national cub challenge 2020

sustainable development goals

adult working kit

SCOUTS South Africa

SCOUTS for SDGs

the challenge:

There are four sections to the 2020 challenge, covering the following sustainable development goals:

Section 1: Gender Equality – SDG 5

Requirement:

Encourage the Cubs to earn the Diversity Awareness Badge by running an 'Orange Day' programme/activity on/near the 25th of a month.

Section 2: Climate Action – SDG 13

Requirements:

The overarching theme for Earth Day 2020 (22 April) is 'Climate Change'.
In celebration of their 50th anniversary, run **BOTH** climate change programmes.

- "Energy Savers"
- "Planet Protectors"

Section 3: Life below Water – SDG 14

Requirements:

Do **TWO** of the following:

As a Pack, complete the entry level badge requirements for the Tide Turners Plastic Challenge Badge.

OR

Do **TWO** of the following:

1. Create an underwater diorama.
2. As a Six, have the Cubs write (and illustrate) a story or comic book on life below water.
3. In celebration of World Rivers Day on the 27th of September 2020, monitor the health of a river and measure the general quality of the water by conducting a mini SASS (stream assessment scoring system) – www.minisass.org.

   OR

   To raise awareness of the role of the oceans and the importance of conserving and protecting our marine environment, run a water activity on/near World Oceans Day on the 8th of June 2020.

OR

Identify a section of river or beach that is used for recreation and which is polluted with plastic. As a Pack, possibly with a Troop too, organise a clean-up of 2 days at least 2 months apart. How much new litter was there?

Section 4: Life on Land – SDG 15

Requirements:

Complete the Water Champ Challenge Badge and share your findings with the rest of the Pack.

OR

During Arbour Week, which runs from the 1st to the 7th of September, do **TWO** of the following:

1. Carry out a tree survey in your community.
2. Make seed paper or bombs and plant them around an area that could be made more beautiful with flowers or plants.
3. Make a Rainforest Terrarium.
4. Carry out or assist with a conservation project in your community.

Reminder:

- **National Cub Challenge deadline: 30 November 2020.** All entries to be submitted to your Regional Team Coordinator by 11 December 2020.

- Please upload your conservation project (10 hours or more) to the Messengers of Peace website. Find it here: https://www.scout.org/explore

Thank you for getting involved, for inspiring and empowering our Cubs to create a better world!

sdg 5: gender equality

"A gender-equal society would be one where the word 'gender' does not exist, where everyone can be themselves." Gloria Steinem.

Every child deserves to reach their potential, but gender inequalities in their lives and in the lives of those who care for them hinder this reality.

The Challenge:

Girls and boys see gender inequality in their homes and communities every day. They find it in textbooks, in the media and among the men and women who provide their care and support.

Unequal responsibility for work in the home further socializes children into thinking that these duties are women's-only roles, thereby curtailing generational change and narrowing girls' ambitions.

Research shows that boys and girls who witness gender-based violence in their homes are more likely to replicate violent relationships as adults, either as perpetrator or victim.

But, as girls and boys age, gender barriers expand. In many of our communities chores, caring for siblings and safety issues keep girls out of school, while expectations of earning money, force boys to drop out. By the time children reach the age of 10, boys' worlds often expand while girls' worlds' contract, resulting in negative consequences that can last a lifetime.

https://www.unicef.org/gender-equality

Diversity Awareness Badge:

Link: Diversity Awareness Badge requirements.

ideas:

- Refer to the June '19 edition of Pack Chat.
- What makes me special? Have the Cubs move around the playing area, walking, hopping, skipping, etc. to music. When the music stops, the Cubs must stop and find a partner. The partners shake hands and then give a compliment to each other. After this has been done, the music can be turned on again and repeat the process this time having the Cubs find a new partner. Repeat the process a number of times. Discuss with the Cubs how they felt having positive things said to them? What if people were saying things that were not nice?

Acknowledgement: Girls Guides of Canada

Orange the World Campaign:

The 25th day of every month is Orange Day. It calls on people everywhere to wear the colour orange and take action to end violence against women and girls in every community. The colour orange symbolises a brighter future, free of violence. It also serves as a means of raising awareness and saying NO to violence against women and girls.

https://www.unwomen.org/https://en.unesco.org

ideas:

- Run an Orange Day programme or activity on/near the 25th day of a month.
- Grow carrot tops.
- Have an orange and spoon relay.
- Make orange scented playdough – for playdough recipes refer to the 'handcraft' module in the Pack Scouters Working Kit.
- Play Kim's Game using only orange items – carrots, oranges, etc.
- Make 'orange' fruit and vegetable prints – cut oranges crosswise in half; slice carrots into quarters, wedges or cut into specific shapes such as a flower or a star.

sdg 13: climate change

"You cannot protect the environment unless you empower people, you inform them, and you help them understand that these resources are their own, that they must protect them." Wangari Maathai

Climate change is a big topic that can be difficult even for adults to wrap their minds around. For a child, the concept is even more abstract. But the good news is that children are receptive to new information and there are fun ways out there to make real to them how the climate is changing and what humans are doing to make that happen.

1. What is climate change

The first thing you'll want to do is explain climate change to your Cubs in a way that is easy for them to understand. It might seem obvious to adults that the seasons or temperatures have changed a lot since they were children, but Cubs won't have experienced that.

The simplest way to explain climate change is to break it down and simplify. **Climate change** (or **global warming**), is the process of our planet heating up. Explain that the way human beings are living their lives, is causing the world to get hotter and hotter.

Some of the causes include: Burning large amounts of **fossil fuels** such as **oil** and **gas in factories.**

Farming cows. Believe it or not, cows' eating habits contribute towards heating up the earth. Just like us, when cows eat, **methane gas** builds up in their digestive system and is released in the form of… a *burp*! This might sound

funny, but when you imagine that there are almost **1.5 billion** cows releasing all that gas into the atmosphere, it sure adds up!

The gases released into the **atmosphere** act like an invisible 'blanket' around our planet which traps the heat from the sun and warms the Earth. This is known as the "**Greenhouse Effect**".

Forests absorb huge amounts of **carbon dioxide** – a greenhouse gas – from the air, and release oxygen back into it. Sadly, lots of forests are being cut down to make wood, palm oil and to clear the way for **farmland**, **roads**, **oil mines**, and **dams**. So this doesn't help at all.

2. What are the effects of climate change

Basically, climate change is hurting our planet. Sea levels are rising, polar ice is melting, and animals are losing their natural habitats and dying out. Farmers and fishermen are finding it harder to make a living. Unfortunately, it's not a pretty picture.

3. Help children fall in love with nature

Where ever you live, there is always a way to take your Cubs to see the beauty of nature, whether it be forests, mountains, rivers, or even just the local park. Let them see and experience the wonder of the natural world. Let them climb trees and play in the dirt. Show them all the wonderful and colourful plants and flowers. Then explain to them that climate change threatens to take all these away from us. If we want to keep living in a beautiful and green world, we need to protect it.

4. Build positive eco-friendly habits for the whole family

Remember, children need to hear positive facts about the world around them, it's not all doom and gloom. Explain to your Cubs how we can all start cutting down on the waste that contributes to climate change right here at home. There are lots of great ways environmentally friendly families can cut down on waste and pollution. Teach your Cubs to be the ones to set the example. Some of these could be:

- **Don't leave taps running.** Help your Cubs understand and know that you can waste as much as 35,000 litres of water per year by leaving the tap running when you brush your teeth.
- **Do not litter** – recycle!
- **Don't use plastic bags.**
- **Switch off lights that are not needed.**
- **Unplug cell phone and other chargers.**
- **Replace light bulbs with energy-saving bulbs.**
- **Take short showers.**
- **Cycle, walk or use public transport, if possible, instead of going by car.**
- **Do compost food waste.** It might sound silly, but composting food waste helps combat climate change and give back to the soil.

https://www.starwalkkids.com/toys/educational/teach-kids-climate-change/ Enviro Kids, volume 34, no 2 – May 2013
https://www.natgeokids.com/za/discover/geography/general-geography/what-is-climate-change/

sdg 14: life below water

"We never know the worth of water till the well is dry."
Thomas Fuller

The world's oceans – their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind. How we manage this vital resource is essential for humanity as a whole, and to counterbalance the effects of climate change.

https://www.undp.org

ideas

- **Underwater Diorama:**

  Building a diorama is a fun DIY project in which you can create an exciting scene in a small space. Dioramas allow a lot of room for creativity and innovation.

  https://www.wikihow.com/Make-a-Diorama
  https://feltmagnet.com/crafts/shoebox-diorama

- **Water glass xylophone:**

  A water xylophone is easy to make and fun to use. They are good for playing tunes and for making up your own songs.

  You will need:

  1. 4-6 tall glasses or glass bottles (they should all be the same shape and size).
  2. Jug of water.
  3. Spoon or pencil.

  What to do:
  1. First, line up the empty glasses/bottles, then tap each with your spoon (or pencil) and listen to the sounds they make. Do they all sound the same?

2. Fill the first glass/bottle almost to the top with water from the jug.
3. Fill the second glass/bottle about an inch or so less full than the first glass.
4. Repeat step 2, filling each glass slightly less full than the previous glass/bottle so that the final glass/bottle has only 1-2 inches of water. You can change the difference in the amount of water between each glass/bottle slightly depending on how many glasses/bottles you are using; just ensure that the water level in each glass/bottle creates steps going down.
5. Use the spoon (or pencil) to tap gently on the side of the first (fullest) glass/bottle and listen closely to the sound it makes. Repeat with each glass and notice the difference in sounds from each one.
6. Can the Cubs play a tune now? Can the Cubs make up a song of their own?

https://learning-center.homesciencetools.com

Yarn: The drop of water

There was once a jar of fresh, clean water. Every drop of water in the jar felt immensely proud of being so clear and pure. Day after day they would congratulate each other on how clean and beautiful they were.

That was, until one day when one of the drops got bored with his ultra-clean existence. He wanted to try what it was like being a dirty drop. The other drops tried to talk him out of it, but he would not change his mind.

Hardly realising, when the drop came back all dirty he turned all the other drops in the jar into dirty drops too. They tried to get clean again, but couldn't. They tried everything to shake off the dirtiness.

Finally, much later, someone dipped the jar in a fountain, and only when a lot of clean water entered the jar, did the drops regain their old transparency and purity. Now they all know that if they all want to be nice clean drops, then each and every one of them has to stay clean, even if they find it difficult. Putting right the mistake of one single drop entails a lot of work for everyone else.

The same happens with us and our friends. If we want to live in a jar of clean water, each one of us will have to be a clean drop. None of us should try being the dirty drop that spoils everything.

How about you? What are you? A clean drop?

Moral: It's much harder to undo an unwise act than it is to act wisely right from the start.

https://freestoriesforkids.com/children/stories-and-tales/drop-water

- **Water pollution:** The quality of our water is being threatened by pollution and the destruction of river catchments. What can we do to help? Carry out an experiment to see how difficult it is too undo water pollution.
  You will need:

  1. A bucket of clean water
  2. Some household rubbish - tin cans, banana peels, plastic bags, etc.
  3. Vegetable oil (to stand for toxic oil spills)
  4. Tongs/strainer

Let the Cubs take turns adding rubbish to the water in the bucket. After polluting the water have the Cubs try to remove all the pollution using tongs and a strainer. After removing all the pollutants, the water is still oily and dirty. Conclusion it is impossible to remove all pollutants from the water.

- Organise someone from a **water based organisation** (Rand Water; The Mvula Trust, etc.) to come and talk to the Cubs and parents.
- Run a **Special Pack Meeting** all around water. Have the Cubs (and Leaders) come dressed all in blue.
- Let the Cubs make up an **activity or game** to tell others about water safety (Gold Wolf: Aptitude Challenge).

www.randwater.co.za; www.waterwise.co.za; www.unicef.org

sdg 13: life on land

"Deforestation is changing our climate, harming people and the natural world. We must, and can, reverse this trend." Jane Goodall

Forests provide a home for millions of species and give us all clean air and water. To protect and restore life on land, we need to stop deforestation and preserve biodiversity.

Trees benefit the environment:

Trees absorb carbon dioxide as they grow and the carbon that they store in their wood helps slow the rate of global warming. They reduce wind speeds and cool the air as they lose moisture and reflect heat upwards from their leaves. Trees also help prevent flooding and soil erosion, absorbing thousands of litres of storm water.

Trees boost wildlife:

Trees host complex microhabitats. When young, they offer habitation and food to amazing communities of birds, insects, lichen and fungi. When ancient, their trunks also provide the hollow cover needed by species such as bats, wood boring beetles, owls and woodpeckers. One mature oak can be home to as many as 500 different species.

Trees strengthen communities:

Trees are an important part of every community. Trees create a peaceful, visually pleasing environment. They increase our quality of life by bringing natural elements and wildlife habitats into our urban settings. Urban woodland can be used as an educational resource and to bring groups together for activities like walking and bird-watching. Trees are also invaluable for children to play in and discover their sense of adventure. Using trees in cities to deflect the sunlight reduces the heat island effect caused by pavement and commercial buildings.

Trees protect the future:

Soon, for the first time in history, the number of people with homes in cities will outstrip those living in the countryside. Parks and trees will become an even more vital component of urban life. We must respect them and protect them for the future. Did you know? One tree can filter up to 60 pounds of pollutants from the air each year.

ideas:

1. Carry out a tree survey in your community.

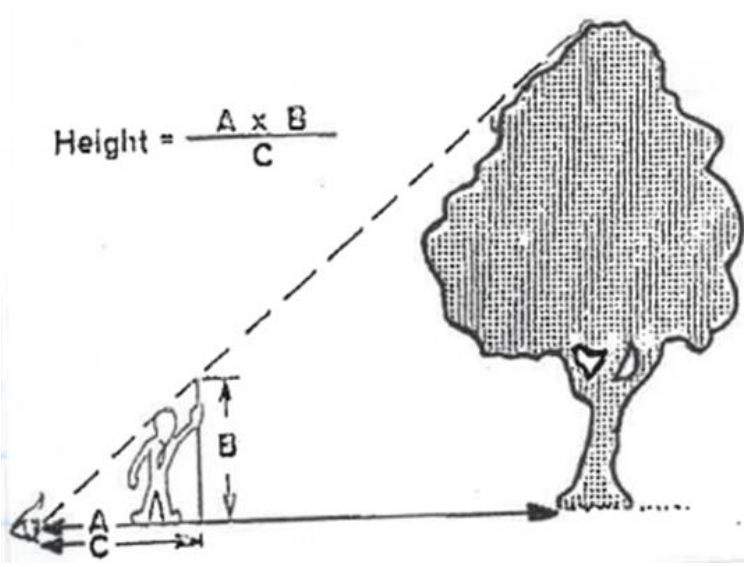
Find out what trees grow in your area; which is the most common? Pick a tree and find out all you can about it.

a) What is the name of your tree?
b) Is it deciduous (loses its leaves in winter) or evergreen (keeps its leaves throughout the winter)?
c) How tall is your tree?
d) How large is its girth (measurement around its trunk)?
e) What is the total span of its branches?
f) What shape does it branches form?
g) What shape are the leaves; are they damp or dry?
h) Is the bark rough or smooth?
i) Does it bear fruit/seeds/flowers?
j) Think about how the tree got where it is and how new trees might come to join it.
k) Think about what things your tree might need for its survival.
l) Are there any animals calling your tree 'home'?
m) Listen to find out if it makes any sound.
n) Smell to find out whether it has an odour. Do different parts of the tree smell different – the bark, leaves, etc.?
o) What kind of activities are going on in, under, and around your tree?

NB: Do not taste any part of the tree.

Have the Cubs record their findings – photographs, bark rubbings, leaf prints, etc.

Estimate the height of the tree:



Use a meter ruler or a garden cane and ask someone to hold it upright between the tree and yourself. With your eye as near to the ground as possible, line up the top of the tree.

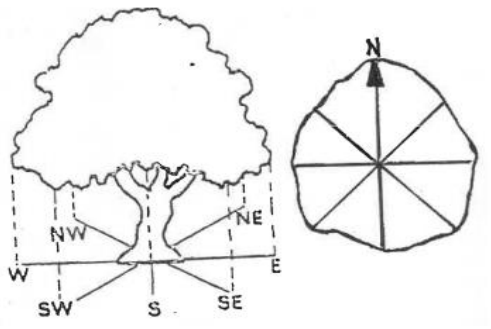
To work out the height fill in the measurements as follows:

Height = distance to the tree multiplied by the height of the cane; divided by the distance to the cane from your eye.

Estimate the spread of the tree:

You will need a compass and a piece of graph/squared paper to work out the spread of the tree.

Stand with your back to the tree facing north. Walk northwards until you are standing under the furthest branch of the tree.



Record the distance from the tree and repeat for all the other compass points.

When you have all the measurements you can draw a plan on the graph/squared paper of what the tree looks like from the air. Suggest you record the distance in paces.

Bark Rubbings:

The bark of each type of tree is different – some are smooth, some are flaky, some appear cracked and some are rough. Have the Cubs make as many different types as they can.

To make good rubbings you will need some strong, thin paper, adhesive tape and a wax crayon. Tape the paper to the tree and rub firmly in one direction without tearing the paper OR you can rub with candle wax and then paint over the paper. The bark pattern will stand out white on the paper.

Instead of taping the paper, one Cub could hold the paper while another covers the paper with firm strokes in one direction.

Spatter Prints:

Flatten the leaves and arrange them on a sheet of paper. Dip an old toothbrush into the paint and rub the bristles with a finger to splatter the paint over the paper to leave the leaf prints. Suggest you use poster paints.

Tear a Tree:

Provide each Six with a collection of old newspapers and some sticky tape. Tell the Cubs they have two minutes in which to make the biggest tree they can, or the tallest tree, or the prettiest tree. No scissors are allowed.

Leafy Kim:

Have a card divided up into squares, each square containing a leaf and its name. Cubs are to be given an identical piece of paper, divided into squares. After looking for a minute, the Cubs must draw the shape of the leaf and write down the name.

Yarn: Johnny Appleseed

Many years ago in America, there lived a boy called Johnny who loved all flowers, animals and trees. He used to climb apple trees, pick an apple and munch away until he came to the core. Then he would take out the little brown apple seeds and plant them.

When Johnny grew up he roamed about the countryside and everywhere he went he carried a big bag full of apple seeds, and showed children he met how to plant them.

Johnny made special friends with the Red Indians who often gave him food and shelter. Because he was always so happy and cheerful he was nicknamed Johnny Appleseed.

One winter's night whilst roaming around, Johnny became ill. He fell down in the snow and whilst he lay there a bear came along and sniffed at him, but because Johnny was a friend to animals, the bear did him no harm and wandered off and left him. His friends, the Red Indians, found the footprints of the bear and followed them.

The prints led them to Johnny their old friend. They took him back to their village and nursed him until he was well again. Johnny thanked his friends and once more set off on his travels planting apple seeds as he went.

Occasionally he returned to visit the Red Indians who had saved his life, and was always made welcome because people knew him as the man who had made their country rich with apple trees, where there had been nothing but brown earth.

Acknowledgements: Hotch Potch, volume 1

2. Make seed paper or bombs and plant them around an area that could be made more beautiful with flowers or plants.

Seed Paper:

Materials: shredded, unwaxed paper; food colouring (optional); flower seeds; blender; towels; cookie cutters; scissors

Directions:

1. Tear paper into pieces.
2. Soak it in a bowl of water for a few hours. Add food colouring at this point, if coloured seed paper is desired.
3. Strain, then puree the soaked paper in a blender, adding water as needed.
4. Add flower seeds and mix.
5. Spread out onto towels and flatten.
6. Let dry for 24-48 hours.
7. Use cookie cutters to make an outline.
8. Cut carefully with scissors.

Give them as gifts or just share them as a unique way to say hello or thank you to a friend.

Acknowledgement: mylittleme.com; americanlifestylemag.com

Seed Bombs:

A seed ball is a small object that packs seeds together with a growing medium for planting.

Materials: 4 sheets of shredded newspaper or junk mail; water; blender; bowl; seeds; moulds (optional)

Directions:

Tear or shred the paper; soak it in water. To make the pulp you will need a blender or food processor (old). Remove the pulp and try to remove a good part of the water by pressing or squeezing the pulp with your hands.

Discard the water or save it for another batch. With the pulp very damp, but not dripping water, transfer it to a bowl. Add ¼ cup of seeds to the entire pulpy mass, knead it all together like making bread dough. The seeds must be fully mixed into the paper pulp. Take small pieces of the mix and press them into moulds or form them with your hands into balls (or any other shapes). Gently remove the seed balls from your mould and let them dry for a few days. By adding a few drops of food colouring you can get seed balls of any colour.

Seed balls made with recycled paper work best when planted beneath a thin layer of potting soil.

Acknowledgement: gardenerscott.wordpress.com

3. Make a Rainforest terrarium:

Materials:

- Clean, plastic water bottle or soda bottle – 2 litre bottles work well
- Pebbles
- Activated carbon charcoal
- Small tropical plants, like a fern, palm or ivy
- Moss (Spanish or fresh)
- Potting soil
- Craft knife or pair of scissors
- Small animal (optional)

Directions:

About two thirds down the length of your bottle, cut the bottle into two parts with the craft knife or a pair of scissors. The bottom part will be the planter and the top part will be the cover of the terrarium (adult assistance is needed for this part). Add a layer of pebbles to the bottom of the planter. This is good for drainage. Sprinkle on a little of the activated carbon charcoal. This will filter the water and keep your terrarium from getting smelly. Add a barrier layer of moss.

Add the potting soil – enough so that it comes to just below the rim of your planter. If you are using a 2-litre bottle, plant the tiniest tropical plants you can find. Then add a few more patches of moss. If you are using a small bottle, it's best to skip the plant and use a little of the moss. Optional: find a small toy that would enjoy living in your terrarium; if you can find a rainforest animal, all the better. Lightly water your terrarium.

Cut a short slit down the back of the planter. Push the planter together where you cut the slit and place the cover on top. Put your terrarium in a spot where it will get indirect sunlight. A bedside table or on your desk are great spots.

There is no need to consistently water your rainforest. Moisture will form on the inside of the terrarium and on the plants. That moisture will drip down and water the soil. It's kind of like a rainforest.

https://ptaourchildren.org

4. Carry out a conservation project in your community:

ideas:

- Plant a wildlife garden, e.g. bee or butterfly-friendly flowers or an insect hotel in your community.
- Plant shrubs to provide cover for wildlife or to prevent soil erosion.
- Plant Spekboom trees to reduce our country's carbon emissions and fight climate change. (www.wonderplant.co.za). Read about a youngster who is planting spekboom plants against global warming: https://www.backabuddy.co.za/champion/project/chris-tiaan-coetzee
- Find out about an alien plant and why it is harmful to our environment and plant an indigenous tree/plant.
- Grow a sock!
- Remove alien vegetation.
- Provide extra food for the creatures that visit your garden – make a bird feeder or butterfly feeder.

Grow a Sock!

Collecting seeds and nuts is a natural activity. However, a collector often overlooks many seeds because they are small or hard to recognize. An entertaining way to collect some hard to find seeds is to take a sock walk. Previously unnoticed seeds will be easily collected and as a bonus, one method of seed dispersal will become very obvious.

Things You Can Use: Long socks with fuzzy outer surfaces to which seeds will stick (i.e. adult knee socks).

What to Do:

1. Dress each Cub in a pair of old knee high socks.
2. Go for a walk through a densely vegetated area.
3. Return to your meeting place and look at the socks! Then take them off.
4. Wet the entire sock, and place it in a cake pan placed on a slant. Fill the lower portion of the pan with water so that the sock remains wet.
5. Put the pan in a warm place and watch the seeds sprout.
6. Pull the seeds off the socks. Sort and place them into cups by species.
7. Allow them to dry. Divide each cup of seeds in half.
8. Place one half in a freezer for two weeks. This is to simulate winter. Some plants won't grow without freezing. Next, plant seeds from both halves in a "seedbed".

Take sock walks at different seasons. Which seeds are harder to remove? Do some hurt you? Can animals help seeds find new places to grow? Glue samples on cards to develop a seed collection. Repot sprouts and grow them to full size. What other ways does nature have of spreading seeds around (e.g. winged seeds-by-wind, berry seeds-by birds)? Plants with fur carried seeds need animals to make sure they are widely spread. Do you think the plants do something to help animals in return (provide food, shelter)?