

# THE ENVIRONMENT



## PRE-READING TASKS

1. What commemorative days can you name (e.g. 14<sup>th</sup> February is known as Valentine's Day)?
2. Google "Earth Day" and answer the following questions:
  - a. When is Earth Day?
  - b. What do you know about the genesis of Earth Day?
  - c. What is its goal?

## EARTH DAY



In the beginning God created Man, which, according to all the latest birth control statistics, was a big mistake.

And Man said, "Let there be light," and there was light, and Man called this light fire, and at first it

was used to warm him and let him cook his food and protect him from the wild animals. But Man discovered fire could be used to burn down a forest or burn someone else's hut or tree house or a witch at the stake<sup>1</sup> or soft coal or oil, which made the air turn dark gray and black. And this made Man start to cough and his eyes to run and his sinuses<sup>2</sup> to hurt. And Man finally said, "God, what are You doing to me?"

And after God made the rivers and lakes and streams and oceans, Man dumped all the refuse from the earth into the waters, and it killed the fish and the plants and even the oxygen, and the waters turned muddy and brown and smelled, and no one could drink from them or bathe in them or even sail on them. And finally Man shook his fist<sup>3</sup> at the heavens and said, "For God's sake, knock it off<sup>4</sup>."

<sup>1</sup> **a witch at the stake**: a witch ("Hexe", «sorcière») was bound to a stake ("post") when burnt

<sup>2</sup> **sinuses** /,sainEsiz/: "Nasennebenhöhle", «sinus»

<sup>3</sup> **fist**: "Faust", «poing»

<sup>4</sup> **knock it off**: stop it

And Man created the wheel<sup>5</sup>, and this was good because Man no longer had to walk through the forests or up and down the mountains or to school. And then Man created the engine which turned the wheels, and Man no longer had to depend on animals to pull him on the roads and paths. And Man called the new creature automobile, and it changed the face of the earth, for Man was forced to cut down the trees and flowers and pour<sup>6</sup> concrete<sup>7</sup> on the land to accommodate the automobile, and drill<sup>8</sup> into the earth and the sea to fuel it, and sometimes the ocean turned black and the air turned brown, and as the automobile multiplied there was less space to park it, and it was unable to move any faster than a horse, and Man behind the wheel screamed, "Good God, am I ever going to get home?"

And Man created the plastic bag and the tin and aluminum can and the cellophane wrapper and the paper plate and the disposable bottle, and this was good because Man could then take his automobile and buy his food all in one place and he could save that which was good to eat in the refrigerator and throw away that which had no further use. And pretty soon the earth was covered with plastic bags and aluminum cans and paper plates and disposable bottles, and there was nowhere left to sit down or to walk. And Man shook his head and cried, "Look at all this God-awful litter."

And Man learned to split the atom, and then he took what he learned and he put it in a bomb to defend himself from other men, and he set off the bomb to see if it would work, and it did. And Man was very pleased with himself because he was safe from other men, and this was good. But other men learned to split the atom, too, and they put it in their bombs, and so Man had to make bigger bombs, and the other men had to make bigger bombs, and the explosions put radioactive material in the air which got into Man's food and water and made that which was nourishing<sup>9</sup> inedible<sup>10</sup> and that which would

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<sup>5</sup> **wheel**: "Rad", «roue»

<sup>6</sup> **pour**: "schütten", «verser»

<sup>7</sup> **concrete**: "Beton"

<sup>8</sup> **drill**: "bohren", «forer»

<sup>9</sup> **nourishing**: nourishing food makes you healthy ("nahrhaft", «nourissant, nutritif»)

<sup>10</sup> **inedible**: not suitable for eating

quench<sup>11</sup> thirst undrinkable. And again Man became very frightened and said, "God help us all."

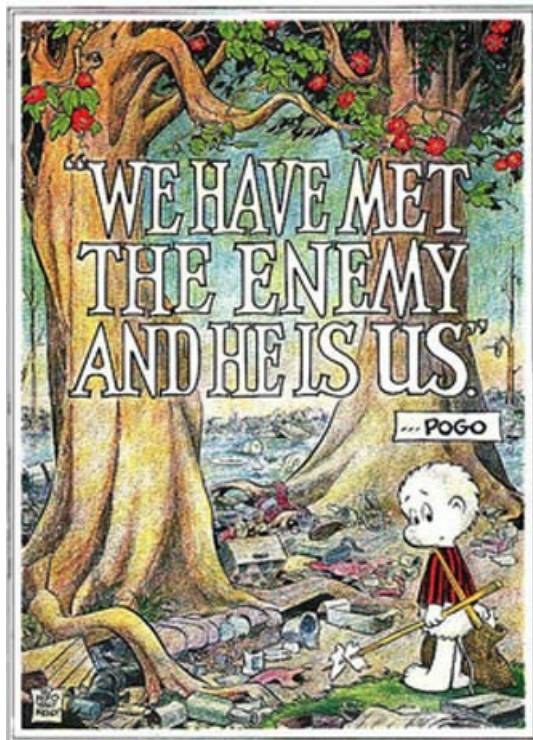
But by this time God had had it, and He sent down word to His loyal servant, Ralph Nader: "Now, Ralph, the first thing I want you to do is build an ark<sup>12</sup> and then ..."

From *Down the Seine and Up the Potomac* by Art Buchwald (1925---2007)

## COMPREHENSION

1. Explain the opening sentence, and say what the tone is!
2. Which role – according to Art Buchwald – does Man play in the process of creation?
3. How does Man comment on the various stages of creation?
4. Why do you think is God fed up with Man at the end of the text?
5. What is the message of the text?
6. Do you agree with Art Buchwald that the creative force of Man will one day destroy the earth?
7. In the text "Earth Day" Man got very frightened. What about you? Are you frightened of mankind's future?
8. Find out about Ralph Nader, and comment on the final sentence of Art Buchwald's "Earth Day"!

## ESSAY TOPICS



1. "Why should man expect his prayer for mercy to be heard by what is above him when he shows no mercy to what is under him?" (Pierre Troubetzkoy, 1864-1936). – Discuss!
2. "Man must feel the earth to know himself and recognize his values.... God made life simple. It is man who complicates it." (Charles A. Lindbergh, 1902-1974). – Discuss!
3. "The struggle to save the global environment is in one way much more difficult than the struggle to vanquish Hitler, for this time the war is with ourselves. We are the enemy, just as we have only ourselves as allies." (Al Gore, \*1948- ). – Discuss!

<sup>11</sup> **quench your thirst:** to drink liquid so that you stop being thirsty

<sup>12</sup> **ark:** "Arche"

## PROJECT

### Read Genesis 1:1-31

**1** In the beginning God created the heaven and the earth.

**2** And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters.

**3** And God said, Let there be light: and there was light.

**4** And God saw the light, that it was good: and God divided the light from the darkness.

**5** And God called the light Day, and the darkness he called Night. And the evening and the morning were the first day.

**6** And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters.

**7** And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament: and it was so.

**8** And God called the firmament Heaven. And the evening and the morning were the second day.

**9** And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear: and it was so.

**10** And God called the dry land Earth; and the gathering together of the waters called he Seas: and God saw that it was good.

**11** And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself, upon the earth: and it was so.

**12** And the earth brought forth grass, and herb yielding seed after his kind, and the tree yielding fruit, whose seed was in itself, after his kind: and God saw that it was good.

**13** And the evening and the morning were the third day.

**14** And God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years:

**15** And let them be for lights in the firmament of the heaven to give light upon the earth: and it was so.

**16** And God made two great lights; the greater light to rule the day, and the lesser light to rule the night: he made the stars also.

**17** And God set them in the firmament of the heaven to give light upon the earth,

**18** And to rule over the day and over the night, and to divide the light from the darkness: and God saw that it was good.

**19** And the evening and the morning were the fourth day.

**20** And God said, Let the waters bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth in the open firmament of heaven.

**21** And God created great whales, and every living creature that moveth, which the waters brought forth abundantly, after their kind, and every winged fowl after his kind: and God saw that it was good.

**22** And God blessed them, saying, Be fruitful, and multiply, and fill the waters in the seas, and let fowl multiply in the earth.

**23** And the evening and the morning were the fifth day.

**24** And God said, Let the earth bring forth the living creature after his kind, cattle, and creeping thing, and beast of the earth after his kind: and it was so.

**25** And God made the beast of the earth after his kind, and cattle after their kind, and every thing that creepeth upon the earth after his kind: and God saw that it was good.

**26** And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.

**27** So God created man in his own image, in the image of God created he him; male and female created he them.

**28** And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.

**29** And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat.

**30** And to every beast of the earth, and to every fowl of the air, and to every thing that creepeth upon the earth, wherein there is life, I have given every green herb for meat: and it was so.

**31** And God saw every thing that he had made, and, behold, it was very good. And the evening and the morning were the sixth day.

1. How does the first creation narrative present the natural world?
2. Humankind is given the command to “rule over” living creatures – how could this be misinterpreted? How should it be interpreted?

## INTERESTING LINK

<http://earthlings.com>

### **WARNING!!**

If you can watch the entire hour and a half of this movie and not have to turn your head away once, you either have nerves of steel, a heart of stone, or a complete lack of eyeballs. This is a tour de force of heart-wrenching, sometimes gruesome clips showing how humans use and abuse animals in many prime areas of our lives—from food and clothing to medical research to entertainment. But it's not just a stream of disturbing visuals—the material is all woven together with an excellent narration that provides context and offers logical objections. *Earthlings* is masterful in its comprehensive, clear-headed presentation of man's domination and mistreatment of animals. We would never let anyone treat our pets this way, why do we tolerate such treatment of other animals?

## PRE-READING TASK

Describe the cartoon below, and say what the moral is!



## THE HUMAN BEING AND THE DINOSAUR

Ages ago in a wasteland of time and a wilderness of space, Man, in upper case<sup>13</sup>, and dinosaur, in lower, first came face to face. They stood like stones for a long while, wary<sup>14</sup> and watchful, taking each other in. Something told the dinosaur that he beheld<sup>15</sup> before him the coming glory and terror of the world, and in the still air of the young planet he seemed to catch the faint smell of his own inevitable doom.

“Greetings, stupid,” said Man. “Behold in me the artfully articulated architect of the future, the chosen species, the certain survivor, the indestructible one, the monarch of all you survey, and of all that everyone else surveys, for that matter. On the other hand, you are, curiously enough, for all your size, a member of the inconsequent ephemera<sup>16</sup>. You are one of God’s moderately amusing early experiments, a frail<sup>17</sup> footnote to natural history, a

<sup>13</sup> **upper case**: “Großschreibung”, «majuscule»

<sup>14</sup> **wary**: if you are wary of someone or something, you do not trust them completely

<sup>15</sup> **to behold** [beheld / beheld]: to see something

<sup>16</sup> **ephemera**: the type of objects which, when they were produced, were not intended to last a long time

<sup>17</sup> **frail**: not strong or healthy

contraption<sup>18</sup> in a museum for future Man to marvel at, an excellent example of Jehovah<sup>19</sup>'s jejune<sup>20</sup> juvenilia<sup>21</sup>."

The dinosaur sighed with a sound like thunder.

"Perpetuating<sup>22</sup> your species," Man continued, "would be foolish and futile<sup>23</sup>."

"The missing link is not lost," said the dinosaur sorrowfully. "It's hiding."

Man paid the doomed dinosaur no mind. "If there were no Man, it would be necessary to create one," said Man, "for God moves in mysterious, but inefficient<sup>24</sup>, ways, and He needs help. Man will go on forever, but you will be one with the mammoth and the mastodon<sup>25</sup>, for monstrosity is the behemoth<sup>26</sup> of extinction."

"There are worse things than being extinct," said the dinosaur sourly, "and one of them is being you."

Man strutted a little pace and flexed his muscles. "You cannot even commit murder," he said, "for murder requires a mind. You are capable only of dinoslaughter. You and your ilk<sup>27</sup> are incapable of devising increasingly effective methods of destroying your own species and, at the same time, increasingly miraculous methods of keeping it extant<sup>28</sup>. You will never live to know the two-party system<sup>29</sup>, the multi-party system<sup>30</sup>, and the one-party system<sup>31</sup>. You will be gone long before I have made this the best of all possible worlds, no matter how possible all other worlds may be. In your highest state of evolution you could not develop the brain cells to prove

<sup>18</sup> **contraption**: a machine or object that looks strange or complicated ("Apparat", «machine, truc»)

<sup>19</sup> **Jehovah**: the proper name of the God of Israel in the Hebrew Bible

<sup>20</sup> **jejune**: very simple or childish

<sup>21</sup> **juvenilia**: a term applied to literary, musical or artistic works produced by an author during his or her youth

<sup>22</sup> **to perpetuate**: to make something continue, especially something bad

<sup>23</sup> **futile**: certain not to have a successful effect or result ("vergeblich", «vain»)

<sup>24</sup> **inefficient**: inefficient people or things waste time, money, or effort, and do not achieve as much as they should

<sup>25</sup> **mastadons**: large mammal species of the extinct genus Mammut that inhabited North and Central America

<sup>26</sup> **behemoth**: a mythological beast mentioned in Job 40:15-24. Metaphorically, the name has come to be used for any extremely large or powerful entity

<sup>27</sup> **ilk**: type, class, sort

<sup>28</sup> **extant**: describes something very old that is still existing

<sup>29</sup> **two-party system**: a political system where two major parties dominate voting in nearly all elections at every level of government and, as a result, all or nearly all elected offices are members of one of the two major parties

<sup>30</sup> **multi-party system**: a political system in which multiple parties have the capacity to gain control of government offices, separately or in coalition

<sup>31</sup> **one-party system**: a political system in which a single party forms the government and no other parties are permitted to run candidates for election

innocent men guilty, even after their acquittal<sup>32</sup>. You are all wrong in the crotch<sup>33</sup>, and in the cranium<sup>34</sup>, and in the cortex<sup>35</sup>. But I have wasted enough time on you. I must use these fingers which God gave me, and now probably wishes He had kept for Himself, to begin writing those noble volumes about Me which will one day run to several hundred billion items, many of them about war, death, conquest, decline<sup>36</sup>, fall, blood, sweat, tears, threats, warnings, boasts, hopelessness, hell, heels, and whores. There will be little enough about you and your ilk and your kith and your kin<sup>37</sup>, for after all, who were you and your ilk and your kith and your kin? Good day and goodbye,” said Man in conclusion. “I shall see to it that your species receives a decent burial, with some simple ceremony.”

Man, as it turned out, was right. The dinosaur and his ilk and his kith and kin died not long after, still in lower case, but with a curious smile of satisfaction, or something of the sort, on their ephemeral faces.

Moral: *The noblest study of mankind is Man, says Man.*

From *Further Fables for our Time* by James THURBER (1894-1961)

## COMPREHENSION

1. Illustrate what Thurber may mean by qualifying Man as the “coming glory and terror of the world”.
2. What image of Man does the second paragraph convey?
3. What is Man’s attitude to the rest of creation?
4. What is Man’s attitude to God, the Creator?
5. What capacities does Man boast of?
6. How does Thurber satirize Man’s famous brain cells? What does Man’s intellect allow him to do?
7. Why did the dinosaur die out with a curious smile of satisfaction on his face?
8. What is the irony of the moral?

<sup>32</sup> **acquittal**: when a court of law decides that someone is not guilty of a crime [≠ conviction]

<sup>33</sup> **crotch**: the part of your body between the tops of your legs (“der Schritt”, «aine»)

<sup>34</sup> **cranium**: the hard bone case in animals and humans, which gives the head its shape and protects the brain (“Schädel”, «crâne»)

<sup>35</sup> **cortex**: the outer layer, especially of the brain and other organs (“Rinde von Organen”, «substance corticale»)

<sup>36</sup> **decline**: “Niedergang”, «déclin, décadence»

<sup>37</sup> **kith and kin**: people you are connected with, especially by family relationships

## ESSAY TOPICS

1. “Man is a blind, witless, low brow, anthropocentric clod who inflicts lesions upon the earth.” (Ian McHarg, 1920-2001) – Discuss!
2. “Our environmental problems originate in the hubris of imagining ourselves as the central nervous system or the brain of nature. We’re not the brain, we are a cancer on nature.” (Dave Foreman, \*1947-) – Discuss!
3. “Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselves. All things are bound together. All things connect.” (Chief Seattle, ~1780-1866) – Discuss!



## PROJECT

Make a collage of photographs illustrating the irony of the moral of Thurber's story, "The noblest study of mankind is Man, says Man".

## PRE-READING TASK

Quiz – how environmentally conscious are you?

Circle your answers and then add up your points. The more points you have, the more environmentally conscious you are.

How often do you ...	always	sometimes	never
... drink bottled water?	-1	0	+1
... unplug / disconnect your TV over night?	+1	0	-1
... take a bath (instead of a shower)?	-1	0	+1
... go to school by car?	-1	0	+1
... walk or ride a bike to school?	+1	0	-1
... recycle paper?	+1	0	-1
... recycle bottles?	+1	0	-1
... give old clothes to charity?	+1	0	-1
... eat meat?	-1	0	+1

## EARTH IN DANGER

**1** The year is 2080, and the world is a very different place. Sea levels have risen and flooded millions of homes. London, New York and many other cities are under water. The Earth has become a lot warmer, and heat waves are killing crops. People are fighting because they don't have enough food or clean water. Malaria is common in Europe, and many of the animals and plants we know have disappeared forever. This sounds like the story of a Hollywood film. But it could really happen if we keep damaging the environment.

**2** Many issues affect the environment but which ones could cause the biggest problems in the future? Claire Addison, 23, from Edinburgh, works for an organization called *Envision* in London, which teaches teens about environmental issues. "The biggest problem for our planet is climate change," Claire explains. "Greenhouse gases are causing higher temperatures around the world, which is causing ice to melt and sea levels to rise."

**3** Many people talk about factories and industry but the truth is: we all cause climate change. Lots of our favourite things – like mobile phones, televisions and computers – need energy to work. Most of this energy comes from burning fossil fuels like coal, oil and natural gas, which releases carbon dioxide (CO<sub>2</sub>), methane and other gases into the air. These greenhouse gases trap the heat from the sun in our atmosphere, which makes our world

warmer.

#### **4** We all contribute to climate change whenever we:

- travel by car, by plane or on public transport.
- take a bath or shower with hot water.
- turn on the heating.
- use electricity that comes from fossil fuels.
- buy products that need lots of energy to make and/or come from far away.

#### **5** What in the world is happening?

There are already signs that our climate is changing. “In Bangladesh there are more storms, which makes it difficult to grow crops,” says Claire. “Flooding is becoming worse, and people are dying of diseases found in the water.” Some scientists think the Earth could be six degrees warmer by 2100. That doesn’t sound like a lot, but it would have disastrous effects:

**6 Wild weather:** There could be more drought and desert in Australia and Africa, and dangerous heat waves in Europe. Or the Gulf Stream, which normally keeps Northern Europe warm, may change and make Europe a lot *colder*. This is not only bad for us – it can also badly affect animals and plants.

**Wet wet wet:** Sea levels could rise, covering low-lying areas like Bangladesh, the Netherlands and Florida. Even London and New York could be flooded.

**Death and disease:** Malaria and other tropical diseases could spread to Europe.

#### **7** Using too much?

Do you throw things away even though they’re not really broken? Do you buy more food than you can eat, and use more water than you need? Most people don’t realize how much they waste. But we’re cutting down trees faster than they can grow back, using more energy than the planet can give us and producing more rubbish than nature can deal with.

#### **8** The facts

If we keep using more than nature can give us, there’ll soon be nothing left.

**Goodbye green:** We’ve already lost two thirds of the world’s forests. Every year, we cut down 160,000 square kilometres – an area the size of England and Wales! This is also bad news for climate change because forests absorb

a lot of CO<sub>2</sub>.

**Helpless habitats:** When we cut down trees or build new things, we destroy the natural habitats of animals.

**Dirty dumps:** Our rubbish dumps pollute the air and land, and our plastic ends up in the sea. There are even rubbish dumps for old aeroplanes and ships.

## 9 You can help!

Our homes produce around 30 per cent of CO<sub>2</sub> emissions. Everyone knows we can save energy by turning off lights and using energy-efficient light bulbs. But there are lots of other simple things you can do:

- ✓ Unplug your television and laptop. They use energy even when they're turned off. Always unplug your phone charger after your phone is charged.
- ✓ Turn down the heating by one degree. This can reduce your energy use by ten per cent!
- ✓ Take a short shower instead of a bath. A bath uses about 100 litres of hot water.
- ✓ Put the lids on pots and pans when you're cooking.
- ✓ Keep your fridge full. Empty fridges need more energy to stay cool.
- ✓ Don't boil more water than you need.

## 10 How to use less!

We need to use less. "We should live in a way that leaves enough for future generations," says Claire from Envision. Recycling more and driving less are good ways to help. But try out these tips too:

- ✓ Use things for as long as possible. It takes energy to make new products.
- ✓ If your old stuff can still be used, give it to charity instead of throwing it away.
- ✓ Eat less meat! Meat production uses lots of energy, and rainforests are destroyed to make space for cattle.
- ✓ Wash fruit and vegetables in a bowl, then use that water for your plants.
- ✓ Turn off the tap while brushing your teeth. Use a normal toothbrush

instead of an electric one.

- ✓ Drink tap water instead of bottled water.
- ✓ Keep water in the fridge so you won't have to run the tap until the water gets cold.
- ✓ Take your own travel mug to the coffee shop instead of using paper cups.

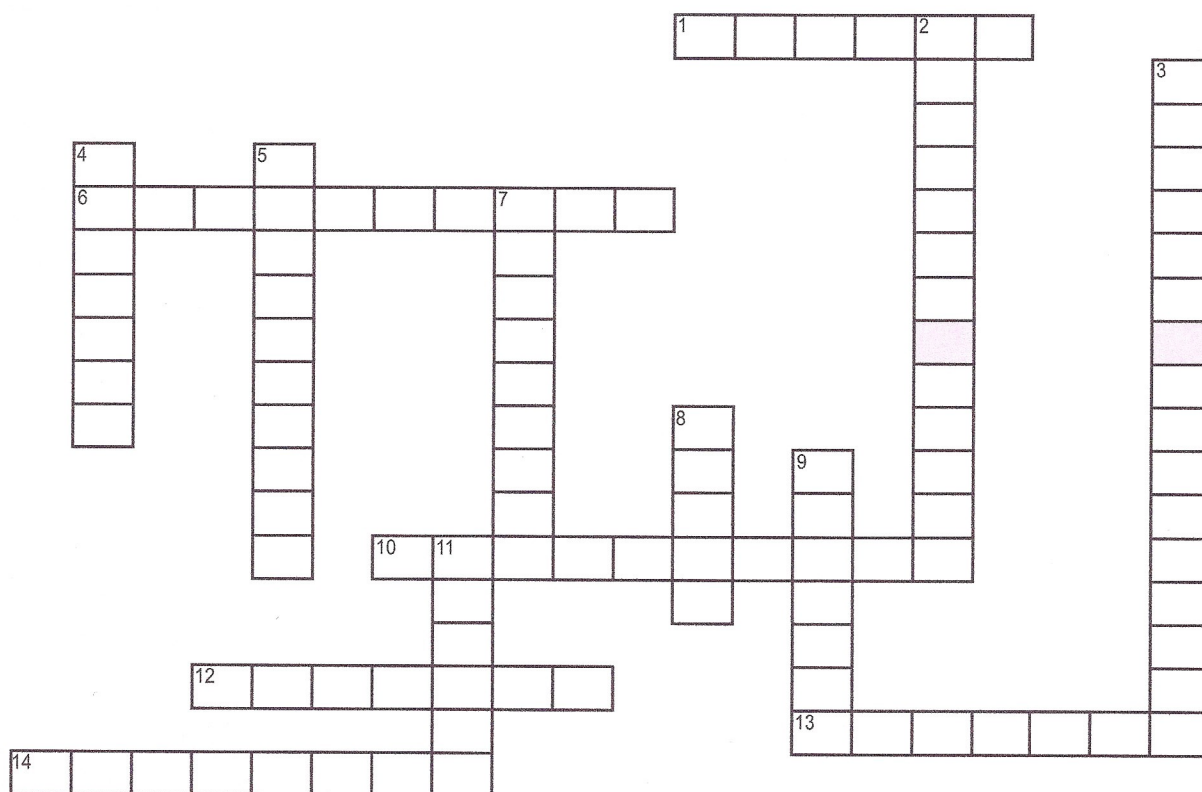
### **Population zero**

What would nature do if we disappeared and didn't use up any more resources? Without humans, plants and wild animals would take over our cities. Within five years, parks would be overgrown and plants would cover our roads and buildings. After 500 years, our cities would be covered by forest. After 1,000 years, Manhattan would look like an area of countryside. And 10,000 years after we disappeared, there would be very little to show that we had ever existed.

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SPOT ON NEWS LESSON / Earth in danger / Advanced

## Crossword – what does it mean?

Write the words from the article into the crossword. The number of letters for each word and the paragraph where the word appears are in brackets after each clue.

**Across**

1. to take in a gas, liquid or other substance (6, para 8)
6. the air round the Earth or round another planet (10, para 3)
10. causing a lot of damage or harm (10, para 5)
12. to make air, water or land too dirty and dangerous for people to use in a safe way (7, para 8)
13. a long period of time when there is little or no rain and crops die (7, para 6)
14. places that particular animals usually live in or particular plants usually grow in, for example a desert, forest or lake (8, para 8)

**Down**

2. places where large amounts of rubbish are taken, usually outside a town (7 + 5, para 8)
3. something that is \_\_\_\_\_ works well and uses the power supply (electricity, gas, oil, etc.) in the most effective way (6 + 9, para 9)
4. a serious illness caused by being bitten by a mosquito, usually in a hot country (7, para 1)
5. do something to help make something else happen, even if you don't want to (10, para 4)
7. substances, especially gases, that go into the air (9, para 9)
8. to use more of something than you need (5, para 7)
9. when land is underwater as a result of lots of rain or rising water levels (7, para 6)
11. subjects that people discuss or argue about, especially relating to the environment, politics, etc. (6, para 2)

## COMPREHENSION

1. Name three negative things that could happen if the Earth continues to get warmer.
2. What are fossil fuels, and what happens when we burn them?
3. How much warmer might the Earth's temperatures become by the end of this century and why is this a bad thing?
4. Name six things you can do to use less energy at home.
5. Why is eating meat bad for the environment?
6. What size area is cut down every year and what effect does this have on the environment and nature?

## ESSAY TOPICS

1. "The world will not be destroyed by those that do evil; but by those who watch them without doing anything." (Albert Einstein, 1879-1955). – Discuss!
2. "We cannot command Nature except by obeying Her." (Francis Bacon, 1561-1626). – Discuss!
3. "Economic advance is not the same as human progress." (John Clapham, 1873-1946). – Discuss!

## PROJECT: WEBQUEST

Our impact on nature is called our "ecological footprint". To find out what your footprint is, go to <http://independent.footprint.wwf.org.uk> Do the online test. Think about your family and the people in your house and answer the questions. Compare your family's ecological footprint with that of another student's family.

Which two companies or organizations run the website?

What other information does the website offer you?

## PRE-READING TASK

Look up the words underlined before doing the quiz.

1. Most of the trash your family throws away each day ends up getting ...

- a) Recycled
- b) Burned
- c) Landfilled
- d) Eaten

2. What material do we throw away the most?

- a) Glass
- b) Paper
- c) Aluminum
- d) Plastic

3. How long does it take Styrofoam to break down in a landfill?

- a) 10 Years
- b) 50 Years
- c) 100 Years
- d) 500 Years

4. Our waterways are polluted by...

- a) Dumping used oil on the ground
- b) Leaking underground gasoline storage<sup>38</sup> tanks
- c) Leaking of old landfills
- d) All of the above

5. Which of the following practices produces the most organic water pollution?

- a) Recreational<sup>39</sup> boating
- b) Humans bathing in the water
- c) Paper mills<sup>40</sup>
- d) Intensive livestock farming

6. Speaking of the ozone layer, what harmful product does this part of the

atmosphere filter?

- a) Greenhouse Effect
- b) Acid Rain
- c) UV light
- d) Sewage

7. What four-letter word that is a combination of smoke and fog is used to describe many forms of air pollution?

8. What is the result when industrial chemicals combine with condensing water vapor?

- a) Greenhouse Effect
- b) Acid Rain
- c) Base Rain
- d) Global Warming

9. What city is generally considered to have America's worst air pollution problem?

- a) New York
- b) Los Angeles
- c) Detroit
- d) Miami

10. In 1952 in London, four thousand people died in just a few days due to exposure to what type of pollution?

- a) Acid rain
- b) Particular matter<sup>41</sup>
- c) Radon gas
- d) Smog

11. The Great Pacific Garbage Patch was formed by a slow-moving spiral of ocean currents that became a magnet for millions of pounds of trash. What is the most common type of trash found there?

- a) Aluminum cans

<sup>38</sup> **storage**: when you put things in a safe place until they are needed

<sup>39</sup> **recreational**: activities that you do for enjoyment when you are not working

<sup>40</sup> **paper mills**: factories where paper is made

<sup>41</sup> **particular matter**: a mixture of solid particles and liquid droplets in the air

- b) Waste from boats
- c) Plastic
- d) Glass

- a) India
- b) China
- c) The United Kingdom
- d) The United States

12. What percentage of Europeans can't see a natural dark sky from their homes due to light pollution, artificial light that shines upward and outward into the sky?

- a) 99,9 percent
- b) 31 percent
- c) 54 percent
- d) 87,9 percent

14. How many human deaths per year does the World Health Organization attribute to climate change?

- a) 150,000
- b) 1,500
- c) 1,500,000
- d) 10,500

13. Which country currently emits the most greenhouse gases?

## POLLUTION

If you visit American city,  
You will find it very pretty.  
Just two things of which you must beware<sup>42</sup>  
Don't drink the water and don't breathe the air.

Pollution, pollution,  
They got smog and sewage and mud.  
Turn on your tap and get hot and cold running crud<sup>43</sup>.

See the halibuts<sup>44</sup> and the sturgeons<sup>45</sup>  
Being wiped out<sup>46</sup> by detergents<sup>47</sup>.  
Fish gotta swim and birds gotta fly,  
But they don't last long if they try.

Pollution, pollution,  
You can use the latest toothpaste,  
And then rinse your mouth with industrial waste.

Just go out for a breath of air,  
And you'll be ready for Medicare<sup>48</sup>.  
The city streets are really quite a thrill,  
If the hoods<sup>49</sup> don't get you, the monoxide will.

<sup>42</sup> **to beware:** used to warn someone to be very careful about something or someone

<sup>43</sup> **crud:** something dirty and unpleasant

<sup>44</sup> **halibut:** "Heilbutt", «flétan»

<sup>45</sup> **sturgeon:** "Stör", «esturgeon»

<sup>46</sup> **wiped out:** eliminated

<sup>47</sup> **detergent:** a liquid or powder that is used to clean things

<sup>48</sup> **Medicare:** a national social insurance program, administered by the U.S. federal government since 1965.

<sup>49</sup> **hood:** a gangster, a thug

Pollution, pollution,  
Wear a gasmask and a veil<sup>50</sup>.  
Then you can breathe, long as you don't inhale.

Lots of things there that you can drink,  
But stay away from the kitchen sink.  
Throw out your breakfast garbage, and I've got a hunch<sup>51</sup>  
That the folks downstream will drink it for lunch.  
So go to the city, see the crazy people there.  
Like lambs to the slaughter  
They're drinking the water  
And breathing the air.

From the recording "That Was the Year that Was", music and lyrics by Tom LEHRER

Watch the clip:

<http://www.youtube.com/watch?v=XCojBngA--s>

### COMPREHENSION

1. Tom Lehrer says, "Just **two** things of which you must beware" (emphasis added). Why does this come as a surprise? What other dangers are (American) cities more notorious for?
2. "Pollution" was written in 1965. To what extent have matters changed for the better or the worse?
3. Explain, "Like lambs to the slaughter".
4. Lehrer focuses on two environmental problems: air and water pollution. What other kinds of pollution are there?
5. Comment on the discrepancy between the melody and the message of the chorus!

### ESSAY TOPICS

1. "Because we don't think about future generations, they will never forget us". (Henrik Tikkanen, 1924-1984). – Discuss!
2. "I think the environment should be put in the category of our national security. Defense of our resources is just as important as defense abroad. Otherwise what is there to defend?" (Robert Redford, Yosemite National Park dedication, 1985). – Discuss!
3. "We shall continue to have a worsening ecologic crisis until we reject the Christian axiom<sup>52</sup> that nature has no reason for existence save to serve man." (Lynn White, Jr., "The Historical Roots of Our Ecologic Crisis," 1967). – Discuss!

<sup>50</sup> **veil**: "Schleier", «voile»

<sup>51</sup> **hunch**: feeling

<sup>52</sup> **axiom**: a statement or principle which is generally accepted to be true, but need not be so

## PROJECTS

Google the quotes below and answer the following questions:

- Who said them?
- In your own words, say what each quote means.
- Put these quotes into the following categories (sometimes there are more possibilities):

Activism & Taking Action	Air Pollution / Air Quality	Animal Welfare	Responsibility	Trees/ Rainforests / Deforestation
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- Choose your favourite quotations and produce posters to be hung in your classroom.

## ENVIRONMENTAL QUOTES

- “In Mexico City, Tehran, Kolkata, Bangkok, Shanghai, and hundreds of other cities, the air is no longer safe to breathe. In some cities, the air is so polluted that breathing is equivalent to smoking two packs of cigarettes per day.”
- “In the next 24 hours, deforestation will release as much CO<sub>2</sub> into the atmosphere as 8 million people flying from London to New York. Stopping the loggers<sup>53</sup> is the fastest and cheapest solution to climate change.”
- “We can judge the heart of a man by his treatment of animals.”
- “Whoever is spared personal pain must feel himself called to help in diminishing the pain of others. We must all carry our share of the misery which lies upon the world.”
- “Your descendants shall gather your fruits.”
- “There’s so much pollution in the air now that if it weren’t for our lungs there’d be no place to put it all.”
- “To know that even one life has breathed easier because you have lived, that is to have succeeded.”
- “It is our collective and individual responsibility to protect and nurture<sup>54</sup> the global family, to support its weaker members and to preserve and tend to the environment in which we all live.”
- “If man doesn’t learn to treat the oceans and the rainforest with respect, man will become extinct.”
- “The question is not, Can they reason? nor, Can they talk? but, Can they suffer?”
- “Pollution should never be the price of prosperity.”
- “You must be the change you wish to see in the world.”
- “There comes a time when one must take a position that is neither safe, nor politic, nor popular, but he must take it because conscience tells him it is right.”
- “A nation that destroys its soils<sup>55</sup> destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people.”

<sup>53</sup> **logger**: a person who cuts down trees for wood

<sup>54</sup> **to nurture**: to look after

<sup>55</sup> **soil**: the top layer of earth that plants grow in

15. "The greatness of a nation and its moral progress can be judged by the way its animals are treated."
16. "If only we can overcome cruelty, to human and animal, with love and compassion we shall stand at the threshold of a new era in human moral and spiritual evolution – and realize, at last, our most unique quality: humanity."
17. "God has cared for these trees, saved them from drought, disease, avalanches, and a thousand tempests and floods. But he cannot save them from fools."
18. "The American people have a right to air that they and their children can breathe without fear."
19. "As long as there are slaughterhouses<sup>56</sup>, there will be battlefields."
20. "Twenty years from now you will be more disappointed by the things you didn't do than by the ones you did do."
21. "Water and air, the two essential fluids on which all life depends, have become global garbage cans."
22. "Our prime purpose in this life is to help others. And if you can't help them, at least don't hurt them."
23. "When a man has pity on all living creatures then only is he noble."
24. "Even if I knew that tomorrow the world would go to pieces, I would still plant my apple tree."
25. "The diligent<sup>57</sup> farmer plants trees, of which he himself will never see the fruit."

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<sup>56</sup> **slaughterhouse**: "Schlachthaus", «abattoir»

<sup>57</sup> **diligent**: working hard with care and effort

## PRE-READING TASKS

1. Read the following quotation.

*"Only when the last tree has died and the last river has been poisoned and the last fish has been caught will we realize that we can't eat money."*

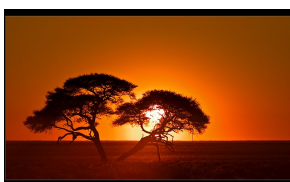
Who do you think said it?

- |                                    |                          |
|------------------------------------|--------------------------|
| a. A political leader.             | d. An African fisherman. |
| b. A member of <i>Greenpeace</i> . | e. A Greek philosopher.  |
| c. An American Indian.             | f. A French farmer       |

When do you think it was said?

- a. In the 5<sup>th</sup> century BC.  
 b. In the 19<sup>th</sup> century.  
 c. In the 20<sup>th</sup> century

2. Look at the pictures. What can you predict about Michael Jackson's "Earth Song"?



## EARTH SONG

What about sunrise

What about rain

What about all the things that you said we were to gain<sup>58</sup> ...

What about killing fields

Is there a time

What about all the things that you said was yours and mine ...

Did you ever stop to notice all the blood we've shed before

Did you ever stop to notice the crying earth, the weeping shores?

What have we done to the world

Look what we've done

What about all the peace that you pledge<sup>59</sup> your only son ...

What about flowering fields

Is there a time

What about all the dreams that you said was yours and mine ...

Did you ever stop to notice all the children dead from war

Did you ever stop to notice the crying earth, the weeping shores?

I used to dream

I used to glance beyond the stars

Now I don't know where we are

Although I know we've drifted far



<sup>58</sup> **to gain:** to get something useful or positive

<sup>59</sup> **to pledge:** to make a serious promise



Hey, what about yesterday  
 What about us  
 What about the seas  
 What about us  
 The heavens are falling down  
 What about us  
 I can't even breathe  
 What about us  
 What about the bleeding earth  
 What about us  
 Can't we feel its wounds  
 What about us  
 What about nature's worth  
 It's our planet's womb  
 What about us  
 What about animals  
 What about us  
 We've turned kingdoms to dust  
 What about us  
 What about elephants  
 What about us  
 Have we lost their trust  
 What about us  
 What about crying whales  
 What about us  
 We're ravaging<sup>60</sup> the seas  
 What about us  
 What about forest trails  
 Burnt despite our pleas  
 What about us  
 What about the holy land  
 What about us  
 Torn apart by creed<sup>61</sup>  
 What about us  
 What about the common man  
 What about us  
 Can't we set him free  
 What about us  
 What about children dying  
 What about us  
 Can't you hear them cry  
 What about us  
 Where did we go wrong  
 Someone tell me why  
 What about us  
 What about babies

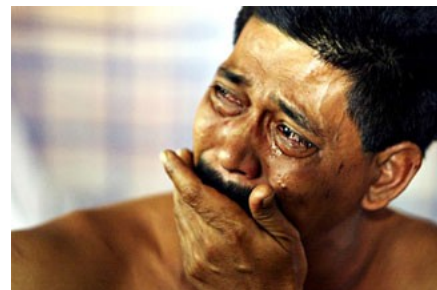


<sup>60</sup> **to ravage:** to damage or destroy something

<sup>61</sup> **creed:** a set of beliefs, especially religious beliefs that influence your life



What about us  
 What about the days  
 What about us  
 What about all their joy  
 What about us  
 What about the man  
 What about us  
 What about the crying man  
 What about us  
 What about Abraham  
 What about us  
 What about death again  
 Do we give a damn



© Michael Jackson 1995

### COMPREHENSION

1. Focus on the use of “you” and discuss who is meant by it!
2. What is the song saying about nature and the environment?
3. Michael Jackson is raising the question, “Where did we go wrong?” and wants somebody to tell him why. – Can you answer both questions?

Now watch the clip [<http://www.youtube.com/watch?v=XAi3VTSdTxU>] and answer the following questions:

4. Can you explain what happens in the clip?
5. What are your feelings after watching this video and considering the lyrics? Do you agree with what Michael Jackson is saying?

### ESSAY TOPICS

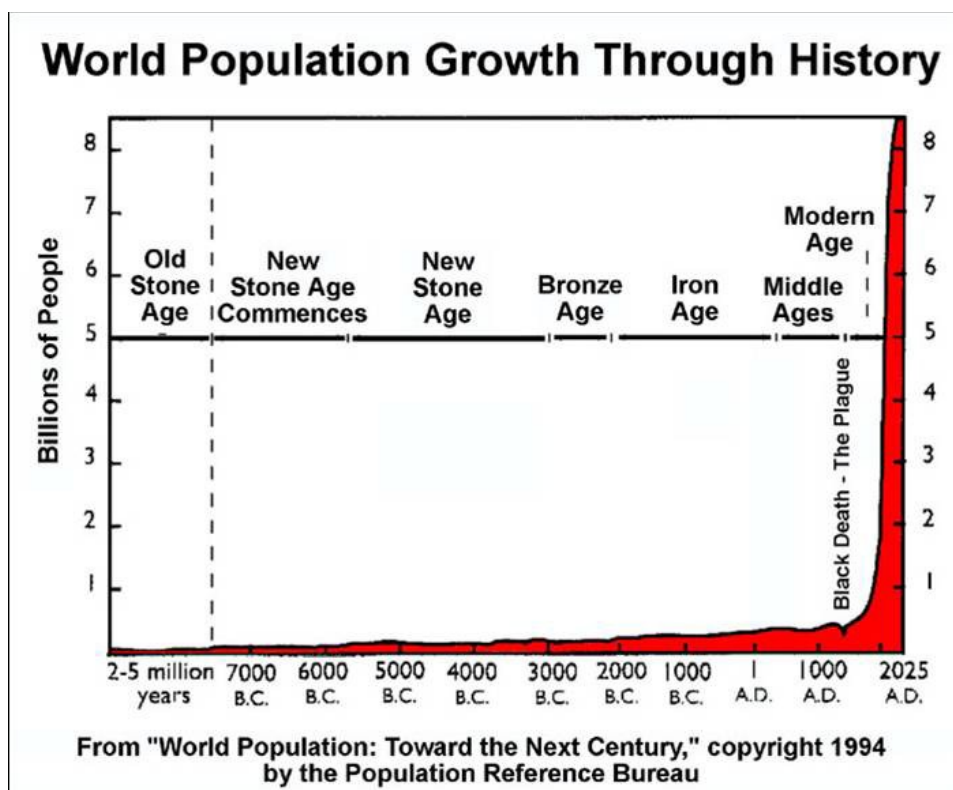
1. “Modern technology / Owes ecology / An apology.” (Alan M. Eddison). – Discuss.
2. “The world has enough for everyone’s need, but not enough for everyone’s greed.” (Mahatma Gandhi, 1869-1948). – Discuss.
3. “We live in a dangerous era. The man dominates nature, before he learned to control himself.” (Albert Schweitzer, 1875-1965). – Discuss.

### PROJECT

Find out about speciesism!

## FACTS AND FIGURES

Since 1950, the world's population has almost tripled. And since 1950, we have more fundamentally altered our island, the Earth, than in all of our 200,000-year-history



**20% of the world's population consumes 80% of its resources**

**5,000 people a day die because of dirty drinking water**

**1 billion people have no access to safe drinking water and water shortages could affect nearly 2 billion people before 2025**

**Nearly 1 billion people are going hungry while over 50% of grain traded around the world is used for animal feed or bio fuels**

**It takes 100 liters of water to produce one kilogram of potatoes, 4,000 for one kilo of rice and 15,000 for one kilo of beef. Not to mention the oil guzzled<sup>62</sup> in the production process and transport**

**40% of arable land has suffered long-term damage**

**Before the end of this century excessive mining will have exhausted nearly all the planet's reserves**

<sup>62</sup> to guzzle: "schlucken" (Benzin, Öl)

**Every year, 13 million hectares of forest disappear. The world's largest rainforest, the Amazon, has already been reduced by 20 %**

**Barely 20 years ago, Borneo, the fourth-largest island in the world, was covered by a vast primary forest. At the current rate of deforestation, it will have totally disappeared within 10 years**

**Demand for paper has increased fivefold in 50 years**

**Since 1950, fishing catches have increased fivefold, from 18 to 100 million metric tons a year. Three-quarters of fishing grounds are exhausted, depleted or in danger of being so**

**One mammal in 4, one bird in 8, one amphibian in 3 are threatened with extinction**

**Every day 50 to 100 species of plants and animals become extinct as their habitat and human influences destroy them**

**Species are dying out at a rhythm 1,000 times faster than the natural rate**

**By 2050, a quarter of the Earth's species could be threatened with extinction**

**In dry season, women from local Indian villages dig wells<sup>63</sup> with their bare hands while thousands of kilometers away, in Las Vegas, 800 to 1,000 liters of water are consumed per person per day**

**The average temperature of the last 15 years has been the highest ever recorded**

**The ice cap is 40% thinner than 40 years ago**

**There may be at least 200 million climate refugees by 2050**

**(taken from Yann ARTHUS-BERTRAND: *HOME*)**

Let's face the facts. We must believe what we know. We have shaped the Earth in our image. We have very little time to change. How can this century carry the burden of nine billion human beings if we refuse to be called to account for everything we alone have done?

---

<sup>63</sup> well: "Brunnen", «puits»

## PROJECT

### ENVIRONMENTAL POSTERS

Work in groups and make these two environmental posters:

- Earth in danger!

Include information about what is happening to our climate and what the future could be like if we do not change our habits. Add facts, figures, website links, pictures, etc.

- Save our planet!

Include information about what we can do to stop our negative impact on the planet. Add facts, figures, website links, pictures, etc.

### INTERESTING LINKS

Yann Arthus-Bertrand: *HOME*

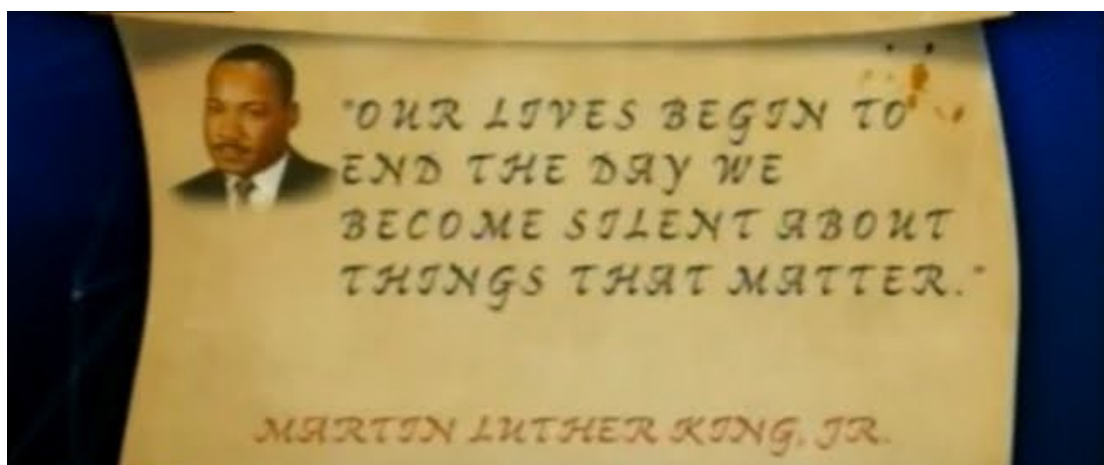
<http://www.youtube.com/watch?v=jqxENMKaeCU>

Al Gore: *AN INCONVENIENT TRUTH*

<http://video.google.com/videoplay?docid=8847562857479496579>

101 WAYS TO HELP PLANET EARTH

<http://www.arvindguptatoys.com/arvindgupta/101ways.pdf>



## GLOSSARY

acid rain	
biodegradable	
biodiversity	
carbon dioxide (CO <sub>2</sub> )	
chemicals and fertilisers	
clean energy	
climate change	
to contaminate (n. contamination)	
deforestation	
deluge	
disposable products	
dump waste	
drought	
earthquake	
ecological	
ecosystem	
erosion	
exhaust	
extinct	
deforestation	
to endanger	
endangered species	
energy-efficient	
environmental disaster	
extinction	
flood	
fossil fuels	
fumes / emissions	
global warming	
the greenhouse effect	
(natural) habitat	
(irreparable) harm	
to melt	
natural disaster (e.g. floods, tsunamis, tornadoes, hurricanes/cyclones, volcanic eruptions, earthquakes, heatwaves, or landslides)	
natural resources	
oil spill	
ozone layer (ozone hole)	
parched	
polar bear	
polar icecap	

<p>pollutants:</p> <ul style="list-style-type: none"> <li>• detergents: liquids or powders used to remove dirt, to kill bacteria</li> <li>• plastic trash: non-recyclable bags</li> <li>• aluminium cans</li> <li>• large-scale use of pesticides (herbicides, insecticides)</li> <li>• exhaust fumes from cars</li> <li>• emissions from fossil fuel</li> <li>• aerosol sprays</li> <li>• fallout: emissions from nuclear power stations</li> </ul>	
(air / water) pollution	
power stations	
rainforest	
ray	
recycle waste	
renewable resources (e.g. wind or solar energy)	
sea level	
soil	
solar energy	
solar panels	
smog	
sustainable	
throw-away society	
toxic	
unleaded	
<p>waste (rubbish, garbage, litter, trash)</p> <ul style="list-style-type: none"> <li>• industrial waste: emissions from industrial combustion</li> <li>• chemical waste: toxic (noxious) gases or liquids</li> <li>• garbage: waste food</li> <li>• sewage: foul liquid, waste from toilets</li> <li>• litter: waste paper, cans, etc. all over the streets and parks</li> </ul>	
waste disposal; refuse disposal	
wind turbines	