
Climate Change

7 Lessons for 3rd and 4th Class (9-10 year olds)

Curriculum Links

S.E.S.E. Geography

Aims:

- To enable the child to play responsible roles as an individual, a family member and a member of local, regional, national, European and global communities
- To foster an understanding of, and concern for, the total interdependence of all humans, all living things and the Earth on which they live
- To foster a sense of responsibility for the long-term care of the environment and a commitment to promote the sustainable use of the Earth's resources through his/her personal lifestyle and participation in collective environmental decision-making

Strand: Environmental Awareness and Care:

Environmental Awareness
Caring for the Environment

Educate Together Curriculum

Aim: - To develop an ethical and reasoned approach to caring for the environment

Strand: Ethics and the Environment:

Knowledge and Awareness of Environmental Issues

Understand the impact of the actions of people on the environment through the generations.

Explore how we can enhance our environment for future generations through energy conservation, tree planting, preservation of habitats

Activation of Responsibility and Stewardship: Discover ways to move towards an environmentally friendly lifestyle such as turning off lights, reducing the amount of water used, recycling paper in the classroom and home.

These lessons were developed in a collaboration between Educate Together and Plan Ireland. The project was funded by Western Union.



Subject: Climate Change

Age Range: 3rd and 4th Class (9-10 year olds)

Lesson Series:

1

2

3

4

5

6

7

Location: Classroom

Time: 45 minutes

Equipment Required: Projector with Internet access [WMnet Colin CO2](#), Irish flood video [Worksheet 1 Vocab Matching Exercise](#), [Extreme Weather Flashcards](#)

Objective: To introduce the concept of climate change, using examples both nationally and internationally.

Introduction: (10 mins) Introduce topic of next 7 lessons: Climate Change. Ask children whether they have heard of it and brainstorm or discuss what it means to them. A KWL / Living Chart can be introduced at this point.

Activity 1: (15 mins) Open internet explorer and go to [WMnet Colin CO2](#). Explain that CO2 is the way that scientists refer to the smoke that comes from cars, airplanes, power stations - and that is also the air that humans breath out and trees breath in.

Go through the online story of Colin CO2 which explains climate change in an understandable way, appropriate for 9-10 year olds. Make sure children grasp the link between CO2 (and other Green House Gases - GHGs) with climate change.

Activity 2: (15 mins) [Irish Flood video](#) – *Six O'Clock or Nine O'Clock news report can be used. Double click on **Play Clip** button to avoid advertisement which precedes report and which may not be suitable for classroom viewing*

Write questions on the board before the video (for comprehension of video):

- What is the name of the town? (Clonmel)
- What is the first name of the Civil Defence volunteer? (Ronan)
- Do we see a man or a woman being evacuated from their home? (Woman)
- What can you see under water? (Cars, homes etc)

NB. If difficulties with broadband speed or access are anticipated, this video can be downloaded from the RTE website and put on a memory stick.

Children to understand that climate change is a global issue (via the colin CO2 story) and that it will have effects in Ireland as well as overseas.

Discussion if children have heard of any extreme weather around the world? Australian Fires, Landslides, Droughts. Hold up or display [Extreme Weather flashcards](#) to help.

Conclusion: (5 mins) [Worksheet 1 Vocab Matching Exercise](#). Ask children to link images to vocabulary. One copy can be printed off, laminated and used for clarification throughout unit.

Subject: Climate Change
Age Range: 3rd and 4th Class (9-10 year olds)

Lesson Series:	1	2	3	4	5	6	7
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Location: Classroom
Time: 30 minutes

Equipment Required: Printouts:
Worksheet 2 World Map,
Worksheet 3 Flags Matching Exercise,

Objective: To locate climate change in an international context.

Introduction: (10 mins) Quick review or KWL / Living Chart of previous lesson. Project or display Worksheet 2 World Map with 6 countries on the board (Ireland, Kenya, Bangladesh, Philippines, Haiti, Sierra Leone) Ask children if they know any people or anything about these countries.

Activity 1: (15 mins) Worksheet 3 Flags Matching Exercise. In pairs, ask children to match the flags to the countries displayed on on the board (ask children to use paper / their exercise books to avoid printing off extra copies) - Use class atlases to help if necessary.

OR, Allocate each country a corner of the room - ask children to move to the corner that they think the flags match. Answers as follows:

IRELAND SIERRA LEONE KENYA HAITI PHILIPPINES BANGLADESH



Conclusion: (5 mins) Climate Change is happening all over the world. What kind of change do you think is happening in these countries?

Subject: Climate Change

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Lesson Series:

1	2	3	4	5	6	7
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Location: Classroom
Time: 30 minutes

Equipment Required: Printouts:
Worksheet 4 - Testimonies, Atlases

Objective: To engender empathy towards those adversely affected by climate change.

Introduction: (5 mins) Quick review or KWL / Living Chart of previous lesson. Ask class if they can remember countries and location of countries from previous lesson.

Activity 1: (10 mins) Hand out 1 testimony (Worksheet 4 - testimonies) from each country to each pair / group. (There are 6 testimonies. The testimony from Kenya is suitable for differentiated readers). Ask the children to read the young people's testimonies about the effects of climate change.

Activity 2: (10 mins) Ask each pair / group to feedback orally to the rest of the class: Who is the person in the story? Where are they from? What are the problems in their community? (This activity can be a written exercise)

Conclusion: (5 mins) Class discussion. The environmental changes can be linked to climate change (Colin CO2 story). Climate change happens because we all use too much CO2 and other green house gases. (GHGs)

Subject: Climate Change

Age Range: 3rd and 4th Class (9-10 year olds)

Lesson Series:

1	2	3	4	5	6	7
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Location: Classroom
Time: 30 minutes

Equipment Required: Projector with Internet access to WMNet [Eco home](#), or, [Ecohome Worksheet](#) or [SE1 Energy Game](#)

Objective: To analyse own use of CO₂

Introduction: (5 mins) Quick review or KWL / Living Chart of previous lesson

Tell class "Today we are going to talk about our environment in Ireland, and the amount of CO₂ we produce"

Class Question: "Does anyone know how we produce CO₂?"

Answer on board - "BY USING ENERGY" mind map if necessary (petrol for cars, electricity, for houses, food for people)

Activity 1: (5 mins) Class energy survey. Make a note of everything that uses energy in our classroom.

Activity 2: (5 mins) Write down or discuss as many ways as you can think of to reduce the energy we use in our classroom and school.
Ideas: Turn computer monitor off, close the window and turn the heat down, turn some of the lights off, school buses turn off engines while waiting, turn off photocopier etc.

Activity 3: (10 mins) **A. [SE1 Energy Game](#) OR B. [Eco home](#) activity.**

A. [SE1 Energy Game](#). Follow on-line instructions to encourage the children to make decisions in each room in order to save energy.

OR, if the school does not have access to projector or interactive whiteboard, design an Eco-house (think about solar panels, energy saving bulbs, heating system, transport)

OR, Table quiz / 'what if' exercise of written scenarios of Eco Home activity

B. [Eco home](#) Open website on the projector / interactive whiteboard or computer monitor.

Select 'Key Stage 2' option.

Encourage the children to make decisions in each room of the eco home in order to save energy. Calculate the total saving when they are finished by pressing the calculate button. *Please note the currency is Sterling rather than Euro.* Reinforce the learning point that saving energy is easy. The [Ecohome Worksheet](#) is available for schools without access to internet / computers available for students.

Conclusion: (5 mins) Class finishes sentence:

"We can save energy by....."

OR

"We can reduce our contribution to global warming by....."

Subject: Climate Change

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Lesson Series:

1	2	3	4	5	6	7
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Location: Classroom
Time: 30 minutes

Equipment Required: Flash Cards , 1 packet of chocolate buttons

Objective: To introduce concept of per capita with regard to energy consumption.

Introduction: (5 mins) Quick review or KWL / Living Chart of previous lesson. How do we save energy in our homes and schools in Ireland?

Activity 1: (20 mins) For this activity, our energy consumption is represented by counters or chocolate buttons. Divide class into 6 equal groups - send them to different parts of room. Each group represents one of the 6 countries, previously analysed. (Group holds up sign with 'Haiti', 'Bangladesh' etc.)

Distribute the counters or chocolate buttons:

Country	Counters	Chocolate Buttons
Ireland :	80	10 buttons
Philippines :	8	1 button
Haiti :	2	Quarter of a button
Bangladesh :	2	Quarter of a button
Kenya :	2	Quarter of a button
Sierra Leone :	1	Crumb

Group discussion: Is it fair? Ask students to use flash cards if required (fair / unfair).

Conclusion: (5 mins) What have we learnt today?

Subject: Climate Change

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Lesson Series:

1	2	3	4	5	6	7
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Location: Classroom

Time: 30 minutes

Equipment Required: Population Sheet, Worksheet 5 Pie chart of CO2 per capita, Worksheet 3 Flags Matching Exercise, Worksheet 2 World Map, Flash Cards

Objective: To reinforce concept of per capita with regard to energy consumption

Introduction: (5 mins) Quick review or KWL / Living Chart of previous lesson

Activity 1: (10 mins) Ask class question: 'Do all countries use the same amount of CO2?

Are we all equally to blame for the world warming up?

Use Population Sheet to illustrate concept of per capita (*total emission divided by the number of people in each country*). Use Worksheet 3 Flags Matching Exercise and World Map if children need to recap where each country is.

Show Worksheet 5 Pie chart of CO2 per capita

Brainstorm or discuss: Which country uses most per person? Is this fair?

Activity 2 / Conclusion: (10 mins) Conscience alley: Split class - Yes side of room, No side of room. Students / teacher walk down alley (between 2 groups). Each member of each side gives one argument. Use flash cards if required (fair / unfair)

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Location: Classroom

Time: 40 minutes

Equipment Required: Worksheet 6 - Poster ideas.
Paper, colouring pens or pencils

Objective: To express in positive way what children have learnt from previous lessons

Introduction: (5 mins) Review or KWL / Living Chart of previous lessons

Activity 1: (10 mins) Extra electrical items could be brought into class
Children close their eyes. One child goes around class finding ways to waste energy, (turns on lights, cd players, taps, opens windows etc.)

Children open eyes. One child chosen to rectify situation. Process repeated.

Activity 2: (25 mins) Design a poster to show people why we need to save energy and the simple things every one can do to reduce their impact on the environment. The slogan has to be positive – think about what children in Ireland can do to make a difference. It should encourage action!

Either:

1. Poster and slogan to show the global nature of climate change OR
2. Poster and slogan to show the need for local action in reducing energy consumption in your life

Examples: Worksheet 6 - Poster Ideas

Conclusion: Continue finishing the posters into English or Art lesson - Once finished, display posters in front of class and ask the children to explain what is in their poster.

Display the posters in a prominent area of the school so other children can see the messages. Stress the importance of making the changes that they are advocating – CHILDREN CAN MAKE A DIFFERENCE!

WORKSHEET 1

Vocabulary matching exercise

- Weather
- Growing Up
- Carbon Dioxide (colin CO2)
- Energy
- Pollution
- Earth
- Greenhouse
- Waste
- Climate



Colin





WORKSHEET 2 Countries Involved



WORKSHEET 3

Flags matching exercise

Match each flag with a country from the following list:

Philippines, Sierra Leone, Ireland, Haiti, Bangladesh, Kenya

1.



2.



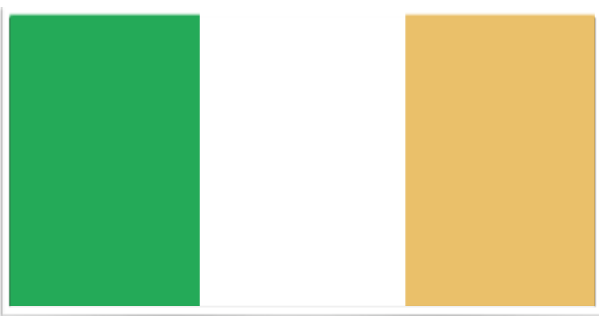
3.



4.



5.



6.



WORKSHEET 4

Flooding in Bangladesh

Girl from Bangladesh

Name: Rupali Akter

Age: 14



Tell us a little about where you live

Our village is beside the bank of the river and its soil is made up of clay and sand. And in the floods the sand and clay get everywhere.

There are 400 people in my part of the village. When there are floods, no-one can use the road and the phones don't work.

How has your community been affected by changes in the climate?

The rain doesn't come in time. The older people say that long ago there were loads of different fish in the river and that you could eat different kinds of fish for days and days but not anymore. And there isn't enough fish for all the fishermen so a lot of them are trying to find new jobs.

Are there any other effects of changes in the climate?

We eat a lot of rice but now the rice plants are being attacked by something called foot rot disease and the plants are dying.

And what about you, how does climate change affect you?

Last time we had floods, my father was sick. He had diarrhoea, which means you have to go to the toilet a lot. But the toilets are all outside and they were very dangerous because of the insects and the snakes. Last year, a boy in my school, called Faruk, was bitten by a snake and died. And when the floods come we don't have enough clean water for drinking. And the floods can wash a house away. The water can actually pick it up and move it. In a way the water just eats it up.

Can you tell us about anything that has been done to try to slow down climate change?

There's very little we can do. We really depend on the river for everything.

Girl from Haiti

Name: Tiena Paul

Age: 12

Tell us a little about where you live

I live in Port-au-Prince, Haiti. The sea is not very far away and there is a river that passes by my house. There are not many trees because people cut them down to use as fuel wood. Most people here work in agriculture or fishing.

Has your community been affected by changes in the climate?

This year there have been 4 cyclones in the space of 1 month. It is the first time in my life that I have seen this. It was very frightening. The river was over the bridge and flooded much of the city. After the hurricane hit we had no water in the taps for weeks. We had to buy drinking water because all the water sources were dirty. This year I noticed that the mango season was shorter, and there were fewer mangoes.

Are there any other effects of changes in the climate?

The cyclones caused a lot of damage in my area. People have died trying to cross the river. Many people have lost their gardens and animals. Many houses were flooded and there are also houses that have been destroyed.

And what about you, how does climate change affect you?

I do not know exactly why we have so many problems but I think people who live in the hills and cut trees all the time are partly responsible. There are not enough trees to retain soil and water, so when it rains the earth and the river meet. If we continue to cut trees without planting others to replace them, I fear that my area will become a desert. Then the land cannot produce food, there won't be enough food for everyone and perhaps no water source. I fear for my future and that of other children.

Can you tell us about anything that has been done to try to slow down climate change?

I would like to plant more trees in the hills and educate communities to stop cutting them down.



Vocabulary

cyclones: powerful tropical storms
mango: type of fruit

Boy from Ireland

Name: Haro Ginzales

Age: 10



Tell us a little about where you live

I live in Clonmel, which is a really cool town. There are loads of things to do. I love painting and drama. And I'm really keen on swimming. I have a little sister called Narata. We live beside the River Suir and when the weather's nice Narata and I might go for a walk with our Mam and look at the ducks and the swans. Those birds, they always look like they're in no particular hurry but then they fly off somewhere or they go to their nest or they start quacking or honking at each other

Has your community been affected by changes in the climate?

The river floods an awful lot. If we get storms, the river starts to grow. It actually gets bigger and bigger and the ducks and swans seem to know something funny is happening and they disappear. And then the water starts sloshing over the edges.

Are there any other effects of changes in the climate?

A load of times now, the river sloshed out onto the road and cars got stuck in the water - actually stuck in the water. People had to get out and leave their cars and much later somebody would come and collect them.

And what about you, how does climate change affect you?

The worst was last year. The water reached our house. It came in under the door and went everywhere. If you stood in our hall the water came up almost to your knee. We had to leave really quickly and Mam said we could only bring one toy with us. I took my painting book and Narata took her teddy. But when we got back and the water was gone the house was so smelly. It was smelly for ages.

Can you tell us about anything that has been done to try to slow down climate change?

The local council is doing a big job to stop this happening again. They're digging holes all over the place but I heard a grown-up say that there's no money left so they might have to stop all the digging.

Girl from Kenya

Name: Sharon Atieno Okoth

Age: 15

Tell us a little about where you live

A lot of people live in my area. We're very far from our nearest place to get water.

Has your community been affected by changes in the climate?

Some of the crops in the fields die and some of the animals as well. When the animals die, we don't have enough food.

And a lot of rain falls during the rainy seasons and sometimes people die because of the flooding.

Are there any other effects of changes in the climate?

We had to move because of the floods and I couldn't go to school.

When the dry season lasts too long, we don't have enough food and some children die because they don't have enough to eat.

And what about you, how does climate change affect you?

People die because there isn't enough food during the dry season. And people get sick as well.

When we don't get enough rain, water becomes a big problem. There's not enough water for us or our cattle.

Can you tell us about anything that has been done to try to slow down climate change?

People have planted more trees. Now we have a rule that if you cut down one tree, you have to plant two more. I've also helped to clean our neighbourhood. People don't get sick so much when things are nice and clean.



WORKSHEET 4

Environmental Change in Philippines

Girl from Philippines

Name: Jophet Jen B. Rojo

Age: 15



Tell us a little about where you live

Our community is peaceful. We have many trees because children help plant them. Generally people are happy in our community. Most people work on farms or they fish.

How has your community been affected by changes in the climate?

It's much hotter now and everyone feels it. Children get sick because of the heat and then they can't go to school. Parents can get sick as well because of the heat, and then they can't work and make money and the whole family becomes poorer.

Are there any other effects of changes in the climate?

In the past it was really fun because children could play outside even during the hottest part of the day and after playtime we would go to the mountains where the air is cool and fresh. But now, children almost never play in the hot afternoons. Because it's so hot some of the crops in the fields die and then the farmers don't make so much money and they become poorer and the children in those families can't buy cool things and sometimes they even have to work instead of going to school to make money.

And what about you, how does climate change affect you?

Climate change may destroy all my dreams. I had loads of plans before about what I'd do when I grew up but now I'm not sure I'll be able to do all those things.

Can you tell us about anything that has been done to try to slow down climate change?

Our school planted some trees and we've cleaned up some of the beaches and places beside the sea.



WORKSHEET 4 Flooding in Sierra Leone

Girl from Sierra Leone

Name: Kimi agrim Karogbo

Age: 14



Tell us a little about where you live

I live in the city beside a river. The river has a waterfall and we use the water for cooking and cleaning clothes. Most people live in small houses made of blocks and there are also some shacks, which are much poorer houses, with corrugated iron on the roofs.

How has your community been affected by changes in the climate?

During the rainy season a lot of flooding happens. Some of the houses get washed away. They fall down and the water takes them away, especially the shacks.

Are there any other effects of changes in the climate

During the heavy rains my parents can't work. My Dad has to take his holidays at this time and my Mam, who sells second hand clothes, has to stop working. During harmattan season, when dry winds come from the Sahara desert, a lot of people have coughs.

And what about you, how does climate change affect you?

When my parents aren't working we have no money at all. The harmattan season is much longer now and we're afraid that the river will run dry and then there'll be no water for the neighbourhood.

Can you tell us about anything that has been done to try to slow down climate change?

We haven't taken any steps yet but we'd like to. I think we should stop cutting down trees because trees stop the flooding getting worse. They're tied into the ground and they stop the soil moving with the water.



Please use this worksheet if you cannot access the WMnt Eco2 Home (Key stage 2) on the Internet

Lounge / Sitting Room

Gas Fire

It's very hot in here!

Turn down the fire to a suitable setting.

Options: high; medium; low; off

(It's great to sit in front of a gas fire when it's cold - but it can use a lot of gas. The gas fire can be good to warm up a sitting room in Spring and Autumn when the central heating is turned off)

Windows

This house is always cold! What do you want to do?

Keep the old windows

Double glaze half the windows

Double glaze all the windows

(Double glazing stops a lot of energy escaping through the window and prevents draughts. But it is expensive! In the Summer, double glazing can help to stop the house getting too hot)

Curtains

Close all windows

Close some windows

Leave all windows open

(Closing the curtains at night helps to keep the warmth in and draughts out. Winter nights are long and cold. Keep the curtains closed)

Home Entertainment

You have a lot of items on standby TV/Video/DVD player/Sound System.

What do you want to do?

Leave everything on standby

Turn off the power to all the items at the wall socket

(Electrical items left on standby can use a lot of energy as they are partly turned on all day and night)

Kitchen

Fridge

Set the fridge temperature

Options: 4; 8, 12, off



(Fridges and freezers need to be set to the correct temperature to store food safely. A fridge should be set between 2 and 4 degrees.)

Washing Machine

You have about $\frac{3}{4}$ of a full load of washing. What do you want to do?

Wait until you have a full load

Do half a load

Do a wash with $\frac{3}{4}$ load

(A washing machine uses less energy on low temperature settings. Note: a full load will not cost twice as much as half a load!)

Tumble Drier

You have only a few items to dry, how will you dry them?

Use the tumble dryer

No thanks, I'll use the washing line

(Tumble driers use a lot of energy. If possible, use the washing line. Even on a cold Winter's day washing will dry outside if it's sunny, breezy and dry.)

Cooker Oven / Microwave

You want to cook two baked potatoes. What would you like to do?

Cook them in the main oven

Cook them in the microwave

(An oven is a good way of cooking a meal as long as the oven is full! You would save a lot of energy by cooking just one or two items in the microwave.)

Dishwasher

The dishwasher is full and ready to go. Select washing setting

Options: super hot, normal, economy, off

(Some people believe that a modern dishwasher uses less energy than hand washing the dishes. Do you need to use the hottest setting?)

Central heating / Hot water boiler

The boiler is very hot and costs a lot of money to run for heating.

Options: Have the old boiler serviced

Replace the old boiler with a modern one

(The boiler heats up the water that goes to your radiators. It also heats the water that comes out of the hot taps. A new boiler will use less energy and only heats up the water you use so you don't need a hot water tank)



Bedroom 1

Air conditioning

What do you want to do?

Options: Keep windows closed in daytime on a hot day to keep hot air out

Fit air conditioning units

(An air conditioning unit uses a lot of energy to cool down the air in the house. It takes warm air in and blows out cold air. In Ireland there really is no need to cool our homes. Wear cool clothes, keep doors closed on a hot day. Keep windows closed at night.)

Home Entertainment

You have a lot of items on standby TV/Video/DVD player/Sound System.

What do you want to do?

Options: Leave everything on standby

Turn off the power to all the items at the wall socket

(Electrical items left on standby can use a lot of energy as they are partly turned on all day and night)

Landing

Lighting

There are 20 standard bulbs in the e-CO2 home. How many would you like to change for low energy bulbs?

(An efficient low energy bulb uses much less energy and lasts much longer than a 'standard' light bulb, but it costs more to buy. In the Winter the nights are long and the days are short so you will have the light on for longer.)

Thermostat

The house is too hot. Set the thermostat to a comfortable level.

Options: 28, 24, 26, 22, 20, 18, 16

(A thermostat keeps the house at a standard temperature. 18 to 20 degrees should be warm enough. In the Winter why not add an extra layer of clothes instead of turning up the thermostat.)

Bathroom

Hot Water Tank

The hot water in the tank goes cold quickly and sometimes comes out of the taps cold. What do you want to do?

Add a thin jacket



Plan

ECO HOME

Offline exercise

[Add a thick jacket](#)

[Don't add a jacket](#)

(A hot water tank insulating jacket stops the hot water in the tank from going cold.)

Bath

What would you like to do?

[Have a bath](#)

[Have a shower](#)

(A bath uses a lot more hot water than a shower.)

Attic

Loft Insulation

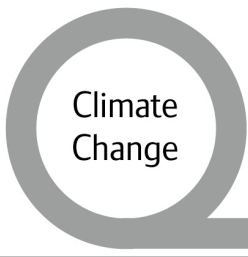
This house is always cold and it costs a lot of money to heat the house. What do you want to do?

[Add a thin insulation layer](#)

[Add a medium insulation layer](#)

[Add a thick insulation layer](#)

(Loft insulation keeps the heat inside your house and stops it escaping through the roof. In the Summer the roof space gets really hot. Loft insulation helps to keep the house cool!)

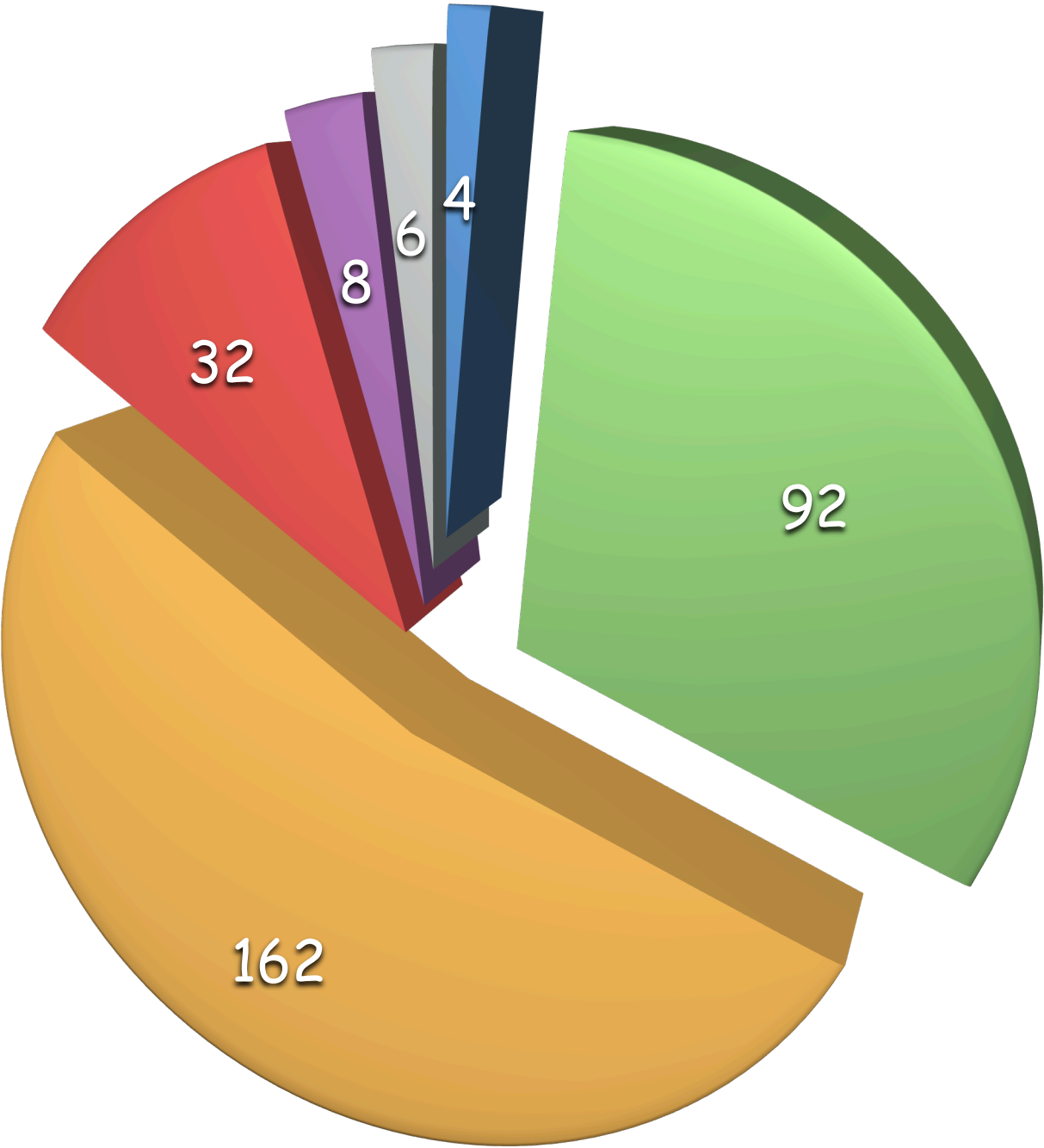


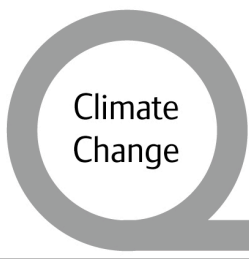
POPULATIONS

Number of people in each country

Population (measured in millions of people)

- Ireland:
- Philippines:
- Bangladesh:
- Kenya:
- Haiti
- Sierra Leone:

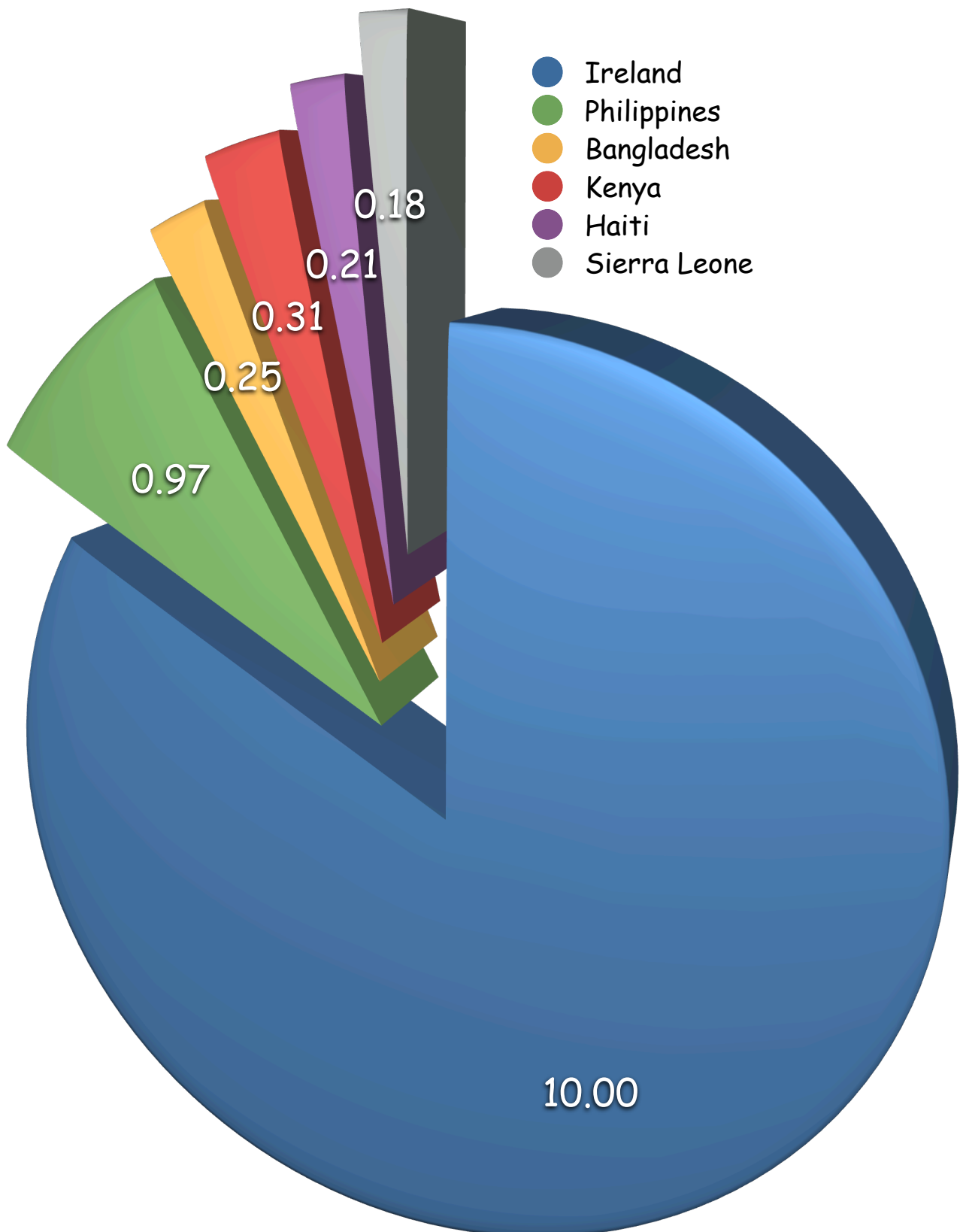




WORKSHEET 5

Pie chart of CO₂ per capita

Carbon Emissions Per Capita (measured in metric tons)



SOURCE: http://www.nationmaster.com/graph/env_co2_emi_percap-environment-co2-emissions-per-capita (Sept 09)



FLASH CARDS

Fairness exercise

FAIR



UNFAIR

**YOU CONTROL
CLIMATE CHANGE.**



TURN DOWN. SWITCH OFF. RECYCLE. WALK. CHANGE

**HOW WILL YOUR
YOUR CHILDREN GET
TO SCHOOL?**



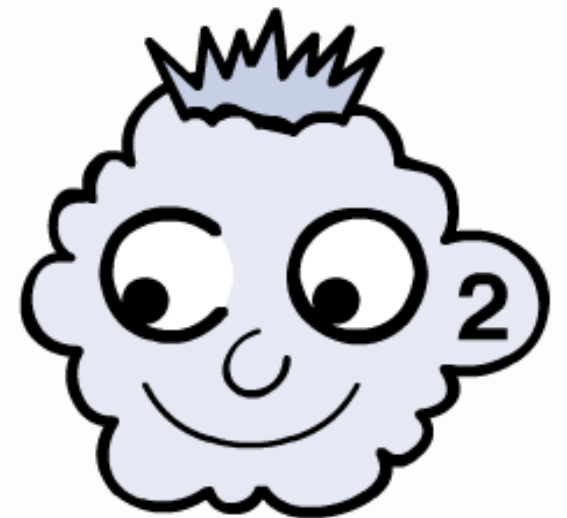
Act Now!
On Climate Change

**THE WORLD
IS HEATING UP**



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For click WMnet button for online version



Meet Colin CO₂



story



games

Colin CO₂ and his family are very special because they make a blanket of air that keeps the earth nice and warm.



story



games



Colin and his family
help plants to
grow.



story



games



New members of
Colin's family are
being added all the
time...



Baby CO₂



Baby CO₂



Baby CO₂



story



games



mostly when
something is
burned...



story



games



but also when
people and animals
breathe out.



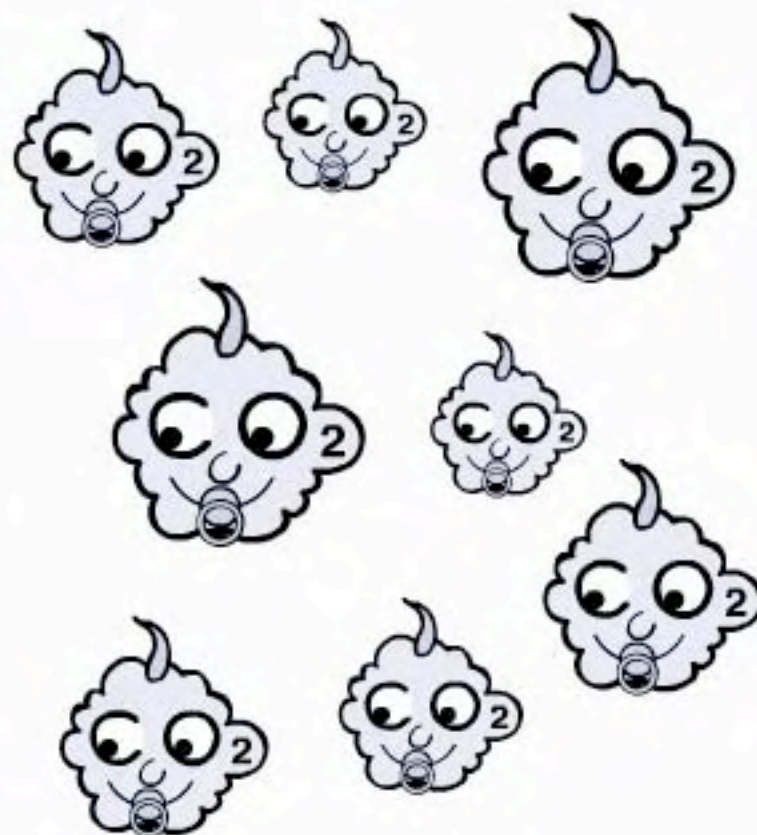
story



games



The trouble is,
there are too many
members of Colin's
family being
added.



story



games



Our cars, buses,
trains and planes
burn fuel to make
them move.



story



games



Our cars, buses,
trains and planes
burn fuel to make
them move.



story



games



To keep our houses
warm and cook our
food we burn gas,
oil, wood and coal.



story



games



When we use
anything electrical
like lights, washing
machines or TV, a
power station has
to burn fuel to
make electricity.



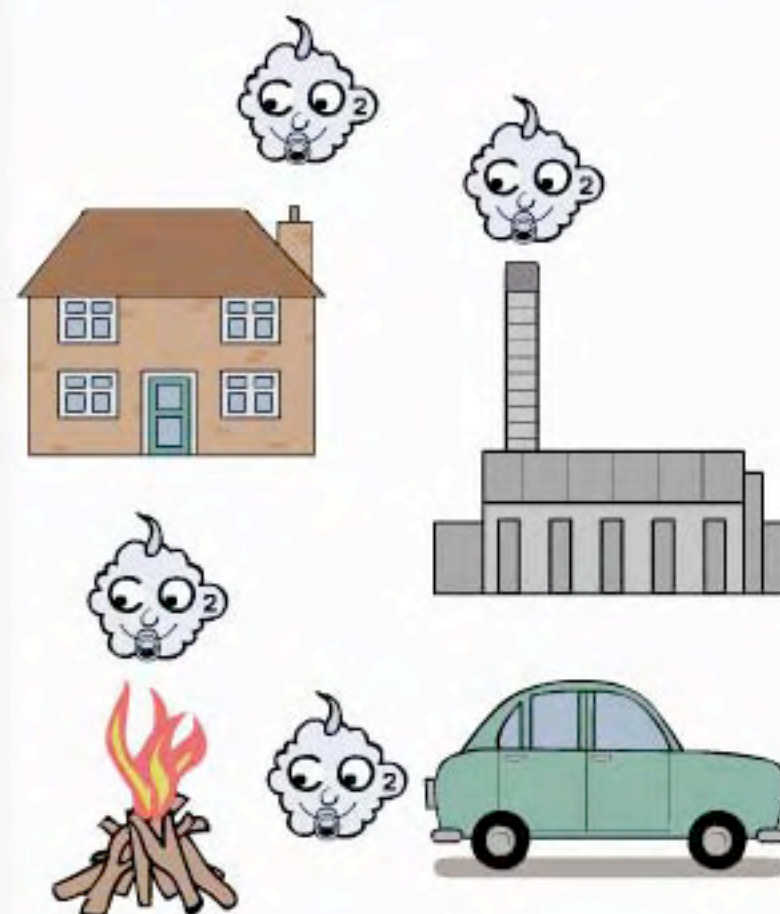
story



games



More and more
people are burning
more and more
fuel.

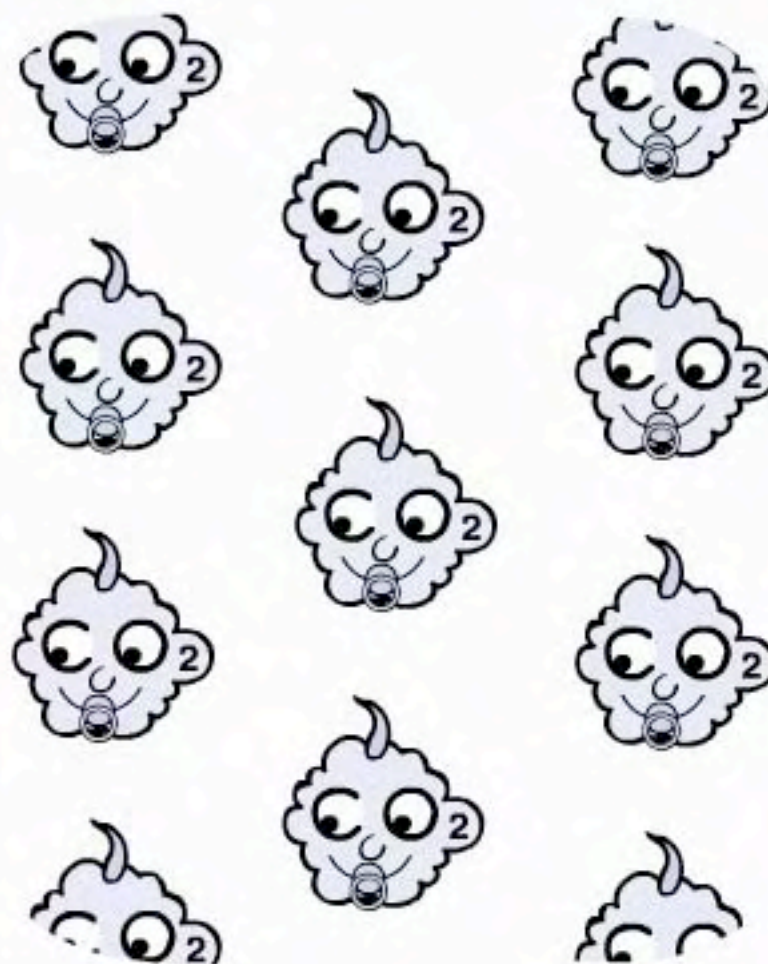


story



games

Colin's family is
getting bigger...



story



games





story



games

and bigger...



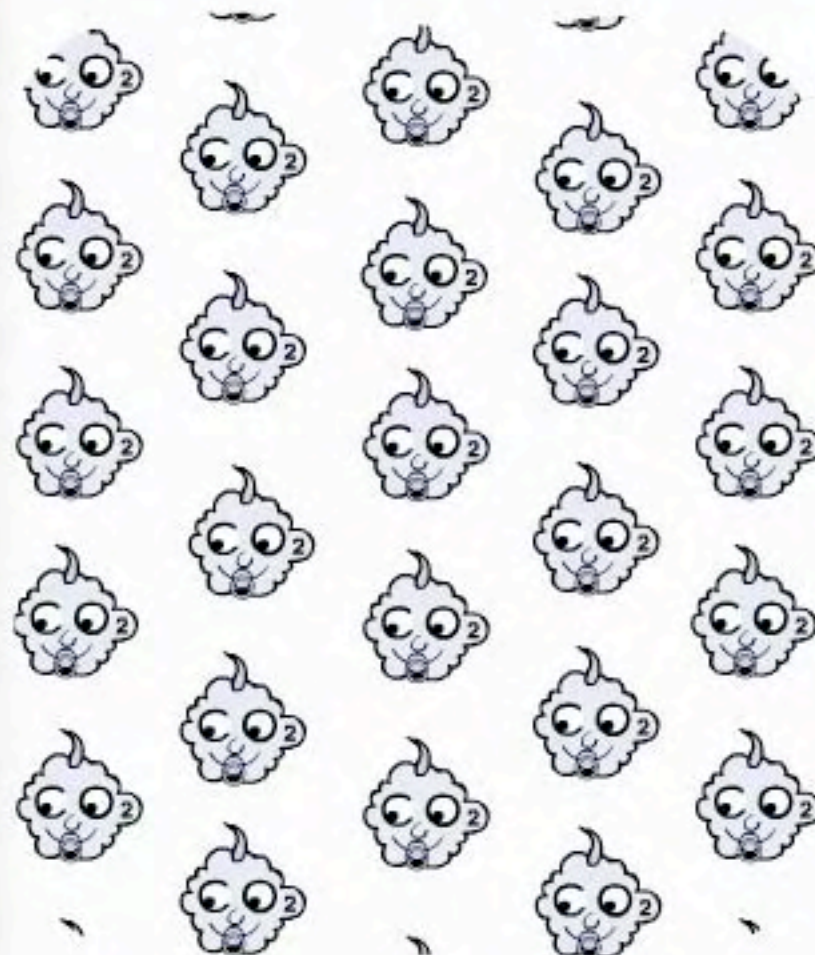


story



games

and bigger...



making a thicker
blanket around the
Earth.



story



games



And the world is
getting warmer...



story



games



and warmer...



story



games





story



games

and warmer.



When the world
gets warmer, the
weather changes...

There is more very
hot, dry weather.



story



games



More heavy rain.



story



games



Ice melts.



story



games



Sea water
heats up
and
rises.



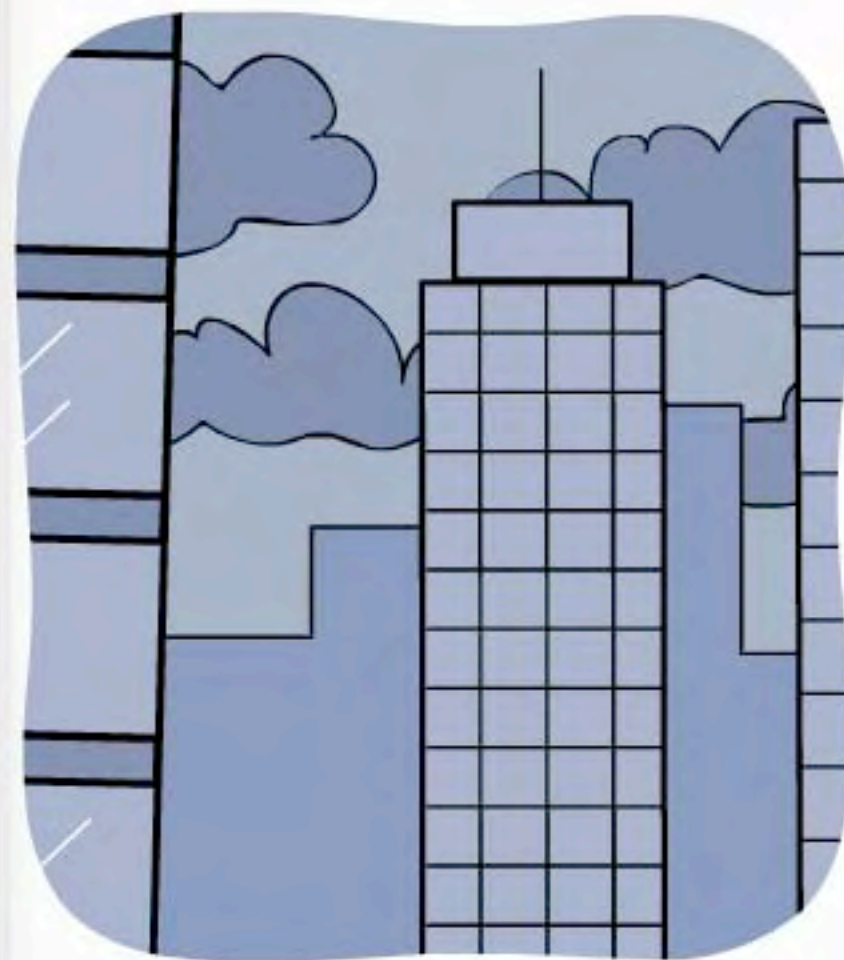
story



games



There are more
storms.



story



games



The world becomes
a much harder
place to live in.



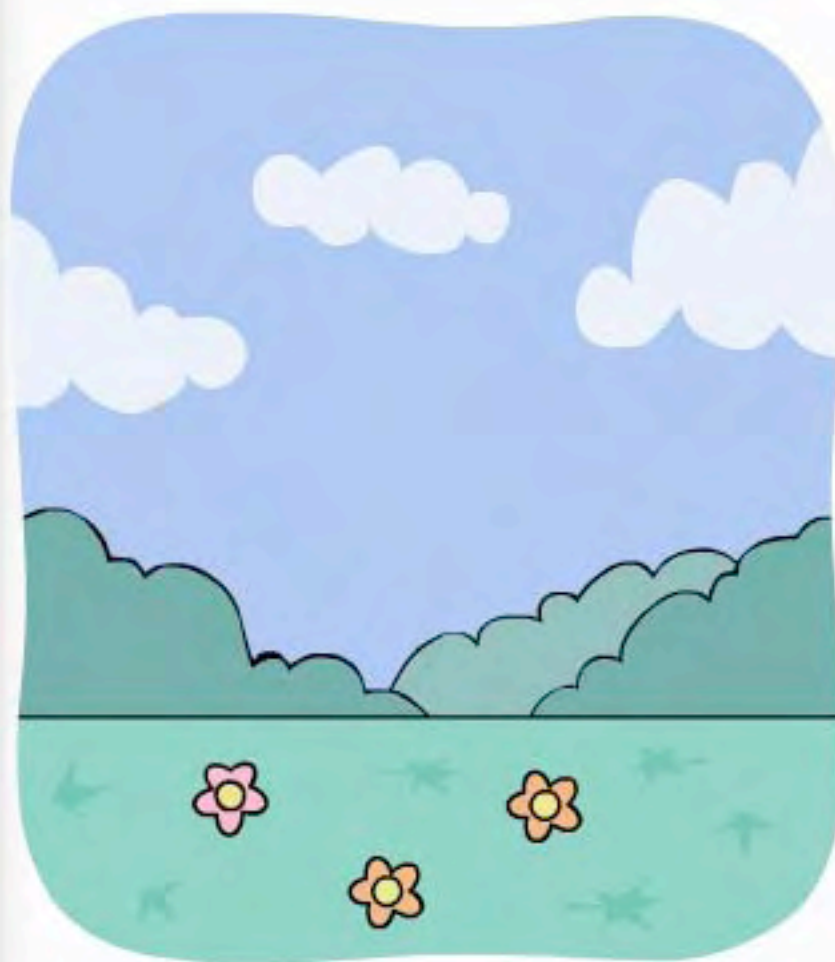
story



games



The only way to
help the world is
to change the way
we live...
by making less of
Colin CO₂.



story



games



How do you think
you can help?



story



games

