

Unit 7: The Inconvenient Truth of Climate Change

Climate Crossroads: Choosing Our Global Future

Keywords

conclude	massive	pace	predict	significant
stem	substantial	tackle	thus	voter

Chapter 1: Understanding the Big Problem

Our Earth is facing a huge challenge known as climate change. This term refers to the way our Earth’s weather patterns are quickly changing. One of the most noticeable changes is the rising temperature across the Earth. This warming effect is causing a series of issues for the environment, some of which are quite serious.

Researchers **conclude** that human activities are a major cause of this climate change. Using their wide knowledge and research, researchers can **predict**, or make guesses, about what might happen in the future. Their predictions are based on data and evidence, and they often turn out to be right. These researchers warn us that if we don’t take action now, the consequences will be **massive**, in other words, very large and serious.

The **pace** of climate change, which is the speed at which these changes are happening, is very fast. It’s not just a small shift in weather patterns; it’s a big change that’s affecting the entire world. This quick change is worrying to many people, including those who study the environment.

Climate change is not just about the temperature getting warmer or the ice melting. It affects everything—from the smallest plants to the largest seas. It affects the way we live, the food we eat, and even the air we breathe. It’s a complex problem with many causes and effects.

The road to understanding and **tackling** climate change is a **substantial** one. It’s a road that requires the effort and attention of everyone. From the smallest individual actions to the largest governmental policies, every step counts. Understanding climate change is the first step in fighting against it. With knowledge, we can make informed decisions and take action. As we move forward, keep in mind the power of knowledge and the importance of taking action. Together, we can make a difference in the health and future of our world.

Chapter 2: The Alarming Speed of Change

Our climate is changing very fast, which is worrying. The **pace**, or speed, of climate change is quicker than many people expect. It’s not something that’s happening slowly over hundreds of years; it’s changing right now, during our lives. Because it’s changing so fast, we need to do something fast too.

The ice at the North and South Poles is melting quicker than before. This isn’t just bad for animals like bears and penguins; it’s a **significant** problem for everyone. When this ice melts, it makes the sea level go up, and this can cause the sea to cover the land.

To stop climate change, we have to **tackle**, or handle, the main reasons it’s happening. It might seem hard to **tackle** such a big problem, but we can do it. It takes work from everyone, from normal people to whole countries. **Thus**, dealing with climate change is not only for researchers or leaders. It’s something we all can help with. As **voters**, we can choose leaders who care about the environment. They can make laws that really help stop climate change.

We can also change how we live every day. Things like riding buses, saving power, and recycling help a lot when lots of us do them. These things may look small, but they can help slow down climate change if everyone does them.

To **conclude**, the fast **pace** of climate change means we all should act. If we learn about why it's happening and what it does, we can start to **tackle** this big problem. Every one of us has a part to play, as a **voter**, a buyer, or a community member. If we work together, our actions can make a big difference and help our Earth be a better place for the future.

Chapter 3: The Root Causes of Climate Change

One big reason for climate change **stems** from all the gases we're putting into the air that hold the sun's heat. This makes the Earth get hotter. These gases are called 'greenhouse gases' because they work like a greenhouse that keeps plants warm. A lot of these gases come from burning things like coal, oil, and gas to make energy.

Cutting down lots of trees is another reason for climate change. Trees are great because they take in carbon dioxide (CO₂), a kind of greenhouse gas, from the air. When we cut trees down, we lose trees that take in CO₂, and cutting them also puts CO₂ into the air. This makes cutting down trees a big problem for climate change.

Factories and farms can make climate change worse, too. Factories let out a lot of greenhouse gases, and some ways of farming make methane, which is another strong greenhouse gas. Cars and other ways we get around also add to the problem because they let out gases.

To prevent these things from making climate change worse, we have to change how we make and use energy. If we use energy from the sun and wind, we won't make so many greenhouse gases. Making our homes, factories, and cars better at using energy can help a lot, too. But it's not just about making less gas. We also need to keep and grow more forests. Trees can catch a lot of carbon dioxide from the air. Keeping forests healthy is really important for controlling greenhouse gases.

Thus, we can see there are many different things causing climate change. But if we understand these things, we can figure out how to **tackle** them. By dealing with each cause, we can make a big change in stopping climate change.

Chapter 4: Combating Climate Change

Fighting climate change is difficult because it has lots of different causes. But, there are also lots of ways to fight it. A big thing we can do is reduce the greenhouse gases we let out. We can do this by using cleaner energy. Instead of using things like oil, we can use energy from the sun, wind, and water. These don't put out greenhouse gases and are better for our world.

Another step is to use energy in a better way. That means doing the same things with less energy. Innovations in green technology are helping with our fight against climate change, offering new hope for a sustainable future. Around the world, scientists and engineers are developing renewable energy sources, such as solar panels and wind turbines, that generate electricity without emitting greenhouse gases. Electric vehicles (EVs) are becoming more common on our roads, powered by clean energy instead of fossil fuels, significantly reducing air pollution. In agriculture, sustainable practices and technologies are being adopted to minimize water usage, enhance soil health, and decrease carbon emissions. LED lights don't use as much energy as old lights but give you the same amount of light. These innovations not only help in reducing the impact of climate change but also pave the way for a greener economy. By investing in and adopting green technologies, we can significantly lower our carbon footprint, protect the environment, and ensure a healthier planet for future generations.

We can also change how we live to **tackle** climate change. If we recycle, waste less, and pick products that don't harm the environment, we help a lot. Recycling things like paper and plastic means we don't need to cut down as many trees or make new plastic. This cuts down on greenhouse gases and saves resources. If we keep our forests safe and plant more trees, the Earth can take up more greenhouse gases.

Governments and companies need to do their part too. Governments can make rules that reduce greenhouse gases and support clean energy. Companies can use greener ways to do their business and make technology that's not bad for the environment.

Chapter 5: The Power of People in Combating Climate Change

In the fight against climate change, each person is really important. Every single one of us can help, and when we all work together, we can make a big difference. Voting is one strong way we can help. When it's time to vote, we can pick leaders who care about the Earth and want to stop climate change. Every **voter** can help choose a future with leaders who are ready to do something about this big problem.

We can also help by doing things in a different way every day. If we use less power, recycle, and take the bus instead of driving alone, it really adds up. We can use less electricity by turning off lights when we leave a room. Walking, biking, or using public transportation instead of driving can also make a big difference. Eating more fruits and vegetables and less meat can reduce the carbon dioxide from farming animals. Choosing to reuse things and recycling waste instead of throwing it away helps too. Every small change in how we live our daily lives adds up. If everyone makes some of these changes, it can have a big impact on reducing the harm to our planet. These little changes in how we live can cut down the greenhouse gases we make.

Learning and talking about climate change is another good way to help. Knowing more and telling others helps everyone understand what's happening and what we can do. When we know more, we can make better choices and encourage others to act too. People in the same area can do a lot too. If we start things like community gardens, share rides, or set up places to recycle together, it can do a lot of good. When a whole community works together, it can get more people to join in.

Customers and businesses can help each other to **tackle** climate change. If we buy things from companies that don't hurt the environment, it can make more companies want to be greener. This can lead to bigger changes in how things are made and sold.

We can also support groups that work to protect the environment. These groups are made up of people called climate change activists. They do things like organize marches, talk to leaders, and use social media to share information. Activists help everyone understand how serious climate change is. They also push for changes that can protect the environment. This can mean asking companies to pollute less or governments to make new laws that help the Earth. Thanks to these activists, more people are learning about climate change and starting to act. When lots of people work together, they can make a big difference. Giving them money or volunteering can help them do more.

To **conclude**, stopping climate change is a job for all of us, not just experts or leaders. From what we buy to how we live, everything we do matters. By taking care of how we affect the Earth and working with others, we can face climate change and keep our Earth safe for the future.

Questions

1. What is a major cause of climate change according to researchers?
 - A) Human activities
 - B) Natural disasters
 - C) Solar flares
 - D) Alien interference
2. What does the term “pace” refer to in the context of climate change?
 - A) The variety of climate changes
 - B) The speed at which climate changes are happening
 - C) The direction of climate changes
 - D) The duration of climate changes
3. What is a significant consequence of polar ice melting?
 - A) Increased landmass
 - B) Lower sea levels
 - C) More polar animals
 - D) Rise in sea levels
4. What is necessary to stop climate change?
 - A) Increasing the use of fossil fuels
 - B) Ignoring environmental policies
 - C) Tackling its main causes
 - D) Reducing educational efforts
5. What does “substantial” mean in the context of tackling climate change?
 - A) Insignificant
 - B) Small
 - C) Quick and easy
 - D) Large and significant
6. Which of the following is a greenhouse gas?
 - A) Oxygen
 - B) Nitrogen
 - C) Carbon dioxide
 - D) Hydrogen
7. What role do trees play in climate change?
 - A) They increase greenhouse gases.
 - B) They have no impact on climate change.
 - C) They take up carbon dioxide.
 - D) They produce methane.
8. What is an effective way to reduce greenhouse gases?
 - A) Using cleaner energy sources
 - B) Cutting down more trees
 - C) Increasing factory emissions
 - D) Using more fossil fuels
9. What is a key factor in fighting climate change?
 - A) The actions of a few
 - B) Waiting for natural solutions
 - C) Reliance on technology only
 - D) The power of people working together

10. What role do governments and companies play in combating climate change?
- A) They have no impact.
 - B) They can make rules and adopt greener practices.
 - C) They should increase pollution.
 - D) They should focus only on profits.

Vocabulary Review

conclude: to reach a decision or form an opinion after considering all the evidence
Example: *Researchers **conclude** that human activities are a major cause of this climate change.* (Chapter 1)

massive: very large or heavy
Example: *These researchers warn us that if we don't take action now, the consequences will be **massive**, in other words, very large and serious.* (Chapter 1)

pace: the speed at which something happens
Example: *The **pace** of climate change, which is the speed at which these changes are happening, is very fast.* (Chapter 1)

predict: to say what will happen in the future, based on information or knowledge
Example: *Using their wide knowledge and research, researchers can **predict**, or make guesses, about what might happen in the future.* (Chapter 1)

significant: important; of consequence
Example: *This isn't just bad for animals like bears and penguins; it's a **significant** problem for everyone.* (Chapter 2)

stem: to develop or come from
Example: *One big reason for climate change **stems** from all the gases we're putting into the air that hold the sun's heat.* (Chapter 3)

substantial: large in amount, size, or importance
Example: *The road to understanding and tackling climate change is a **substantial** one.* (Chapter 1)

tackle: to confront or take on a challenge
Example: *To stop climate change, we have to **tackle**, or handle, the main reasons it's happening.* (Chapter 2)

thus: as a result or consequence
Example: ***Thus**, dealing with climate change is not only for researchers or leaders.* (Chapter 2)

voter: a person who votes or has the right to vote in an election
Example: *As **voters**, we can choose leaders who care about the environment.* (Chapter 2)