CapeNature Cubs Club
Kids Conserving Nature

Cubs Club lesson plan
The Climate Countdown

Use this lesson plan to support your action projects for this term.

GROUPS



Date

August to October 2026

Duration

1 to 3 hours (depending on projects selected)

Support material from toolbox



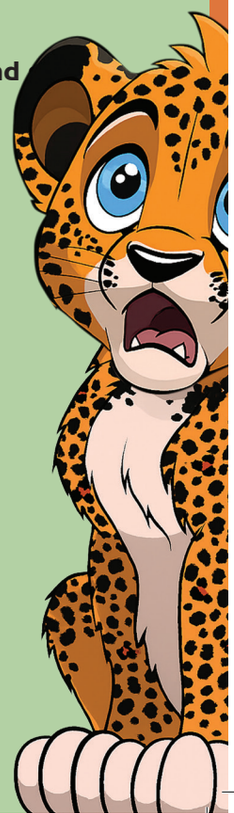
Climate Change Booklet



Newsletter name The Climate Countdown

Theme Climate Change

Key message We need to prevent and
down climate change.



Topics covered

Weather & Climate Change

- What weather is and what climate change is
- What causes climate change
- What can be done to decrease the speed of climate change

Curriculum links

Subject: Natural Science and Technology Grade 5
Strand: Energy & Change and Systems
Topic: Energy & Electricity

Subject: Natural Science and Technology Grade 7
Strand: Energy & Change
Topic: Sources of Energy

Subject: Natural Science and Technology Grade 9
Strand: Planet Earth and beyond (the atmosphere)

Outcomes

Know

- What climate change is and why it is important to prevent it (optional)
- Ways in which we can stop or lessen climate change
- Know at least one thing that can be done to prevent climate change

Do

- Actively do something to prevent climate change

Value

- Believe that it is our responsibility to help aid the prevention of climate change



LESSON PLAN

1. Introduction

INTRODUCTION TO THE DAY'S ACTIVITIES

- Introduce staff
- Outline of the day/what to expect
- Rules of engagement
- Safety brief if any
- Divide into groups (if applicable)

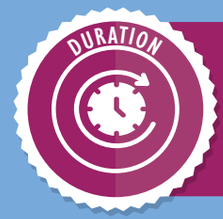
SETTING THE SCENE/TUNING-IN

You want to teach the group a little bit about what climate change is before completing your action project. Use the article in the newsletter as background information.

PART 1:
TUNING IN TO WEATHER AND CLIMATE CHANGE



OPTION 1: WHAT IS WEATHER & CLIMATE?



15 minutes



Climate Change Booklet



Subject: Natural Science and Technology

Grade 9/ Strand: Planet Earth and beyond (the atmosphere)

1. Ask learners to complete the weather vs climate activity.

2. Once they have filled it in. Explain that climate changes over a long time and weather over a short time.

3. Use the Natural vs Human enhanced image to ask kids to spot the difference (next page).

4. They should note that the difference is less heat escaping into the atmosphere. Explain that when we make things or drive cars, a gas called carbon dioxide is released into the air. When that layer gets too thick, the suns heat is blocked off from escaping and this makes the earth warner. It is known as the Greenhouse Effect. With a warmer earth, climate changes and this causes things like more floods, more drought, worse storms.

WHAT'S THE DIFFERENCE BETWEEN WEATHER AND CLIMATE?

Weather?

Answer: Typical weather over a **SHORT** period of



Climate?

Answer: Typical weather over a **LOOONG** period of

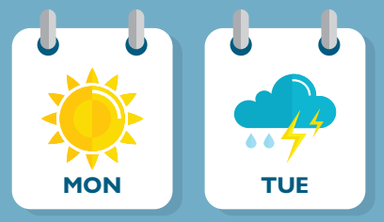


Write down which words belong to weather and which belong to climate.

1. *Dry*
2. *Cloudiness*
3. *Hot*
4. *Precipitation*
5. *Cold*
6. *Temperature*
8. *Wet*
7. *Pressure*
9. *Wind*

Weather?

(what you get?)



VS

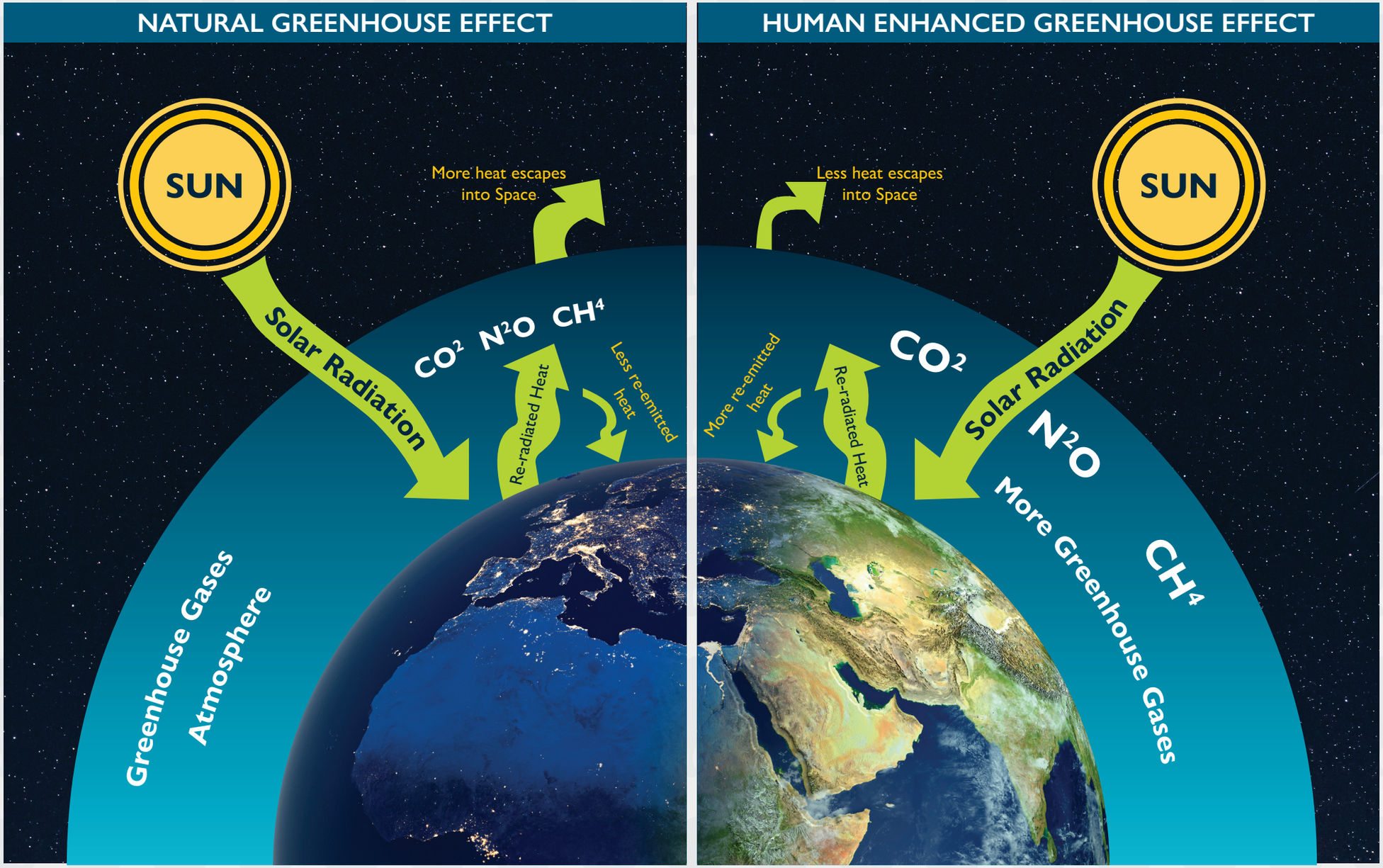
Climate?

(what you expect)



Solutions on page 09

SPOT THE DIFFERENCE



EFFECTS OF CLIMATE CHANGE *(see activity book)*

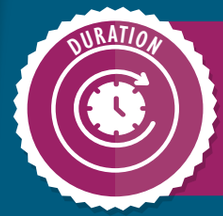
1. Changing rain and snow patterns
2. Changes in animal migration and life cycles
3. Stronger storms
4. Higher temperatures and more heat waves
5. More droughts and wildfires
6. Less snow and ice
7. Damaged corals
8. Rising sea levels
9. Warmer oceans
10. Changes in plant life cycles

Solutions on page 09

PART 2:
TUNING IN TO THINGS THAT CAUSE CLIMATE CHANGE



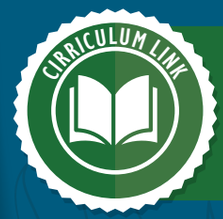
INTRODUCING THE CAUSES OF CLIMATE CHANGE



15 minutes



You will need copies of the NASA Climate Change activity in the Climate Change Booklet



Subject: Natural Science and Technology

Grade 9/ Strand: Planet Earth and beyond (the atmosphere)

Ask learners to spot items on the left page that may cause Climate Change. Then ask them to look for the items on the right page in the pic on the left (must circle). These are things we can do to help Climate Change. Discuss one or two in depth with the learners.

Examples:

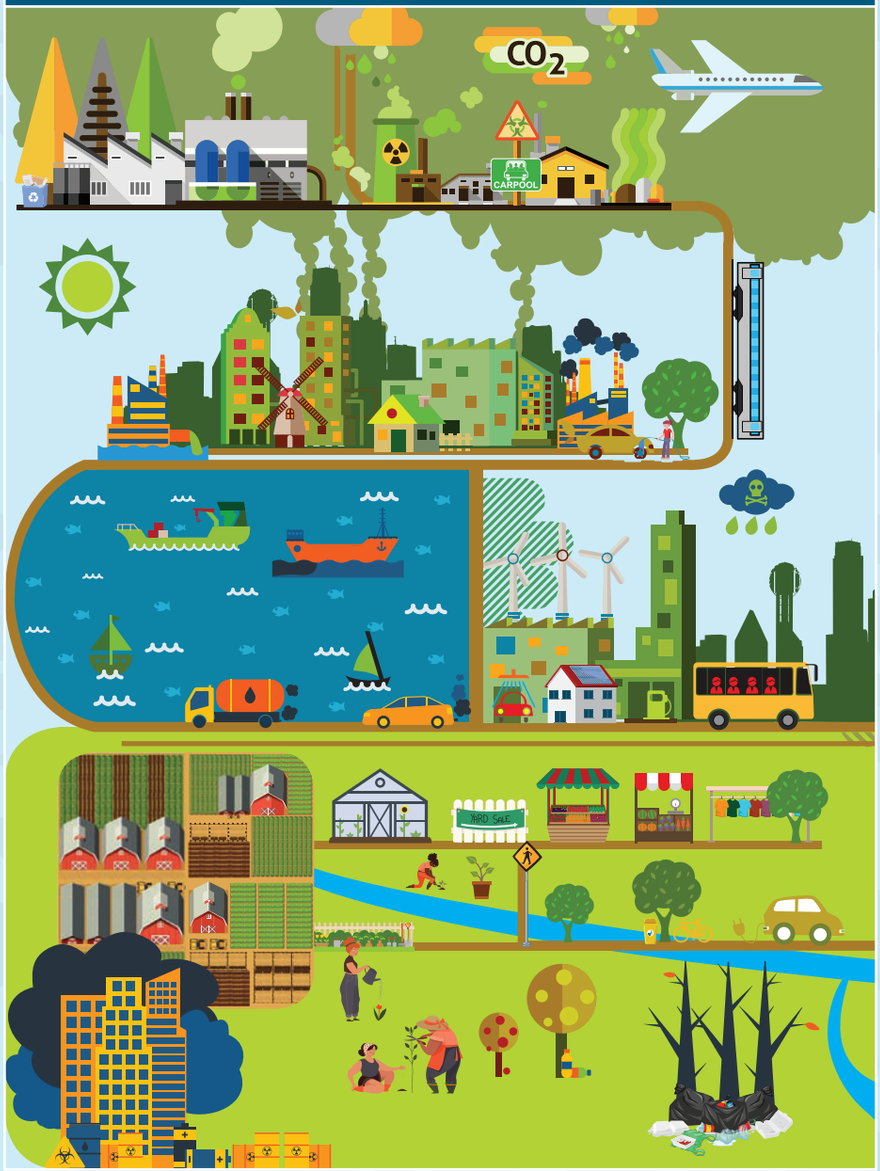
- **Windmill** – uses wind and not electricity. To get electricity we burn coal and carbon is released into the air.
- **Garden** – plants absorb carbon dioxide.
- **Carpool** – by carpooling we use only one vehicle and therefore less pollution from exhaust fumes enter the air (bad gasses, including carbon dioxide).

OLDER OR YOUNGER CHILDREN

Have older children write down the answers on a card or paper. Younger children, simplify and use the images – you can even let them draw a concept vs explain or find it e.g draw people on a bus, because if we use less cars, the air will not get as dirty. Or COUNT the number of things that we can do to prevent climate change – they must find and count the images.



WHAT CAUSES CLIMATE CHANGE?



ACTION THAT PREVENT CLIMATE CHANGE

Can you spot the good actions on the right in the picture on the left?

Pedestrian	Sailing boat	Raking leaves	Bus	Solar power
Field of crops	Diesel pump	River	Car wash	
Picking up trash	Garden	Nursery	Carpool lane	
Farmer's market	Plant Nursery	Bicycle	Recycling bins	
Windmill	Yard sale	Thrift store	Bike lane	
Train	Farm Stand	Wind Power	Cyclist	

Various images taken from NASA Climate Kids: Climate Change Bingo.

SOLUTIONS

Weather?

Wind
Cloudiness
Pressure
Temperature
Precipitation

Climate?

Hot
Cold
Wet
Dry

@ page 05



@ page 07



@ page 08

3. Action Projects

Ensure to consult your newsletter for point allocations for each activity. Any number of activities below may be completed and is entirely optional. The more projects that are completed, the more points your group will earn.

ACTIVITY

OPTION 1
SWITCH OFF SQUAD

DURATION

1 hour to 2 hours (depending on complexity)

RESOURCES

You will need a place to make your energy saving signs as well as materials to do this. Consider cardboard and kokis or paper that is laminated. Don't forget prestick or something to stick it up with.

POINTS

Your group will earn 200 points for the energy audit and 25 points for every save electricity sign.

EVIDENCE

Send us a picture of your audit and signs.

CURRICULUM LINK

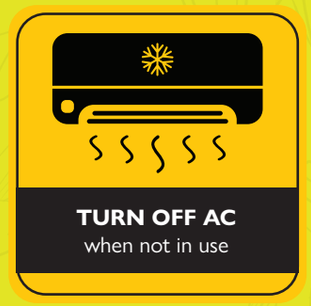
Natural Sciences and Electricity/ Energy & Change and Systems /
Topic: Energy & Electricity/ Grade 5 /

Kids work in teams to audit classrooms, homes or club spaces, creating signs and reminders to switch off lights, plugs and electronics.

Why it helps climate change: Using less electricity reduces greenhouse gas emissions from power generation. Small daily habits, multiplied across many homes, make a real impact.

Step 1: Audit your classroom, home or school in terms of the electricity that is used
Step 2: Decide what actions can be taken to save electricity at the school , classroom or home
Step 3: Design signs that remind the user to be responsible
Step 4: Put the signs up



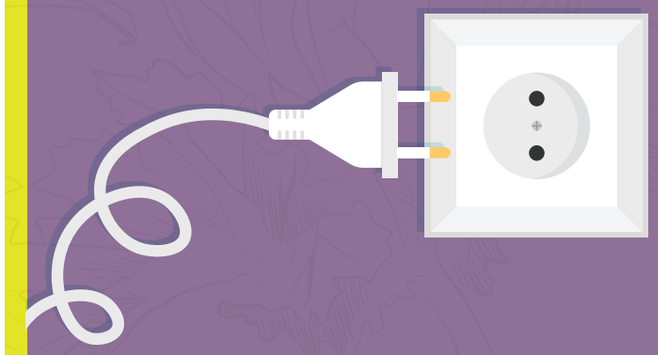




ENERGY AUDIT EXAMPLE

Go around your house and look at some of the ways you use energy. Use the chart below to tally how many of each item you find.

Example:  Computers and TVs	𝍸 III
 Lightbulbs	
 Computers and TVs	
 Large appliances	



Include how often you switch these on and off



Groups track and celebrate days when they walk, cycle or lift with one another (where safe and possible).

Why it helps climate change: Transport is a major source of emissions. Fewer car trips mean less carbon dioxide in the air — plus healthier kids. Come up with a conscious plan on how the group can improve the way they get to school or group meetings. Draw up a before and after tracker and track for at least two weeks.

ACTIVITY

OPTION 3
BEACH, RIVER OR PARK CLEAN-UP

DURATION

1 hr to 2 hrs

RESOURCES

Gloves and trash bags (check in with Learning & Awareness at CapeNature, we can spot you these tools).

POINTS

Earn your group 200 points for completing a clean-up.

EVIDENCE

Submit a picture of the bags you have collected.

Get your group together to collect litter at a local beach, riverbank, park or green space. Why it helps Climate Change: Less plastic waste means less plastic breaking down into microplastics and fewer emissions from clean-up and landfill processing. It also protects ecosystems that absorb carbon, like coastal plants and wetlands.



ACTIVITY

OPTION 4
FOOD WASTE FIGHTERS

DURATION

1 hr to 2 hrs

RESOURCES

Bin to collect food waste or food audit sheet.

POINTS

Earn your group 100 points for completing a food waste audit or 200 points for donating compostable material to a compost heap.

EVIDENCE

Submit a picture of the scraps you have composted or the audit.

Kids collect food scraps for composting or do a simple food-waste audit to see how much gets thrown away. Decide what you can do differently to prevent so much waste from entering the system or how and where you can contribute to food waste being used. **Why it helps climate change:** Food waste in landfills produces methane — a powerful greenhouse gas. Composting turns waste into soil instead of emissions.

HOME FOOD WASTE AUDIT

Week # _____worksheet

Investigating Your Kitchen
This week, pay attention to the food that is wasted every time you eat. Fill out the chart below by noting any foods that are thrown away, the quantity and reason it was uneaten, estimated monetary value, and if the waste was composted (or donated, etc).

NOTES: _____

	Food(s) Thrown Out	How Much? (1/2 cup, cup, etc)	Reason for Tossing	Estimated Value (R)	Composted? (Yes/No/ Other)
M					
T					
W					
T					
F					
S					
S					

For younger children, use images and simple language to help.

How to make compost



01

Choose a place

Ideal compost area is any shady spot near a water source with dimensions of 3x3x3 feet.



02

Add the ingredients

The ingredients are those rich carbon (brown materials) and those rich in nitrogen (green materials). Make sure large materials are chopped or shredded.



03

Add water as needed

Make sure the pile stays moist, but not too wet (it should feel like a damp sponge).



04

Keep things moving

Turn your compost mixture to ass air to the mix. This helps speed up the composting process.



05

Wait a while

When the compost no longer gives off heat and becomes dry, brown and crumbly, it's fully cooked and ready to be fed to the garden.



4. Consolidation

ACTIVITY

CONSOLIDATION OF CLIMATE CHANGE ACTIVITY

DURATION

15 minutes

RESOURCES

Paper and pen if drawing superpower, otherwise none.

Ask kids to imagine that they have unlocked a real Climate Change superpower by completing their action project. Each child must invent one power for themselves – energy saver, cleaner upper, tree protector, plastic spotter as some examples. They can each draw it or simply say if out loud one by one (My superpower is…). Once everyone has said or drawn their power, ask them to try and make this power become real by remembering to use it in future.





Notes



CapeNature

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