

12 Science and Technology

- A) Život kedysi a dnes (výdobytky vedy a techniky a životná úroveň, prístroje v domácnosti)
- B) Pozoruhodné objavy vedy a techniky (radium, pasterizácia, film, TGV)
- C) Veda a technika na pomoc človeku (elektrotechnika, informatika, medicína, telekomunikácie, doprava, stavebníctvo)

A) Life in the past and today

Pre-historic times – people's lives and their needs were very simple – everything needed for life was at hand - it was an excellent tool (for hunting, making other tools and clothes ...)

Later people started changing the world, trying to make life easier and more comfortable.

B + C) Important discoveries, explorations and inventions resulted in new thinking:

the wheel, use of water for energy, wind energy, invention of the printing press, developments in astronomy, philosophy, medicine, biology

Industrial revolution completely changed the world:

The steam engine (J. Watt), the electric light bulb (T. A. Edison), the electric motor (M. Faraday), 1st petrol- driven car (G. Daimler, K. Benz)

It resulted: small manufacturing business changed into large factories

hand-made goods were replaced by machine-made products
mass production started, goods became cheaper, more available to more people

20th century: development of science and technology went on rapidly – inventions: airplane, the television, the mobile phone, the Internet, the videophone

Research in medicine: new drugs and vaccines that prolong people's lives

In chemistry : pesticides, fertilizers that enable to plant more crops

Science and technology have a deep influence on our lives. They influence: communication (using phones, satellites, computers to talk to friends, relatives in any part of the world; online discussions, teleconferences; do shopping from home by mail order)

But we spend less time with friends, family, we communicate with a computer not real people

New technologies improved:

- *working conditions* - hard work – done by machines(robots), directed by PC – it's easier for people
- But many people become unemployed
- made some *transactions easier* – use of cards (credit, debit, phone) instead of paper money or coins
- it's simple, comfortable, you can easily get used to it
- *medicine* – new medical equipment(lasers) – efficient, shortens the amount of time a person has to spend in hospital after having operation
- *food industry*- genetic engineering used to produce more grains, fruits and vegetables

New technologies are everywhere, surrounding us at home. Our households – equipped with modern appliances: refrigerator, freezer, vacuum cleaner, washing machine, dishwasher, microwave oven, computer, TV set, stereo and DVD and video player, kettle, etc.

They have made our lives much easier, more comfortable than the lives of our great grandparents

Tasks:

Picture:

- Look at the pictures and name the inventions you can see. Say what makes them important for people. Mention some of their negative aspects.
- Choose three of the inventions and explain your attitude to them. Can you imagine your life without them?

Topic:

- Talk about the role of science and technology in today's society. Discuss: experiences the average person has of technology in their daily life, if technology helps us or it just causes problems.
- Tell us what kind of electrical appliances you have at home. What do you use them for?
- Specify your relation to technology and try to think whether you could live without any of the technological inventions (TV set, radio, refrigerator, telephone, microwave, photocopier, etc.)

Role-play:

You are on holiday and have just remembered that you wanted to record a TV programme, but you forgot to set the VCR before your departure. Call to your friend who is watering your plants while you are away, and ask him to tape the programme for you. Give him instructions using the following information:

- day and time of programme,
- which channel it is on,
- where the blank cassette is,
- how to set the VCR (use the remote control, select the channel, key in the time).