



NATURE PHOTO LABYRINTH

SPECIAL COURSE: MODULE 1 - CLIMATE CHANGE

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YOUTH IN SCIENCE AND BUSINESS FOUNDATION

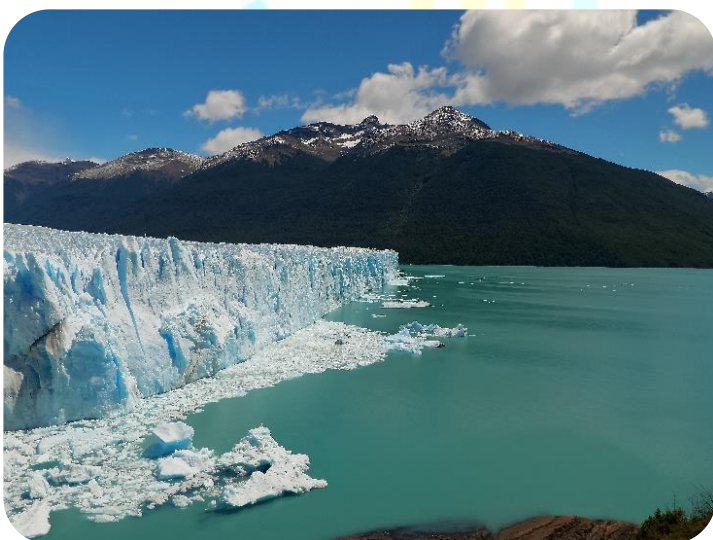
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1. INTRODUCTION

In recent years, the temperatures are reaching their extremes. The weather is not the same as it used to be some years back. There are more storms and tornados, more flooding and rainfall in areas where it hardly used to rain, more drought, and number of forest fires have increased, there are also frequent reports about water levels rising and increase in pollution levels affecting people to breath. Recently, the artic blasts in US and other parts of the world have also cost many their lives. All this is due to Climate Change. Slowing down climate change is essential to prevent these impacts from becoming even more severe.



Climate change is one of the biggest challenges facing humanity today, and it is caused primarily by the increasing concentration of greenhouse gases in the atmosphere as a result of human activities. While governments and businesses have a significant role to play in addressing this problem, individuals can also make a difference by making changes to their daily lives. Together, everyone can help make difference with their actions

to save our planet Earth from melting away.

This document is focused on enhancing individual knowledge about understanding the issues encompassing the Climate Change and its consequence. It also includes a range of activities that individuals can undertake in their daily lives and in community to help combat climate change and help reduce its consequences.

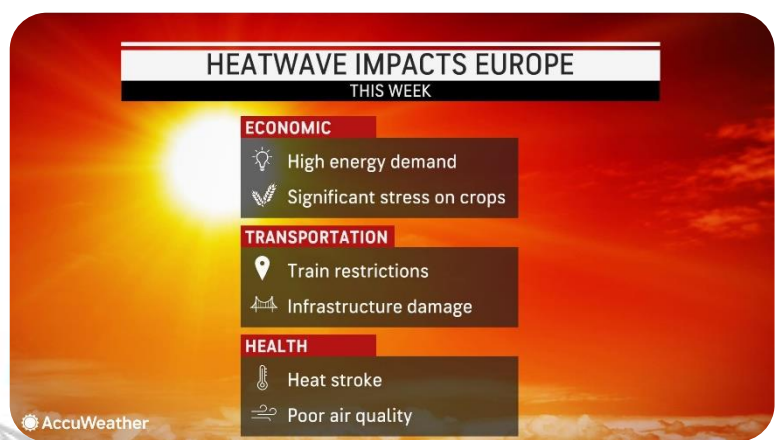


2. WHAT IS CLIMATE CHANGE?

Climate refers to the long-term pattern of weather conditions that prevail in a particular region or over the Earth as a whole. It includes average temperature, humidity, rainfall, wind patterns, and other factors that determine the typical conditions in a given area.

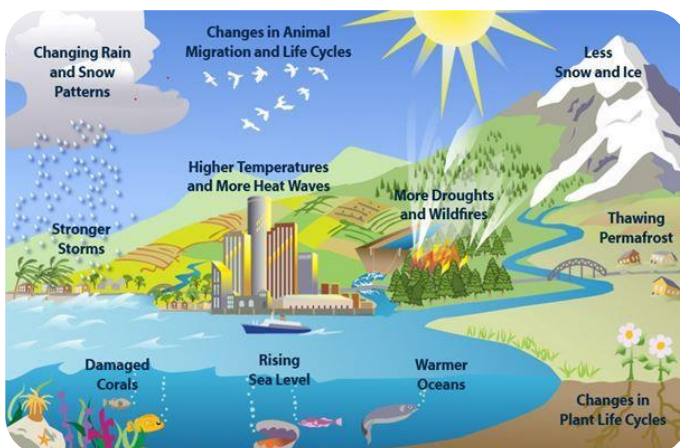
Climate is the result of complex interactions between the Earth's atmosphere, oceans, land surface, and other factors such as solar radiation and the position of the Earth relative to the Sun. The atmosphere plays a crucial role in regulating climate by trapping heat and gases that are radiated from the Earth's surface, such as carbon dioxide and methane.

The oceans also play a significant role in regulating climate by absorbing and storing heat and carbon dioxide, as well as by affecting wind and rainfall patterns through ocean currents. The land surface, including vegetation, soils, and ice cover, also affects climate by reflecting or absorbing sunlight and influencing the exchange of gases and moisture between the atmosphere and the land.



Climate is constantly changing over time due to both natural factors, such as volcanic activity and variations in solar radiation, and human activities, such as burning fossil fuels and deforestation. Understanding how climate works and how it is changing is crucial for predicting and mitigating the impacts of climate change on human societies and the natural world.

Climate change refers to the long-term and significant changes in the Earth's climate system, including changes in temperature, precipitation patterns, sea level, and extreme weather events, that are primarily caused by human activities such as burning fossil fuels and deforestation.





Here are some real-world examples of the impacts of climate change:

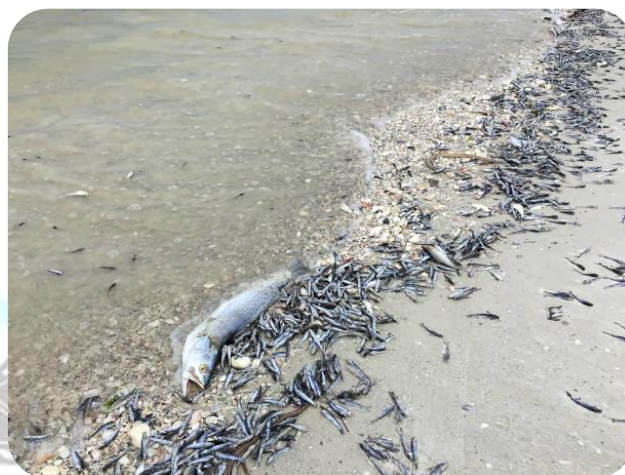
🌍 Global temperatures are rising: According to NASA, the average global temperature has increased by about 1.8 degrees Fahrenheit (1 degree Celsius) since the late 19th century, with the majority of the warming occurring in the past few


decades. This has led to a range of impacts, including melting of glaciers and sea ice, rising sea levels, and more frequent and severe heatwaves.



 **Changes in precipitation patterns:** Climate change is causing changes in the patterns and amount of precipitation, leading to more frequent and intense floods and droughts. For example, in 2019, India experienced its longest monsoon season in 25 years, leading to devastating floods that affected millions of people.

 **Ocean acidification:** The oceans are becoming more acidic as they absorb more carbon dioxide from the atmosphere, which can harm marine life such as coral reefs and shellfish. For example, the Great Barrier Reef in Australia, one of the world's largest coral reefs, has experienced widespread coral bleaching due to warmer waters and increased ocean acidity. There are several reports of dead fish washing ashore coasts of USA, Spain, Australia, New Zealand and more.



 **Changes in biodiversity:** Climate change is affecting ecosystems and biodiversity by altering migration patterns, breeding cycles, and habitats of plants and animals. For example, in the Arctic, polar bears are struggling to find food as sea ice melts, and some species of birds are changing their migration patterns in response to changes in temperature and weather patterns.

These are just a few examples of the impacts of climate change, and they highlight the urgent need to address this global challenge.

3. GLOBAL WARMING

From the dawn of the Industrial Era, humans have created and produced a wide range of items that have improved our standard of living. We have become technologically advanced. There are several types of vehicles around, including ships, cars, and airplanes. Several factories appeared to continue producing the artificial goods on which we have grown to rely. All of this demands a tremendous amount of energy, and coal and other fossil fuels are our primary energy source. Massive volumes of carbon dioxide are released into the atmosphere when fossil fuels are burned, which leads to an imbalance in the amount of greenhouse gases and the greenhouse effect. This leads to the globe retaining more heat causing global warming.

Global warming is therefore known as the gradual warming of the Earth's surface that has been seen since the pre-industrial era (between 1850 and 1900), and is attributed to human activity, particularly the burning of fossil fuels, which raises the amounts of heat-trapping greenhouse gases in the atmosphere, primarily carbon dioxide, that trap heat from the sun and warm the Earth's surface.

This term should not be used in place of "climate change."

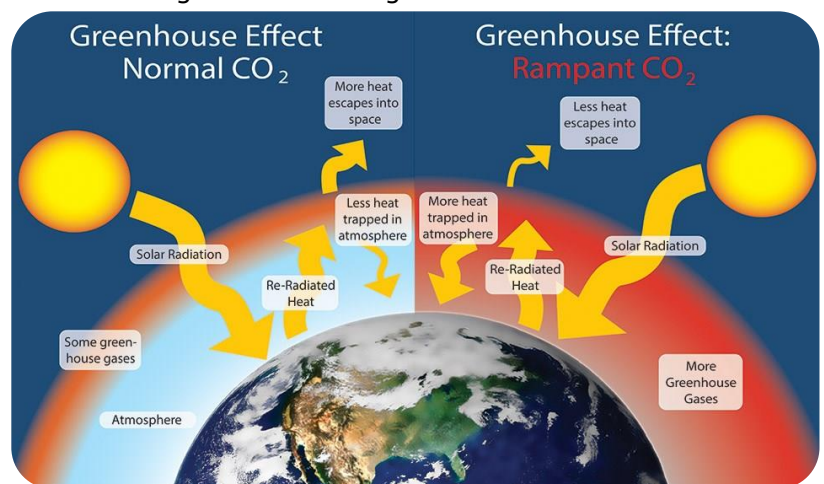
HOW DOES GLOBAL WARMING WORK?

When we burn fossil fuels like coal, oil, and gas for energy, we release carbon dioxide into the air. Trees and other plants absorb carbon dioxide, but when we cut down forests, less carbon dioxide is removed from the atmosphere. As a result, more heat is trapped in the atmosphere, leading to a warmer planet.

Here are some of the processes involved in global warming:

Greenhouse effect: The Earth's atmosphere acts like a blanket, trapping heat from the sun and keeping our planet warm enough to support life. But human activities are increasing the amount of greenhouse gases in the atmosphere, which leads to more heat being trapped and a warmer planet.

Melting ice: As the Earth warms, ice in the Arctic and Antarctica





is melting at an alarming rate. This can lead to rising sea levels, flooding, and changes in ocean currents that can affect weather patterns around the world.

Extreme weather events: Climate change can also lead to more frequent and intense heatwaves, droughts, floods, and hurricanes, which can cause damage to communities and ecosystems.

4. WHAT IS THE CONNECTION BETWEEN CLIMATE CHANGE AND GLOBAL WARMING?

Global warming and climate change are closely related terms. As global warming causes the Earth's surface temperature to increase, it affects the Earth's climate system in various ways. For example, melting of polar ice caps and glaciers leads to rising sea levels and changes in ocean currents, which can affect weather patterns around the world. Climate change, on the other hand, is a broader term that encompasses the various effects of global warming and other factors that are causing long-term changes in the Earth's climate system.

In summary, global warming is the primary cause of climate change, and the changes in the Earth's climate system resulting from global warming can have wide-ranging impacts on the planet and its inhabitants. Understanding the connection between global warming and climate change is important because it helps us to understand the causes and impacts of climate change and to develop strategies for mitigating its effects.

5. WHY DOES IT MATTER?

Climate change is a big problem that affects everyone and everything on our planet. Here is a more detailed explanation of why climate change matters:

- 🌍 **Weather and natural disasters:** Climate change can cause changes in weather patterns, such as increased heat waves, droughts, hurricanes, and floods. These events can be very dangerous and cause damage to homes, businesses, and infrastructure. For example, when hurricanes get stronger because of warmer ocean temperatures caused by climate change, they can cause more damage to homes and cities.

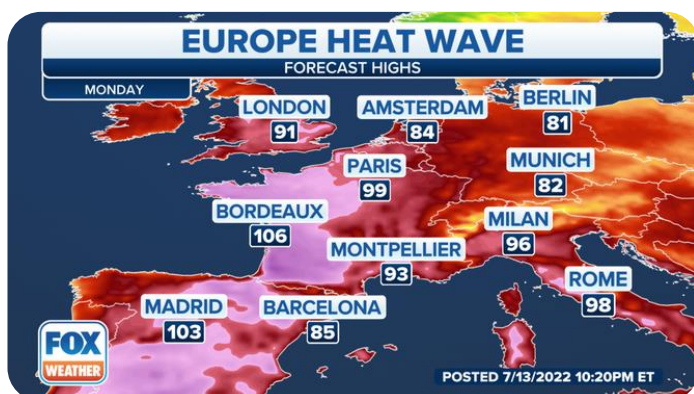
🌍 Health: Climate change can also have an impact on our health. When the weather gets hotter, people can get sick from heat exhaustion or heat stroke. Changes in weather patterns can also cause droughts and famine, which can lead to malnutrition and disease. Air pollution caused by burning fossil fuels can also lead to respiratory and cardiovascular problems.



🌍 Animals and plants: Climate change is already affecting animals and plants all over the world. Changes in temperature and rainfall patterns can affect migration patterns, breeding cycles, and habitats of animals and plants. This can lead to the extinction of species and loss of biodiversity. This is a big problem because animals and plants are important parts of ecosystems that help keep our

planet healthy.

🌍 Food and water: Climate change can also affect the availability of food and water. Changes in rainfall patterns can lead to droughts, which can make it difficult for farmers to grow crops. This can lead to food shortages and higher food prices. Changes in temperature can also affect the availability and quality of water, which is essential for all life on Earth.



🌍 The future: Climate change is a problem that will affect future generations. If we don't take action to reduce greenhouse gas emissions and slow down the warming of the planet, the impacts of climate change will get worse and worse. This could mean more extreme weather events, more health problems, and more challenges for growing food and finding clean water.

Climate change matters because it affects everything on our planet, including people, animals, plants, and ecosystems. The good news is that there are things we can all do to help reduce our impact on the planet. By reducing our use of fossil fuels, planting trees, recycling, and taking other actions to reduce our carbon footprint, we can help protect our planet and ensure a healthy future for generations to come.

6. CARBON FOOTPRINT

The term "carbon footprint" refers to the amount of carbon dioxide and other greenhouse gases that are emitted into the atmosphere as a result of human activities, such as transportation, energy use, and consumption of goods and services. The more we do these things, the larger our carbon footprint becomes.

There are many factors that contribute to a person's carbon footprint. For example, driving a car or taking a flight generates emissions from burning fossil fuels, which release carbon dioxide into the atmosphere. The production and transportation of goods, such as clothing and electronics, also contribute to emissions through the use of energy from fossil fuels.



Reducing our carbon footprint is essential to mitigating the impacts of climate change. There are many ways to reduce your carbon footprint, both individually and collectively. Here are some ways we can reduce our carbon footprint:

- 🌍 Reduce energy consumption: Use energy-efficient light bulbs and appliances, turn off lights and electronics when they're not in use, and unplug chargers when they're not in use.
- 🌍 Reduce transportation emissions: Walk, bike, or take public transportation instead of driving a car. If you have to drive, consider carpooling or driving an electric vehicle.
- 🌍 Reduce food waste: Eat food that's in season and locally sourced, and reduce the amount of meat you eat, as meat production is a major source of greenhouse gas emissions.
- 🌍 Reduce consumption: Reduce, reuse, and recycle products to reduce the amount of waste

that ends up in landfills and to reduce the amount of energy used to manufacture new products.

- 🌍 **Plant trees:** Trees absorb carbon dioxide from the atmosphere and store it in their wood and leaves. By planting trees, we can help to offset our carbon footprint and reduce the amount of greenhouse gases in the atmosphere.

Reducing our carbon footprint is not only good for the environment, but it can also save us money. By using energy-efficient appliances, driving less, and reducing our consumption, we can save money on our utility bills and reduce our overall expenses.

Our carbon footprint is a measure of the impact we have on the environment through our daily activities. By reducing our carbon footprint, we can help to slow down the rate of climate change and protect our planet for future generations. It's important for everyone to do their part to reduce their carbon footprint, no matter how small, in order to create a healthier and more sustainable future for all.

7. CLIMATE CHANGE EFFECTS ON AGRICULTURE

One of the primary effects of climate change on agriculture is the impact on crop yields. As temperatures rise, crops are more vulnerable to heat stress, drought, and pests. In some regions, the growing season is also becoming shorter, which limits the amount of time farmers have to grow their crops. This can lead to lower yields and reduced quality of crops, which can impact food security for millions of people around the world.

Another effect of climate change on agriculture is the increased frequency and intensity of extreme weather events. This includes droughts, floods, and storms, which can devastate crops and infrastructure. In areas that are already vulnerable to these events, such as sub-Saharan Africa and parts of Asia, the impact can be particularly severe. Extreme weather events can also impact the health and well-being of livestock, which can lead to reduced production and economic losses for farmers.



Climate change is also impacting the availability and quality of water for agriculture. In some regions, droughts are becoming more frequent and severe, which limits the availability of water for irrigation. This can lead to lower

crop yields and reduced food production. In other regions, increased precipitation and flooding can wash away soil and nutrients, reducing the quality of the land for agriculture.



Finally, climate change is impacting the distribution and availability of pests and diseases. As temperatures rise, pests and diseases that were once confined to certain regions are now spreading to new areas. This can lead to the destruction of crops and increased economic losses for farmers.

In response to these challenges, farmers are adapting their practices and using new technologies to mitigate the impacts of climate change on agriculture. For example, some farmers are using drought-resistant crops, improving irrigation systems, and using new techniques for soil management. However, these efforts require significant investments and support from governments and the private sector.

Overall, the effects of climate change on agriculture are significant and widespread. The impacts on crop yields, livestock health, water availability, and pest and disease management pose significant challenges for farmers and food security around the world. Without concerted efforts to address climate change and reduce greenhouse gas emissions, these challenges are likely to increase in severity and frequency, leading to food shortages, increased food prices, and reduced food security for millions of people around the world. As the impacts of climate change continue to worsen, it is crucial that governments and the private sector invest in sustainable agriculture practices and support farmers in adapting to a changing climate. It is therefore important that governments, businesses, and individuals work together to take action to mitigate and adapt to the impacts of climate change on agriculture.

8. CLIMATE CHANGE EFFECTS ON OCEAN

Climate change is having a profound impact on our oceans and marine life. As the Earth's temperature rises, the oceans are absorbing more carbon dioxide, leading to increased acidity and changes in ocean chemistry. These changes are having significant impacts on marine ecosystems and the species that call them home.

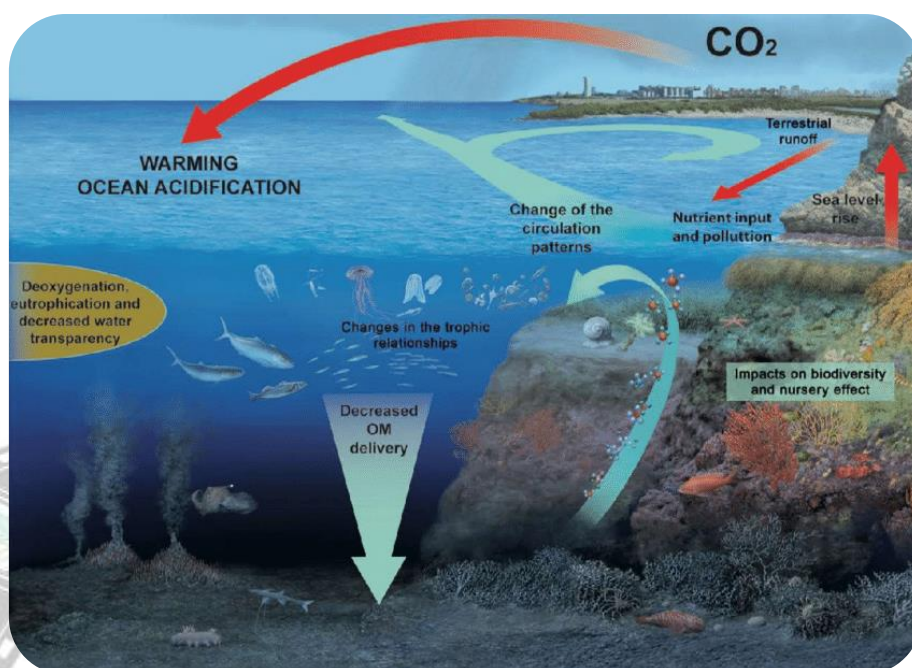
One of the primary effects of climate change on the ocean is ocean acidification. As carbon dioxide is absorbed into the water, it reacts with

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seawater to create carbonic acid, which lowers the pH of the water. This can have a devastating impact on marine organisms that rely on calcium carbonate to build their shells and skeletons. As the water becomes more acidic, it becomes harder for these organisms to form and maintain their structures, which can lead to decreased growth rates and increased mortality.

Another effect of climate change on the ocean is warming temperatures. As the Earth's temperature rises, so does the temperature of the ocean. This can have a significant impact on marine ecosystems, as many species are adapted to specific temperature ranges. As temperatures shift, species may be forced to move to new areas or face extinction. Warming temperatures can also lead to increased coral bleaching, which occurs when coral expel the algae that live inside them, leading to their death.

Climate change is also affecting the distribution and abundance of marine species. As ocean currents shift and temperatures change, the habitats of many species are being disrupted. This can lead to changes in migration patterns and food availability, which can impact the survival and reproductive success of many marine species.



Finally, climate change is having a significant impact on the ocean's food web. Changes in ocean chemistry and temperature can lead to the decline of phytoplankton, which are the base of the ocean's food web. This can have a ripple effect throughout the food chain, impacting the survival and health of many marine species, including commercially important fish stocks.

In response to these challenges, there are many efforts underway to mitigate the impacts of climate change on the ocean and marine life. These efforts include reducing greenhouse gas emissions, protecting and restoring critical marine habitats, and supporting sustainable fishing practices. However, these efforts require significant investments and support from governments and the private sector.

In conclusion, the effects of climate change on the ocean and marine life are significant and far-reaching. From ocean acidification to changes in species distribution, warming temperatures, and impacts on the food web, the impacts of climate change pose a significant threat to the health and well-being of our oceans and the species that depend on them. As the impacts of

changes, these cues may no longer be reliable. This can lead to decreased reproductive success and increased mortality in many species.

Climate change is also having a significant impact on marine life. As discussed in a previous article, ocean acidification and warming temperatures are having a profound impact on marine ecosystems and the species that call them home. From coral bleaching to changes in species distribution, the impacts of climate change on marine life are posing a significant threat to the health and well-being of our oceans.

Finally, climate change is having a significant impact on agriculture and food security. Changes in temperature and rainfall patterns can lead to decreased crop yields and food shortages, particularly in regions that are already vulnerable to food insecurity. This can lead to malnutrition, hunger, and other health problems for millions of people around the world.

In summary, the effects of climate change on living organisms on Earth are significant and far-reaching. From increased health risks to disruptions in migration patterns and impacts on marine life, the impacts of climate change pose a significant threat to the health and well-being of humans and other living organisms. It is crucial that we take action to reduce greenhouse gas emissions and mitigate the impacts of climate change to protect the health and resilience of our planet and its inhabitants.

10. SOLUTIONS AND ACTIVITIES FOR REDUCING THE EFFECTS OF CLIMATE CHANGE

The most important step in slowing down climate change is to reduce the amount of greenhouse gases we emit into the atmosphere. Along with some of the solutions mentioned earlier in the module, there are other ways through which this can be achieved, including:

PLANTING TREES

Trees absorb carbon dioxide from the atmosphere and store it in their wood and leaves. Planting more trees and preserving existing forests can help to remove carbon dioxide from the atmosphere and slow down climate change. This can be done at the individual level, by planting trees in gardens or on community land, or at the government level, by implementing policies to protect forests and encourage reforestation.



EATING A PLANT-BASED DIET



Livestock farming is a major contributor to greenhouse gas emissions, particularly methane. Eating a plant-based diet or reducing meat consumption can help to reduce emissions and slow down climate change. This can be done at the individual level, by choosing to eat vegetarian or vegan meals, or at the government level, by implementing policies to promote plant-based diets or reduce meat consumption.

USING PUBLIC TRANSPORTATION OR CYCLING

Cars and trucks are major sources of greenhouse gas emissions. Using public transportation or cycling instead of driving can help to reduce emissions and slow down climate change. This can be done at the individual level, by choosing to take public transportation or cycle instead of driving, or at the government level, by investing in public transportation infrastructure or implementing policies to promote cycling.

RECYCLING AND REDUCING WASTE

Manufacturing and disposing of products produce greenhouse gas emissions. Recycling and reducing waste can help to reduce emissions and slow down climate change. This can be done at the individual level, by reducing consumption and recycling waste, or at the government level, by implementing policies to promote recycling and reduce waste.



REDUCE WATER CONSUMPTION

Reducing your water consumption is another way to help combat climate change. Simple actions such as taking shorter showers, fixing leaks, and using a low-flow toilet can all help to reduce your water usage. You can also reduce water consumption in the home by using a rain barrel to collect water for gardening, choosing water-efficient appliances, and watering your lawn and garden in the early morning or evening to reduce evaporation.

REDUCE ENERGY USE AT HOME

One of the easiest ways to reduce your carbon footprint is to reduce your energy use at home. This can be achieved by turning off lights and electronics when they are not in use, using energy-efficient appliances, and making sure your home is well-insulated. Other ways to save energy include using natural light instead of electric lighting, drying clothes on a line instead of in a dryer, and turning off appliances when they are not in use.



SUPPORTING POLICIES THAT ADDRESS CLIMATE CHANGE

Governments can implement policies to address climate change, such as putting a price on carbon emissions, investing in renewable energy, and regulating emissions from industry and transportation. Supporting these policies through voting, advocacy, or activism can help to accelerate progress in slowing down climate change.

Individual actions may seem small in the face of the global challenge of climate change, but collectively, these actions can have a significant impact. By reducing energy use at home, choosing sustainable transportation, reducing water consumption, choosing sustainable food options, reducing, reusing, and recycling, planting trees and supporting reforestation, and using renewable energy, we can all play a role in combatting climate change. The key is to be mindful of our daily habits and make choices that prioritize sustainability and the health of our planet. By working together, we can create a more sustainable future for ourselves and for generations to come.

11. BRAIN BOOSTER

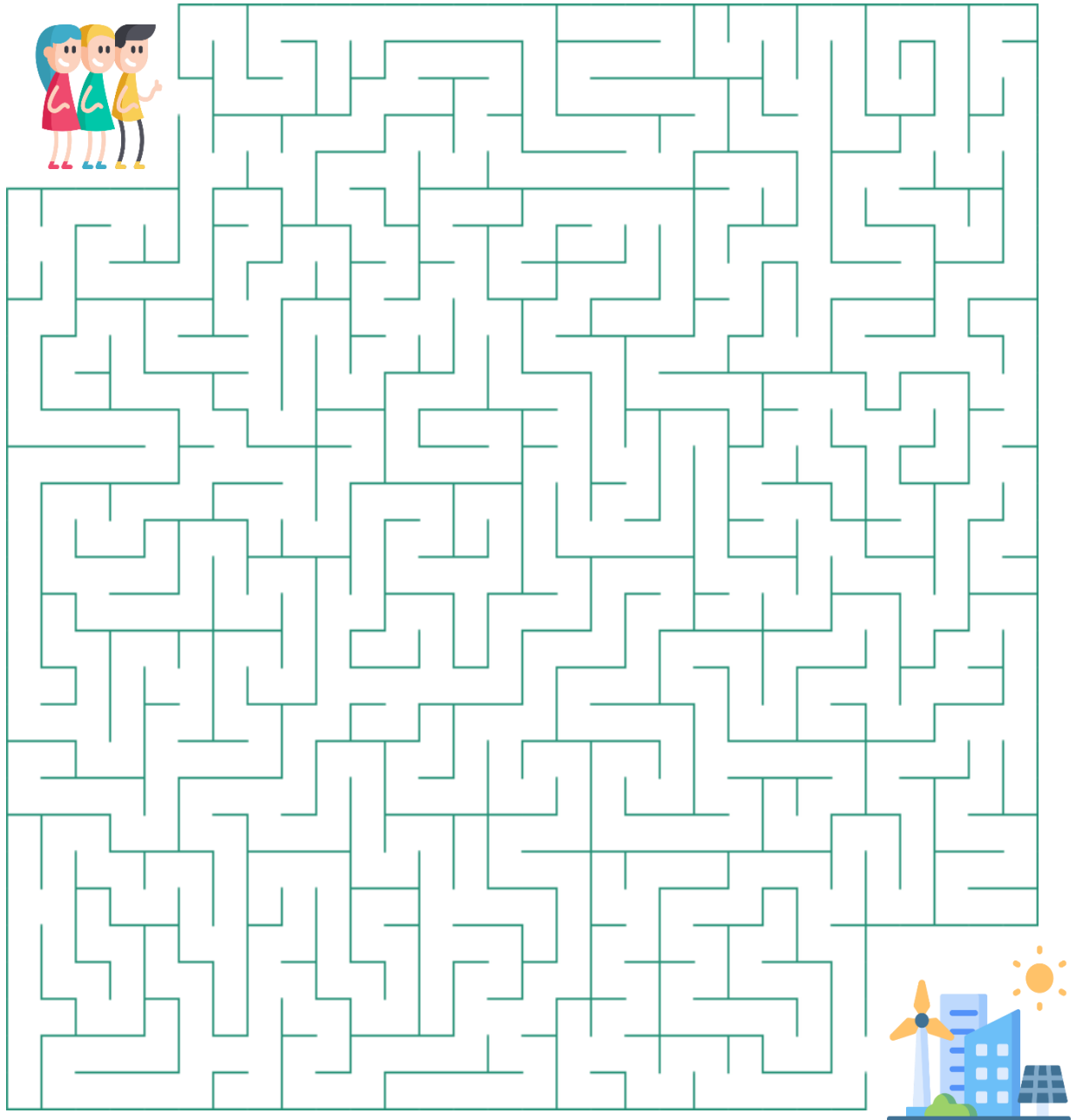
Solve these puzzles and activities to boost your brain.

1. See if you are able to find all the following words:

- (?) ATMOSPHERE (?) CLIMATE CHANGE (?) FOSSIL FUELS (?) EMISSIONS
- (?) CARBON DIOXIDE (?) GLOBAL WARMING (?) POLLUTION (?) ECOSYSTEMS
- (?) ENDANGERED (?) SPECIES (?) HABITAT (?) SOLAR RADIATION
- (?) EXTINCTION (?) GREENHOUSE GASES

S	T	T	Z	S	Y	N	E	C	O	S	Y	S	T	E	M	S	A
P	G	L	O	B	A	L	W	A	R	M	I	N	G	C	V	N	K
E	R	A	C	H	B	S	Z	Q	I	U	Z	N	Y	N	M	W	V
C	C	A	R	B	O	N	D	I	O	X	I	D	E	L	J	L	K
I	X	O	C	E	N	D	A	N	G	E	R	E	D	R	K	W	X
E	A	C	L	I	M	A	T	E	C	H	A	N	G	E	R	W	S
S	E	X	T	I	N	C	T	I	O	N	M	M	O	G	U	O	R
F	J	S	O	L	A	R	R	A	D	I	A	T	I	O	N	J	B
F	P	G	R	E	E	N	H	O	U	S	E	G	A	S	E	S	N
I	A	T	M	O	S	P	H	E	R	E	C	I	C	H	W	N	N
H	A	B	I	T	A	T	B	B	B	Q	Y	R	S	A	J	Z	T
L	T	R	N	H	J	P	O	L	L	U	T	I	O	N	A	N	Y
L	S	D	V	P	I	W	I	K	E	M	I	S	S	I	O	N	S
F	F	O	S	S	I	L	F	U	E	L	S	P	P	Z	I	Y	O

2. Lead these group of youngsters towards sustainable green city.

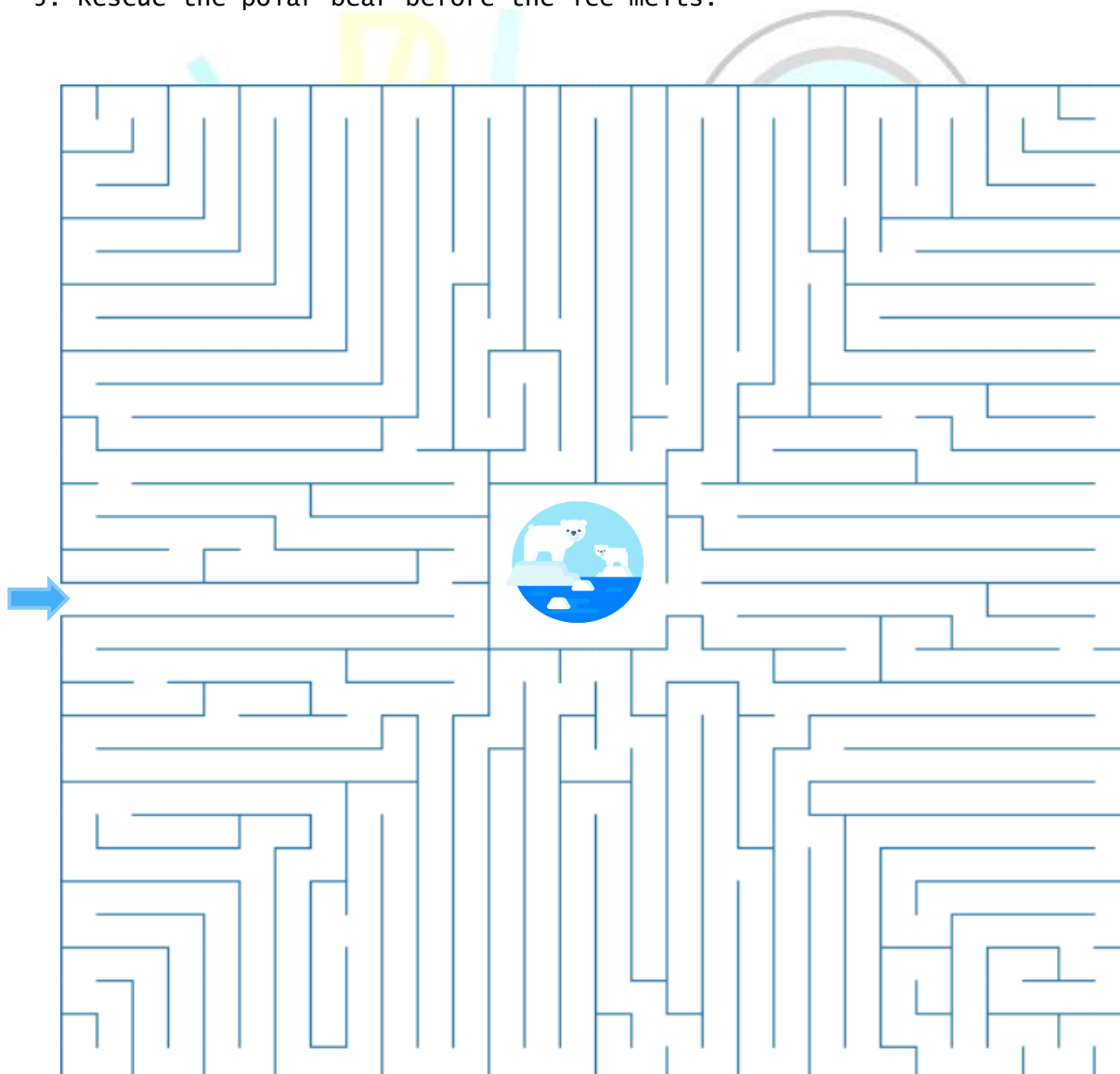


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4. Unscramble the tiles to reveal a message. Each tile is used only once. Use spacing, punctuation and common words to find adjacent tiles. Some words maybe split into two lines. Hint: It's based on "Climate Change".

g	e	h	e	r	p	a	t	e	m	h	a	n	m	a	t	t	s	e	c	
n	g	-	p	e	r	d	w	.	e	r	s	h	i	f	l	o	a	t	u	
e	a	t	r	e	f	t	e	r	i	n	r	n	s	t	o	m	s	r	e	s
c	l	i	t	t	e	a	n													

5. Rescue the polar bear before the ice melts.



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6. Decode the message. Each letter in the phrase has been replaced with a random letter or number. Try to decode the message.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	11																	13	1	26					

B
T
T

11 20
18 16 2 25 17 6 12
1 16 12 14 1 8 14 2
18 14 4 7 6

T
S U S T
B

4 2 14 7 1 14 7
21 16 2 14
13 26 13 1 7 17 6 7 11 15 14

U T U
U S
S

5 26 1 26 2 14 5 16 2
16 26 2 13 14 15 24 14 13
7 6 9
5 16 2

T
S
T

12 14 6 14 2 7 1 17 16 6 13
1 16
4 16 21 14



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7. Decode the Crypto list on climate change words. 10 words have been encrypted with an alphabet code. Use the decoder to keep track of letter substitute.

																			Y															
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z									

W̄N̄C̄C̄H̄C̄

X̄C̄ŪĪ F̄K̄T̄C̄Ō

W̄ḠS̄N̄N̄Q̄

ĀS̄V̄C̄N̄M̄C̄ḠḠ

P̄ḠS̄ĀĪC̄N̄Q̄

ĀM̄ŪĪĪC̄N̄C̄T̄

R̄N̄C̄C̄K̄X̄L̄S̄ĀC̄ C̄W̄W̄C̄M̄Ī

P̄ŪḠJ̄Q̄

B̄C̄ŪĪX̄C̄N̄ J̄ŪV̄

W̄ḠL̄L̄T̄

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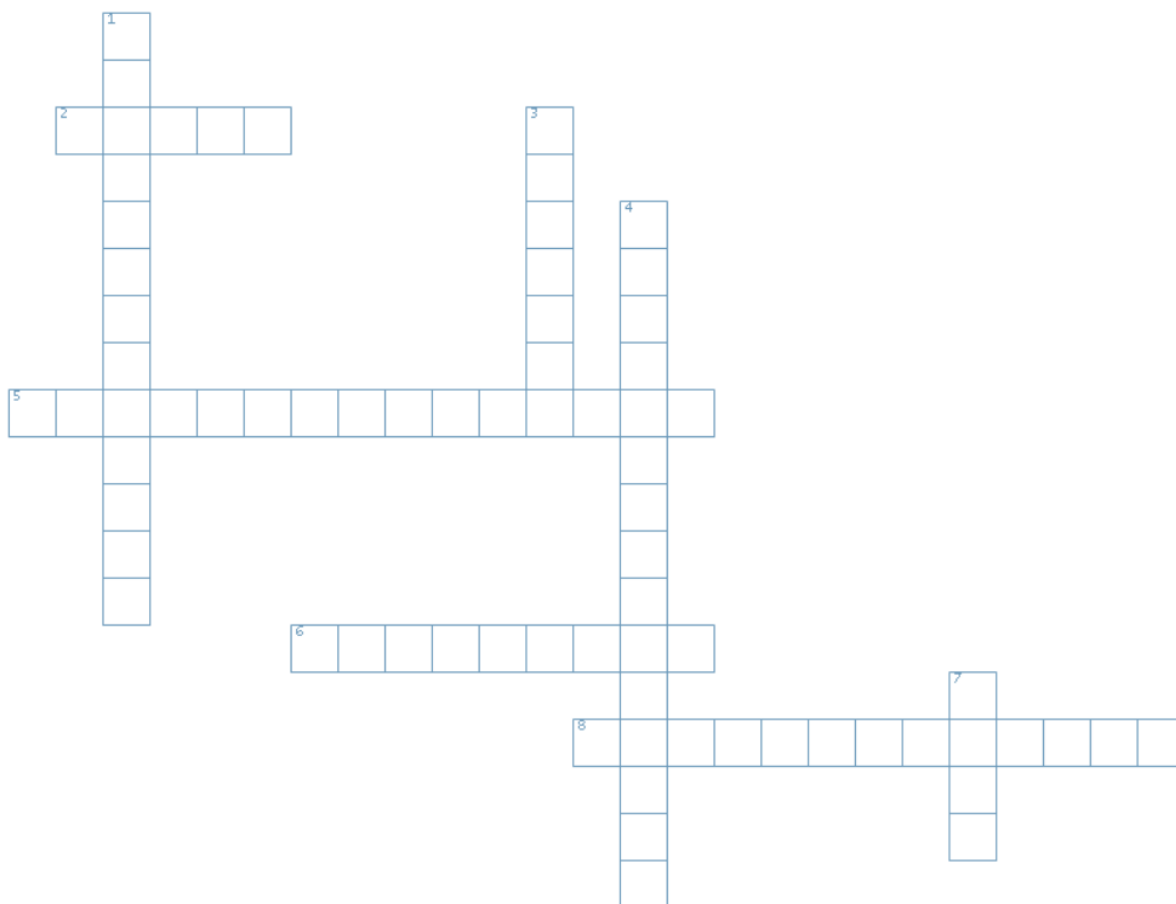
8. Use the clues to fill the words. Words can go across or down. Letters are shared when the words intersect.

ACROSS

2. This group of organisms cannot handle higher temperatures and will likely suffer as temperatures continue to increase.
5. The amount of greenhouse gases that are produced in our day-to-day lives through the burning of fossil fuels.
6. These "hot-headed" structures are one of the natural causes of climate change on our planet.
8. The levels of this greenhouse gas are rising

DOWN

1. Polar ice melting is 1 effect of this
3. The daily atmospheric conditions
4. Gases that absorb and radiate heat
7. Without the Greenhouse Effect, Earth would be too _____ for life to exist.



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9. Unscramble the tiles to reveal a message. Each tile is used only once. Use spacing, punctuation and common words to find adjacent tiles. Some words maybe split into two lines. Hint: It's based on "Climate Change".

o u r	o g e t	s w o	i t i g	o u r	t s a	r e .	a t e
r k t	e t ,	c l i m	a t e	p l a n	c h a n	n d s	g e e
f u t u	L e t '	h e r	f f e c	t o m	a v e		

10. Try to build the message. The letters from each cell are below the puzzle. Try to rebuild the original message by choosing the letters for each cell.

				L			R	I	N		I	S		A			N				
								R				T									.
E					O																S
	L	E															T				
		B		L		W		M			.										
					R			G				I		B		U		N			
								,		N	E			R			M				.

A
 O A N G D R
 B O B F N R W I F T T O
 G L E A T R L S M I R E U H O F R E O G I S
 C O O B A E T W A R D U N G V T O T R E N N R B H E K N
 G L M P L U O E I E A I C E F G H N C A E E A C A C A F
 K T U P S T O P E Y T S M G N E E E W E R E I S C H U S

12. SOLUTIONS

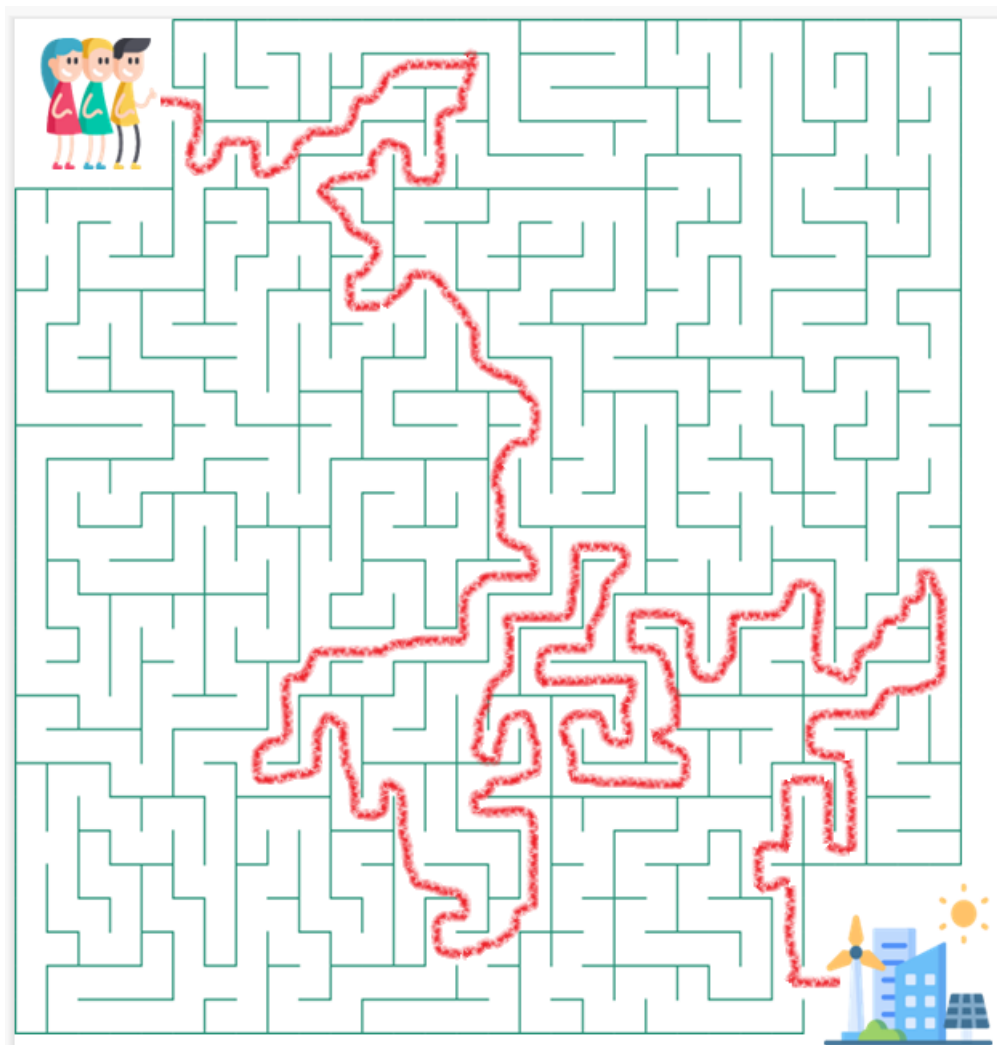
You can find solutions to puzzles here.

1. Word Search

S	T	T	Z	S	Y	N	E	C	O	S	Y	S	T	E	M	S	A
P	G	L	O	B	A	L	W	A	R	M	I	N	G	C	V	N	K
E	R	A	C	H	B	S	Z	Q	I	U	Z	N	Y	N	M	W	V
C	C	A	R	B	O	N	D	I	O	X	I	D	E	L	J	L	K
I	X	O	C	E	N	D	A	N	G	E	R	E	D	R	K	W	X
E	A	C	L	I	M	A	T	E	C	H	A	N	G	E	R	W	S
S	E	X	T	I	N	C	T	I	O	N	M	M	O	G	U	O	R
F	J	S	O	L	A	R	R	A	D	I	A	T	I	O	N	J	B
F	P	G	R	E	E	N	H	O	U	S	E	G	A	S	E	S	N
I	A	T	M	O	S	P	H	E	R	E	C	I	C	H	W	N	N
H	A	B	I	T	A	T	B	B	B	Q	Y	R	S	A	J	Z	T
L	T	R	N	H	J	P	O	L	L	U	T	I	O	N	A	N	Y
L	S	D	V	P	I	W	I	K	E	M	I	S	S	I	O	N	S
F	F	O	S	S	I	L	F	U	E	L	S	P	P	Z	I	Y	O

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2. Maze - Green City



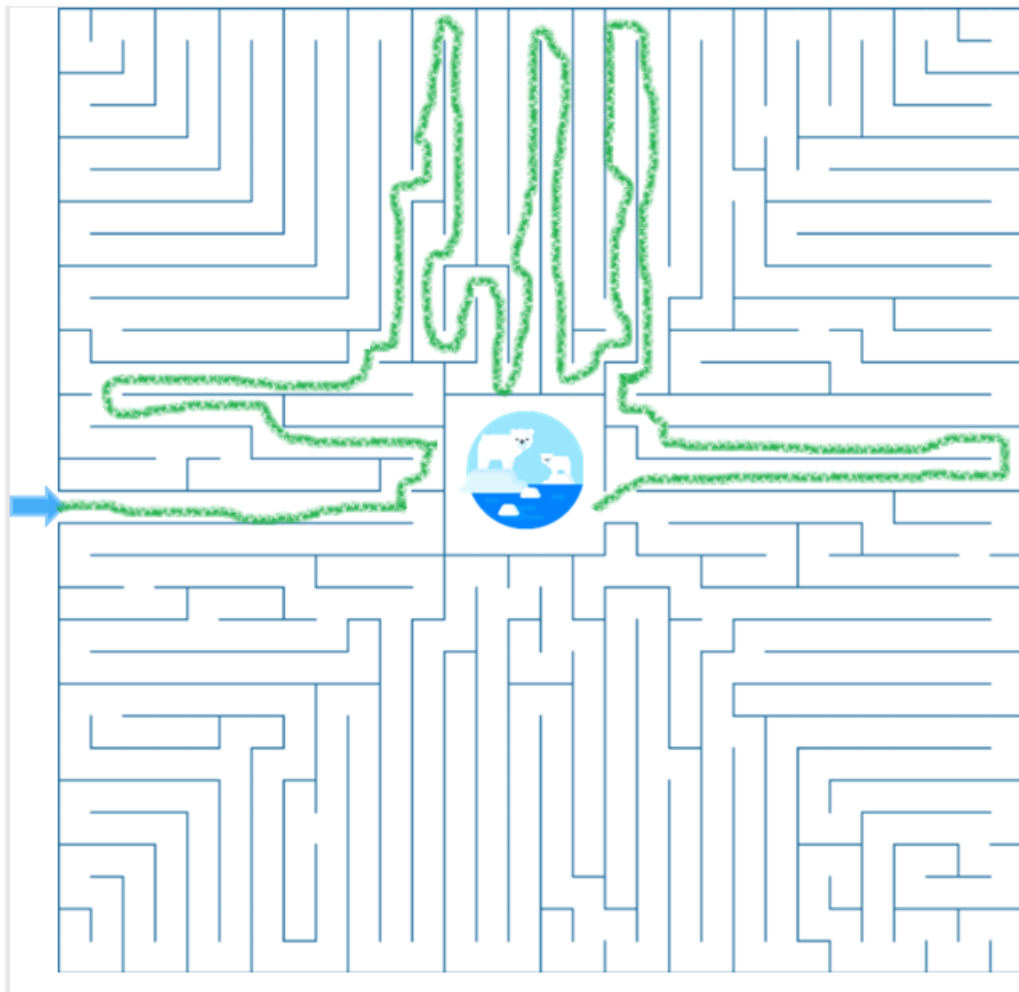
3. Crypto list - 1

E	H	Q	R	F	V	U	A	N	C	W	Y	B	J	P	T	Z	L	M	G	X	K	D	O	S	I
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

4. Unscramble the message in tiles

c	l	i	m	a	t	e	c	h	a	n	g	e	r	e	f	e	r	s	t	o
l	o	n	g	-	t	e	r	m	s	h	i	f	t	s	i	n	t	e	m	
p	e	r	a	t	u	r	e	s	a	n	d	w	e	a	t	h	e	r	p	a
t	t	e	r	n	s	.														

5. Save the Polar Bear



6. Decode Message

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
7	11	4	9	14	5	12	8	17	10	25	15	21	6	16	23	3	2	13	1	26	24	18	22	20	19

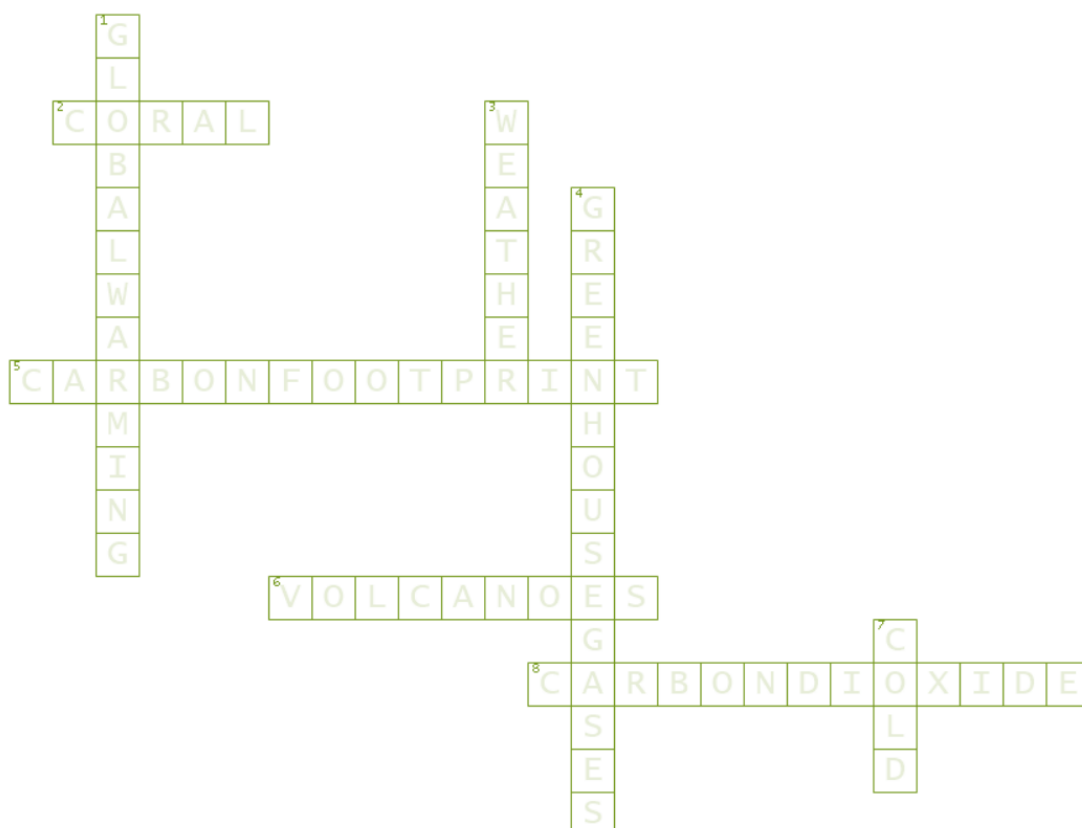
B Y W O R K I N G T O G E T H E R , W E C A N
 C R E A T E A M O R E S U S T A I N A B L E
 F U T U R E F O R O U R S E L V E S A N D F O R
 G E N E R A T I O N S T O C O M E .

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7. Crypto list - 2

S	W	E	K	J	I	L	Z	T	M	N	O	C	R	X	B	Y	G	U	D	A	P	F	H	V	Q
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

8. Crosswords



9. Unscramble the message in tiles

L	e	t	'	s		w	o	r	k		t	o	g	e	t	h	e	r		t	o		m	i	t	i	g	a	t	e
c	l	i	m	a	t	e		c	h	a	n	g	e		e	f	f	e	c	t	s		a	n	d		s	a	v	e
o	u	r		p	l	a	n	e	t	,		o	u	r		f	u	t	u	r	e	.								

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10. Build the Message

G	L	O	B	A	L		W	A	R	M	I	N	G		I	S		W	A	R	N	I	N	G		U	S	
	T	O		S	T	O	P		W	A	R	M	I	N	G		T	H	E		E	A	R	T	H	.		
K	E	E	P		F	O	R	E	S	T	S		G	R	E	E	N		A	N	D		O	C	E	A	N	S
B	L	U	E		T	O		R	E	D	U	C	E		T	H	E		E	F	F	E	C	T		O	F	
G	L	O	B	A	L		W	A	R	M	I	N	G	.		O	U	R		E	A	R	T	H		I	S	
					B	U	R	N	I	N	G	;		I	F		I	T		B	U	R	N	S				
C	O	M	P	L	E	T	E	L	Y	,		N	E	V	E	R		C	O	M	E		B	A	C	K	.	





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