

WARM UP

1 Answer the following questions.

1. Do you have a computer at home?
How old is it?
2. Is it your family's first computer?
If not, where did the old computer/s end up?
3. Have you got a mobile phone?
Is it your first mobile?
4. Would you like to buy a new mobile
or a new computer? If so, why?
5. Do you know how long the average lifecycle
of a computer or of a mobile is?
6. Do you have any electronic toys?
7. Do you know if there are rules to follow
when you throw an electronic product away?

READING

2 Read the passage and answer the questions.

1. Why do people often change their electronic products?
2. Why is it illegal to throw these away?
3. Where does e-waste often end up?
4. Why is it dangerous to burn e-waste?
5. What happens if electronic products are not recycled?
6. Is everybody aware of the risks of e-waste?
7. What are the possible solutions to the problem of e-waste?

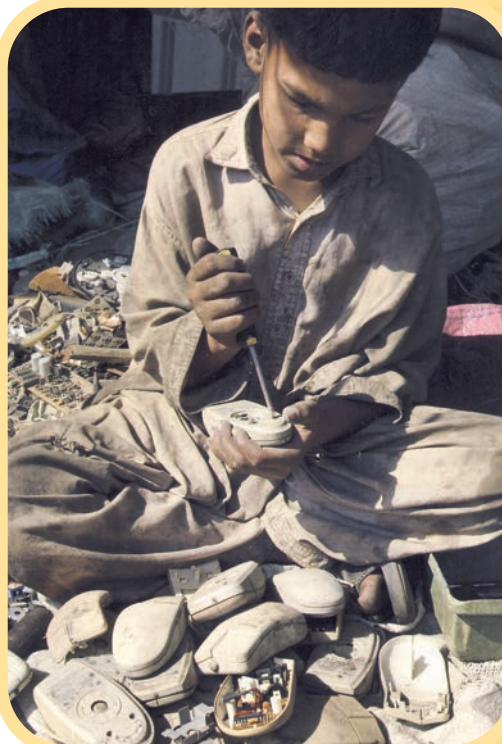
High-Tech
Trash

In developed countries, computers and mobiles have an average lifecycle of about two years. Technology is changing at great **speed** and people replace their mobile phones, computers, printers, televisions with new ones more frequently than ever before. Electronic products become **obsolete** in a very short time: it is estimated that in the world there are already 100 million obsolete mobile phones and 300 million obsolete computers.

But where do they end up when people throw them away? Electronic products contain parts that are not dangerous in daily use, but they become toxic without proper **disposal**. The metals and the plastic contained in these products can contaminate the soil and atmosphere, and enter the food chain. Although most countries have regulations about the disposal and the **dismantling** of e-waste (electronic waste), a high percentage of it ends up in landfills and incinerators, or it is illegally exported to developing countries. Here people **dismantle** e-waste

and extract valuable substances such as copper, silicon, nickel, iron and gold. They do not know that e-waste is dangerous and they often work without any protective **equipment**. Unfortunately much of this work is done by children.

Many computers go to die in the same place as where they were born: Asia. In the Chinese city of Guiyu, the capital of e-waste recycling, hundreds of people are involved in the job of dismantling old computers. Children live, work and play among old monitors, printers, DVD players, cables and switches. The air contains the highest quantity of dioxin (a very toxic chemical) measured anywhere



GLOSSARY

to dismantle	smantellare
dismantling	smontaggio
disposal	smaltimento
equipment	attrezzatura
illness	malattia
obsolete	obsoleto
speed	velocità

in the world. Much e-waste is also exported to India and Africa. Near Accra, the capital of Ghana, the soil is saturated with dangerous chemicals which derive from the burning of e-waste, and many children are developing serious **illnesses**, which are probably caused by contact with the toxic chemicals.

It will not be easy to solve the global problem of e-waste. There are now companies which produce computers with non toxic parts and shops where customers can take back their old products, which will be recycled. When you buy your next mobile or computer, think twice: if you really need it, support companies which make clean products.



LISTENING



3 Read the health risks derived from elements and compounds of e-waste and fill in the blanks using the following words. Listen and check your answers.

toxic, damage, mental, difficulty, system

Lead

Even low levels of exposure can damage children's development. It can also damage the reproductive

Mercury

It can people's brains and kidneys.

PVC

This plastic is very versatile, but if you burn it, it can produce dioxins.

Barium

Exposure to this element can cause muscle weakness and breathing

CLASS SURVEY

4 Working in groups, interview one of these people: your Technology teacher, another teacher who uses the computer lab and the secretary of the school. Ask the questions below and then write down the whole interview. Compare the results of your group with the results of the other groups. Write a short report for the whole class.

- How old are the school computers?
How old is the computer you use?
- Are there any laptops? Do you use one?
- Is there a webcam at school? Who uses it?
- Are there any obsolete computers at your school?
Where are they stored?
- Does the school need more powerful computers?
Is the school going to buy new computers?

SPEAKING

EXAM practice

5 Prepare an oral report about e-waste. Mention the following points:

- what e-waste consists of;
- why it is dangerous;
- where it is sent;
- how the problem can be solved.