Climate Change

Pre-Reading

A. Warm-Up Questions

1. What does the word "climate" mean?

2. What is the temperature in your city or town today? Is this "average" for this time of year?

3. Who/what causes climate change?

B. Vocabulary Preview

Match up as many words and meanings as you can.
Check this exercise again after seeing the words in context on page 2.

_____	1. average	a)	the area where plants and animals live
_____	2. drought	b)	usual, typical
_____	3. blame *(noun)*	c)	to block movement
_____	4. trap	d)	a large variety
_____	5. gas	e)	an air-like substance that can expand but has no shape or volume (e.g., CO_2)
_____	6. habitat	f)	to make necessary changes
_____	7. diversity	g)	a lack of rainfall, extreme dryness in the climate
_____	8. adapt	h)	the responsibility for a bad thing that happened

Reading

CLIMATE CHANGE

1. Many people agree that the earth is in serious trouble due to climate change. Around the world, **average** temperatures are higher now than they were 50 years ago. Extreme weather events such as hurricanes, **droughts**, wildfires, and floods are more common too. According to scientists, much of the **blame** falls on humans.

2. Global warming occurs when the earth's atmosphere **traps** the sun's heat and blocks it from going to space. This is called "the greenhouse effect." Many types of **gases**, including carbon dioxide (CO_2) and methane, cause this blockage. Do you buy furniture, eat meat, or drive to school or work? All of these everyday activities contribute to the greenhouse effect.

3. One of the regions showing the early effects of climate change is the Arctic. Higher temperatures result in warming oceans. Much of the sea ice in the Arctic is melting. The decrease in sea ice is causing Arctic animals to lose their **habitat**. As environments change, plants and animals die off. What will this loss in **diversity** mean for the earth?

4. Climate change is happening whether we like it or not. Many scientists believe it is impossible for us to undo the damage. There are many things we can and must do, however, to prevent further harm. We must also learn how to **adapt** to our warming planet. How much time do humans have left? When will we stop *playing the blame game*?

> **Note**
>
> The word "blame" can be both a *verb* and a *noun*.
>
> • I took all the blame. *(noun)*
> • Don't blame me! *(verb)*

> **Playing the Blame Game**
>
> This expression means that everyone blames someone else for a problem. Let's think about climate change. Here are some people who blame others for climate change:
>
> • Youth blame politicians.
> • Politicians blame the media.
> • The media blames consumers.
> • Scientists blame all humans.
>
> How does playing the blame game hurt the planet?

Comprehension

A. Questions

Discuss these questions in pairs and write the answers in your notebook.

1. What is different about the earth's climate now compared to 50 years ago?
2. Define "the greenhouse effect" in your own words.
3. Why does the reading mention meat?
4. How does melting sea ice in the Arctic affect the whole world?
5. How does the reading end?

B. Sorting

Look at the topics. Which paragraph in the reading
does each one belong to?

_____   A.   Humans need to react and adapt to climate change.

_____   B.   Human activity contributes to the greenhouse effect.

_____   C.   Look at the Arctic to see the effects of climate change.

_____   D.   Climate is changing around the world.

Movement Break

Homophones are words that sound the same but have different meanings and/or spelling (e.g., *whether* and *weather*). Stand up and practice this rhyme with your class. Think of an action for each line.

WHETHER OR WEATHER?

Whether the weather be fine,

Whether the weather be not.

Whether the weather be cold,

Whether the weather be hot.

We'll weather the weather,

Whatever the weather.

Whether we like it or not.

Vocabulary Review

A. Word Forms

Circle the correct word to complete each sentence.

1. Don't put the _____ on me. I always take the bus.

   a) average
   b) blame
   c) trouble

2. _____ loss occurred because of the wildfires.

   a) Habitat
   b) Ocean
   c) Gas

3. Animals will _____ to their surroundings.

   a) adept
   b) adapt
   c) adopt

4. Warmer oceans cause a loss in plant _____ .

   a) diverse
   b) diversity
   c) diversion

5. The _____ caused the swamps to dry up.

   a) drought
   b) hurricane
   c) flood

6. Methane is a type of greenhouse _____ .

   a) gassed
   b) gas
   c) gases

B. Opposites

Circle the word that means the **opposite** of each word from the reading.

1. trap

   a) block
   b) release
   c) fix

2. diversity

   a) difference
   b) similarity
   c) troublesome

3. harm

   a) help
   b) ignore
   c) damage

4. drought

   a) desert
   b) hurricane
   c) flood

5. melt

   a) increase
   b) decrease
   c) freeze

6. loss

   a) death
   b) lost
   c) increase

Grammar Review

MANY & MUCH

A. Quantifiers

A **quantifier** is a word that comes before a **noun** (a person, place, or thing). It shows the **quantity** (amount) of that noun.

Quantifiers have no specific amounts attached to them. Two common quantifiers that are commonly confused are *many* and *much*.

Read the chart. Then go back to the reading and circle all of the instances of *many* and *much*.

Quantifier	Many	Much
Meaning	a lot, a large number	a lot, a large amount
When to Use	• before **plural, count nouns** • in affirmative (positive) sentences, negative sentences, and questions	• before **non-count nouns** • in negative sentences and questions
Examples	• The earth has many problems. • We don't get many hurricanes here. • How many business trips do you take each year?	• The mayor wasn't much help. • How much gas do you use in a week? • How much is the veggie burger? *(= how much money?)*

B. Practice

Fill in the blanks using *many* or *much*.

1. _____ rain
2. _____ animals
3. _____ time
4. _____ methane gas
5. _____ plants

6. _____ CO_2
7. _____ food
8. _____ ice
9. _____ hurricanes
10. _____ oceans

Discussion

1. Identify the extreme weather events from the reading. Have you experienced any of these in your region?

2. Why do politicians and scientists often disagree about climate change?

3. What do you know about Greta Thunberg? Share you knowledge with your classmates.

4. Why is climate change such an important issue for today's youth?

Class Survey

Walk around the class and ask your classmates the
questions in the chart. Write their answers in the blank boxes.

What can schools do to prevent climate change?	What can businesses do to prevent climate change?	What do you already do to prevent climate change?

Listening

Fill in the blanks as you listen to the recording.

CLIMATE CHANGE

1. Many people agree that the earth is in serious trouble due to climate change. Around the world, __ __ __ __ __ __ __ temperatures are higher now than they were 50 years ago. Extreme weather events such as hurricanes, droughts, wildfires, and floods are more common too. According to scientists, much of the __ __ __ __ __ falls on humans.

2. Global warming occurs when the earth's atmosphere __ __ __ __ __ the sun's heat and blocks it from going to space. This is called "the greenhouse effect." Many types of __ __ __ __ __ , including carbon dioxide (CO2) and methane, cause this blockage. Do you buy furniture, eat meat, or drive to school or work? All of these everyday activities contribute to the greenhouse __ __ __ __ __ __ .

3. One of the regions showing the early effects of climate change is the Arctic. Higher temperatures result in warming oceans. Much of the sea ice in the Arctic is __ __ __ __ __ __ __ . The decrease in sea ice is causing Arctic animals to lose their __ __ __ __ __ __ __ . As environments change, plants and animals die off. What will this loss in __ __ __ __ __ __ __ __ __ mean for the earth?

4. Climate change is happening whether we like it or not. Many scientists believe it is impossible for us to undo the __ __ __ __ __ __ . There are many things we can and must do, however, to prevent further harm. We must also learn how to __ __ __ __ __ to our warming planet. How much time do humans have left? When will we stop *playing the blame game*?

Answer Key

LESSON DESCRIPTION:

Students read about and discuss climate change. They review the quantifiers *many* and *much* and survey their classmates on what can be done to prevent further climate change.

TEACHING TIPS:

See our Discussion Starters Teaching Guide (https://esllibrary.com/courses/72/lessons/) for a variety of ways to use the reading.

LEVEL: Low Int

TIME: 1.5–2 hours

TAGS: discussion, climate change, environment, earth, quantifier, many, much, count noun, non-count noun, homophone

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Pre-Reading

A. WARM-UP QUESTIONS

Have students work in small groups or as a class.

B. VOCABULARY PREVIEW

1. b
2. g
3. h
4. c
5. e
6. a
7. d
8. f

Reading (and/or Listening)

Read individually, in small groups, or as a class. You can also play the listening as your students read along. A gap-fill version of the reading is available on page 7. Help your students with vocabulary and expressions that they are unfamiliar with. Discuss the expression "the blame game" and talk about why playing the blame game on the subject of climate change is bad for the planet (e.g., we're running out of time to take action).

Comprehension

A. QUESTIONS

1. Average temperatures are higher now. Extreme weather events are more common.
2. Gases in the earth's atmosphere (often due to human activity) trap heat from going to space.
3. The reading mentions meat because raising cattle contributes to the greenhouse effect.
4. The melting sea ice causes loss in habitat. This leads to loss of diversity in the earth's species.
5. The reading ends by asking the reader to think about how we waste time blaming others rather than making changes to solve the problem.

B. SORTING

A. 4   B. 2   C. 3   D. 1

(continued on the next page…)

Answer Key cont.

Vocabulary Review

A. WORD FORMS

1. b   2. a   3. b   4. b   5. a   6. b

B. OPPOSITES

1. b   2. b   3. a   4. c   5. c   6. c

Grammar Review

A. QUANTIFIERS

Go over the grammar notes and chart on the quantifiers *many* and *much*. Challenge students to find these quantifiers in the reading.

B. PRACTICE

1. much
2. many
3. much
4. much
5. many
6. much
7. much
8. much
9. many
10. many

For further grammar practice, try these related lessons:

Quantifiers — Many and Much:

https://esllibrary.com/courses/88/lessons/2249

Count and Non-Count Nouns:

https://esllibrary.com/courses/88/lessons/1613

Discussion

Answers will vary.
Can be done individually or in small groups or pairs.

Class Survey

Answers will vary.

Listening

1. average, blame
2. traps, gases, effect
3. melting, habitat, diversity
4. damage, adapt

SPELLING NOTE:

This lesson shows the American spelling of the word *Practice.* Most other English-speaking countries spell this word this way: *Practise* (when used as a verb; *Practice* when use as a noun). Make it a challenge for your students to find this word in the lesson and see if they know the alternate spelling.