

Science and technology

- What is science and technology.

Science is systemized knowledge gained through experimentation, observation and study. We know natural sciences, social sciences, environmental sciences and so on. Natural sciences are biology, geography, chemistry, physics or maths. Social sciences are history, philosophy, theology..

Technology is the application of knowledge gained through science. Our cars, planes, trains, computers are kinds of technology.

There is a difference between an invention and a discovery. An invention is something made by human, such as a light bulb. When somebody creates a theory or finds out a solution, it's a discovery. Many discoveries were made through observation and are connected with famous people. Isaac Newton discover gravitation, Mikuláš Kopernik discovered that the Sun is in the centre of our solar system.

- Compare the life in the past and nowadays, consider the influence of science and technology on it.

In the past people didn't have any technology. Society has made a great progress especially in in transport, medicine, biology and information technology.

Transport the progress in travelling is incredible. In the past people travelled on foot or used horses. Nowadays there is public transport in most towns, high-speed trains, supersonic planes to travel long distances and cars to get to work or on holidays. Also we are able to explore the space.

Medicine new cure methods and medicines has helped ease the pain, has cured and prevented some diseases that were incurable in the past, they help prolong the life. Exact operations thanks to microsurgery save people's lives.

Information and communication technology during the last decades we can see a big development in I and CT. The most important inventions were the inventions of the cell phones and the Internet. Mobile phones represent comfortable, fast communication and they contain lots of services a camera, a music player, a computer....

Household the equipment of houses has changed completely. Domestic (electrical) appliances help with preparing food, housework, they are used for entertainment, heating and lighting. (preparing food cooker, microwave oven, freezer, fridge, food mixer, kettle... housework - dishwasher, iron, vacuum cleaner, washing machine; entertainment-computer. hi-fi system, video, CD player; heating and lighting-air conditioning, spotlight, fan, lamp)

- Invent your list of the most important inventions and discoveries, domestic appliances.

Paper-before it was invented people wrote on clay, tablets, silk, palm leaves, papyrus. Paper was invented in China in 105 AD.

Wheel-300 BC, followed by watermill and windmill

Electricity we can't imagine our life without electricity; we use it for lighting, heating. radio, TV. It was started to use in the 17th century.

The telephone - it was invented in 1876 by Alexander Graham Bell

Car-invented by two Germans, Daimler and Karl Benz (1885)

Television-the first transmissions were made in England in 1926 by John Logie Baird

Laser-was discovered in 1961

The steam engine-J. Watt

The electric light bulb Edison, 1879

Printing press-J. Gutenberg

Penicillin-Fleming

All inventions help us, make our life easier, but on the other hand, we are getting lazy-we sit in front of TV, use DVD, PC, the Internet, mobile phones, household appliances...everything is easier, we move less and have less time for our families. Pesticides and other chemicals are used to get more crops, we eat genetic modified foodstuff. New Technologies and machines replace people at work - people get unemployed...

- Talk about computers used for work and for entertainment.

According to many people, the most popular technical invention is a computer. The history of computers started in 1960s when the first was developed. Computers have influenced dramatically the way how we live and work. They help us work faster and more effectively. For example, in business, computers are used to store and process data...we write texts, send e-mails, paint pictures, read newspapers, call with our friends or business partners. Also, Internet is a great source of information. Moreover, computers are a popular way of spending free time. Playing computer games, browsing on the Internet, chatting with friends on social sites have become a part of our everyday lives.

Computers are also used at school. Students do projects on PC, they look for information on the Internet, send their essays via e-mail, learn with interactive software. Some people think that they will replace the teacher one day too. Others argue that computers can only be used for obtaining passive knowledge and for testing knowledge.

- Give your opinion on the misuse of science and inventions – various kinds of addiction, weapons, consumer society.

The best example of misuse of science is a weapon the gun industry, especially nuclear weapons, have become the most dangerous threat to the world we live in.

Cars have started to be used for military purposes. They also cause massive pollution.

Industrial and city waste pollute the soil, water and air. The development of industry means a great danger for life on the air. To the most serious ecological problems belong the destruction of the ozone layer and the green-house effect which is caused by a lot of carbon dioxide in the air.

In the field of microbiology the biggest danger is cloning and its abuse.

- Predict the role of science and technology in the future (using computers at home and at school, brain drain).

Computers at home will assist with tasks, making everything from cooking to connecting with friends a breeze. At school, smart computers will turn studying into an adventure, helping us understand complex stuff in simpler ways.

But there's a challenge called brain drain. Smart people might leave their countries for better opportunities. To fix this, countries need to make staying at home more appealing. This way, bright minds can use their skills to make their own countries better.

In a nutshell, future homes and schools will have super-smart computers making life and learning awesome. Yet, we must figure out how to keep our smartest minds close, so we can all work together for a better tomorrow.

- Inventions that you use often (every day)

Every day, I rely on essential inventions that simplify my life. The smartphone is my go-to for communication and staying informed. The internet connects me to a world of information and entertainment. Electric light bulbs brighten my home, ensuring I can work and relax at any hour. A trusty refrigerator keeps my food fresh and safe.

Transportation is made effortless by the automobile, providing convenience and efficiency. The washing machine makes cleaning clothes a breeze, saving time and effort. Microwave ovens quickly warm up my meals, adding efficiency to my day. My comfortable bed, a simple yet crucial invention, ensures restful sleep every night.

These inventions, from communication devices to household essentials, contribute to the practical aspects of my daily routine, making each day more manageable and comfortable.

- Simulation <

Ladies and gentlemen, imagine stepping into the year 2100, a time where life has taken leaps and bounds into the future. Our homes have become marvels of smart living, with walls that can change colors at a whim and windows that adjust to the weather. These smart homes know us so well that they even brew our coffee and set the perfect room temperature before we wake up.

Traveling has transformed into a breeze with futuristic modes of transport. Forget traffic jams; we now have self-driving cars zipping around town. The skies are filled with air taxis, making our daily commute a dance in the clouds. And yes, we've conquered the skies! Personal flying devices are as common as bicycles, allowing us to soar through the air with the wind in our hair.

Medicine has evolved into a realm of miracles. Tiny nanobots patrol our bodies, fixing any health hiccup before we even notice. Hospitals have become more like spa retreats, where advanced technologies ensure a pain-free and personalized healthcare experience. Diseases that once plagued us are now relics of the past, thanks to groundbreaking cures and preventive measures.

Science has unlocked the secrets of longevity, granting us the gift of time. With rejuvenation therapies, people are living well beyond a century, enjoying vibrant and healthy lives. Our

understanding of genetics has paved the way for custom-designed babies, ensuring a healthier and brighter future for the next generations.

In this utopia of 2100, life has become a seamless blend of comfort, convenience, and boundless possibilities. As we navigate this brave new world, one thing remains certain: the journey from today to 2100 promises to be an exciting adventure filled with amazing discoveries and innovations.

- Words

science	veda	technology	technológia
Scientist	Vedec	Developmen	Vývojári
Researcher	výskum	technological change	technologická zmena
Inventor	vynálezca	machine manufacturing	strojová výroba
explorer	prieskumník	steam power	parný pohon
to conduct research	Vykonávať výskum	powered machinery	poháňané stroje
to experiment	experimentovať	inventions	vynálezy
to study	študovať	Wheel	Koleso
to observe	pozorovať	gun powder	pušný prach
to invent	vynájsť	windmills	veterné mlyny
to discover	objaviť	watermills	vodné mlyny
to explore	preskúmať	steam engine	parný motor
to search for	hľadať niečo	printing machine	tlačiarenský stroj
to achieve	dosiahnuť	electric bulb	elektrická žiarovka
to apply	aplikovať	telegraph	telegraf
technological progress	technologický pokrok	telephone	telefón
Transport	Doprava	laser	laser
medicine	liek	nuclear power	jadrová energia
biology	biológia		
information and communication technology	informačná a komunikačná technológia		

everyday usage of modern technology	každodenné používanie moderných technológií
household appliances	domáce prístroje
gadgets	vynález, vecička, ...
devices	zariadenia
machines	stroje
pitfalls of using modern technology in life	V úskalia používania moderných technológií v živote
Abuse	Zneužívanie
Misuse	Nesprávne Použitie
Threat	Ohrozenie
Pollution	Znečistenie
Damage	Poškodzovanie
Hurt	Ublížovanie/Zranený
growth of consumer society	rast spotrebiteľskej spoločnosti
materialism	materializmus
social/psychological /spiritual hunger	sociálne/psychologické/ duchovné potreby
erosion of privacy and anonymity	narúšanie súkromia a anonymity
brain drain	„únik mozgov“ (odchod múdrych ľudí za lepšími životnými podmienkami)