's Reedfrog: Most endangered frog in South Africa because of habitat destruction, urban development and climate change

There is some good news. Environmentalists are doing their best to prevent the extinction of these species through breeding programs, education programs, anti-poaching strategies and rehabilitation of habitat. However, it is essential that we all do whatever we can to prevent animal extinction.



Season of Creation Songs

He made the stars to shine

He made the stars to shine
 He made the rolling sea
 He made the mountains high
 And He made me, and the Lord
 made you
 And this is why I love Him
 For me He bled and died
 The Lord of all Creation
 Became the crucified

I love the sun

I love the sun, it shines on me
 God made the sun and God made me

 I love the stars, they twinkle on me
 God made the stars and God made me

 I love the rain, it splashes on me

 I love the wind, it blows on me

 I love the birds, they sing to me

Our God is so big

Our God is so big, so strong and so
 mighty
 There's nothing my God cannot do
 (x2)

 The mountains are His
 The rivers are His
 The stars are His handiwork too
 My God is so big, so strong and so
 mighty,
 There's nothing my God cannot do

He's got the whole world in His hands

He's got the whole world in His hands (X4)

 He's got the moon and the stars in His hands (x4)

 He's got the rivers and the mountains....

 He's got you and me

Our God is an awesome God

Our God is an awesome God
 He reigns from Heaven above
 With wisdom, power and might
 Our God is an awesome God

All things bright and beautiful

*All things bright and beautiful,
 All creatures great and small,
 All things wise and wonderful:
 The Lord God made them all.*

Each little flow'r that opens,
 Each little bird that sings,
 He made their glowing colors,
 He made their tiny wings.

The purple-headed mountains,
 The river running by,
 The sunset and the morning
 That brightens up the sky.

The cold wind in the winter,
 The pleasant summer sun,
 The ripe fruits in the garden,
 He made them every one.

The tall trees in the greenwood,
 The meadows where we play,
 The rushes by the water,
 To gather every day.

He gave us eyes to see them,
 And lips that we might tell
 How great is God Almighty,
 Who has made all things well.

How great thou Art

O Lord my God, When I in awesome wonder,
 Consider all the worlds Thy Hands have made;
 I see the stars, I hear the rolling thunder,
 Thy power throughout the universe displayed.

*Then sings my soul, My Saviour God, to Thee,
 How great Thou art, How great Thou art.
 Then sings my soul, My Saviour God, to Thee,
 How great Thou art, How great Thou art!*

When through the woods, and forest glades I
 wander,
 And hear the birds sing sweetly in the trees.
 When I look down, from lofty mountain
 grandeur
 And see the brook, and feel the gentle breeze.

Think of a world

Think of a world without any flowers
 Think of a world without any trees
 Think of the sky without any sunshine
 Think of the air without any breeze
 We thank you Lord for flowers, trees and sunshine
 We thank you Lord, and praise your Holy name