

B2: POPULATION AND POLLUTION

Learning Objectives

- ✘ Basic understanding of the causes and characteristics of the population problem
- ✘ Understand the different types of pollution that are exacerbated by population growth

Success Criteria

- ✘ Correctly answer written questions on population growth and pollution
- ✘ Successfully draw/write a detailed and annotated mind map on pollution and population

STARTER

- ✘ Watch the video and write down 2 or 3 reasons why rubbish is become an increasing problem



- ✘ <http://www.theglobeandmail.com/video/chinas-garbage-problem/article1402177/>

POPULATION GROWTH IS A MASSIVE PROBLEM

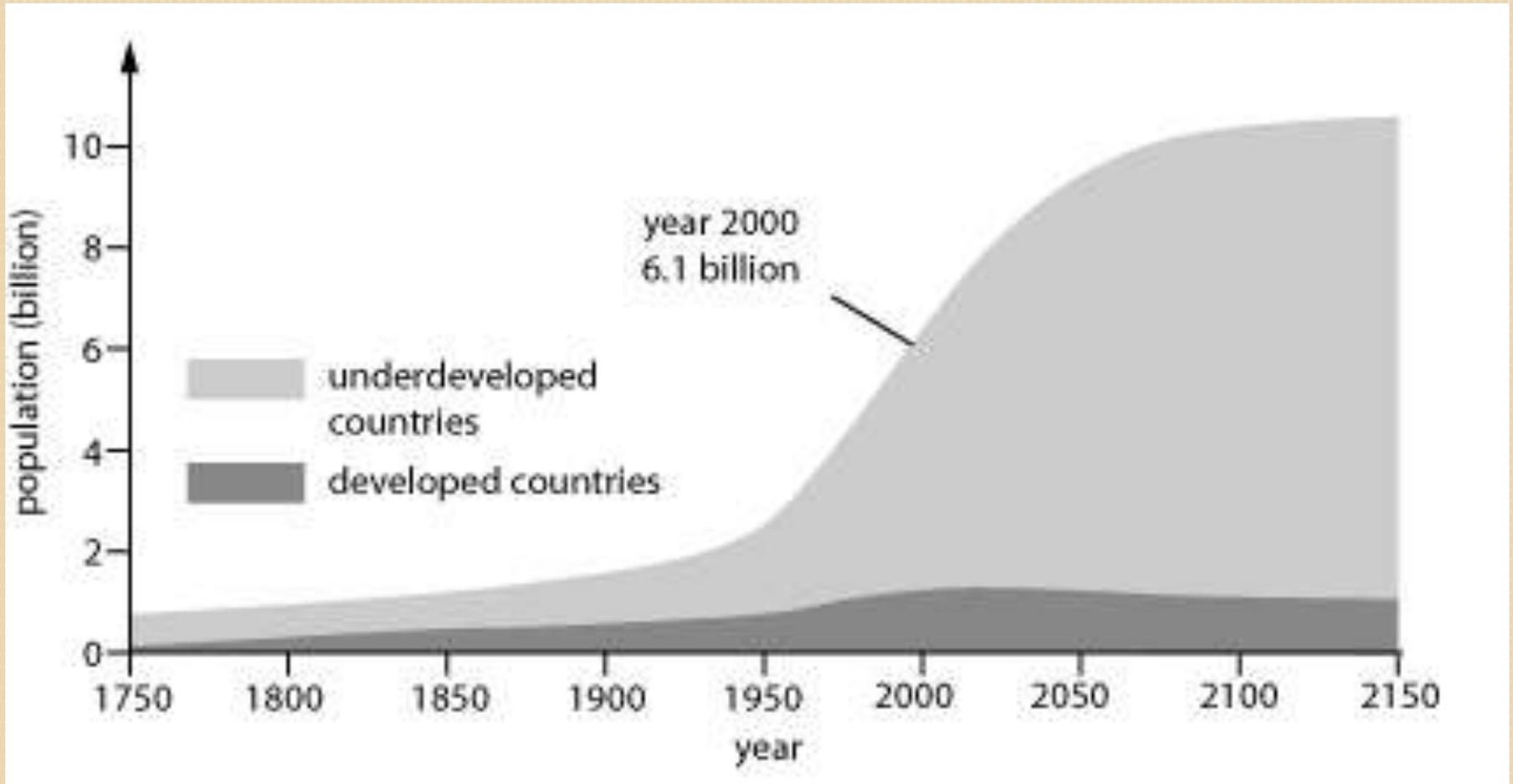


Picture taken: Lagos, Nigeria

WHY ARE PEOPLE LIVING LONGER?

- × No natural predators
- × Better living conditions
- × Less infectious disease
- × Growing lots of food
- × Better medicine

EXPONENTIAL GROWTH



Not only population growth but also improved standards of living...



Improved standard of living



WATCH THE CLIP

- × Watch the clip on the problem of over-population...write down 6 key points in your book
- × What are the three solutions identified?
- × Do you understand them?

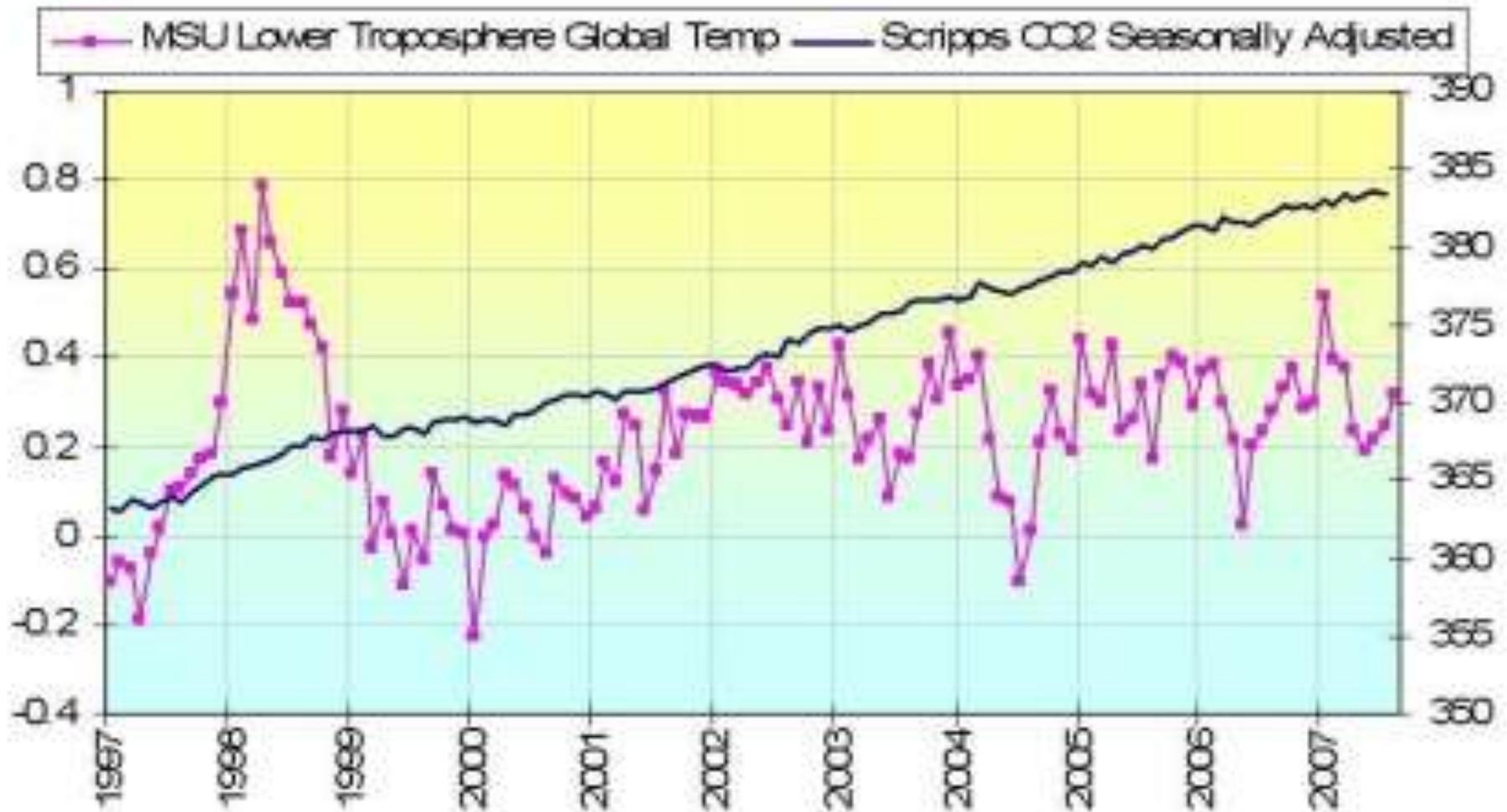
<http://www.youtube.com/watch?v=b98JmQ0Cc3k>

CARBON FOOTPRINT



- × What is it?
- × Total carbon dioxide emitted by a person (or organisation) in a given time
- × In more developed countries we tend to have higher carbon footprints...why?
 - + More car ownership
 - + Use more carbon-intensive resources at home
 - + More carbon intensive types of recreation
 - + Holidays (flights)
 - + Buy goods made in more carbon-intensive ways

CLIMATE CHANGE & CO2 EMISSIONS



R-squared correlation strength of just 0.07

QUESTIONS

1. What is a fossil fuel? Give 2 examples.
2. Why is there more household rubbish than in 1800?
3. How have the use of CFCs led to an increase in skin cancer?
4. Suggest why the demand for oil is likely to increase in the future
5. Explain why a developed country such as the UK uses more oil than a poorer country such as Ethiopia?
6. When you buy a packet of sweets you increase your carbon footprint. Suggest 3 reasons why.
7. Suggest how/when the world population might stop increasing.
8. Suggest 3-5 ways you can contribute to a better environment.

DRAW A MIND MAP/POSTER

- × On your poster/mind map:
 - + Summarise the issue of population growth and use of fossil fuels
 - + Describe the pollution effects:
 - × Global warming (climate change)
 - × Ozone layer depletion
 - × Acid rain
 - × Population and pollution

PLENARY

Draw a straight line from each pollution problem to its source

pollution problem

large areas needed for landfill

acid rain caused by sulfur dioxide

global warming caused by increases in carbon dioxide

pollution of rivers and lakes

source

burning fossil fuels that contain sulfur

burning all fossil fuels

sewage

household waste