9

Culture

Made in Ukraine

I can understand a text about Ukrainian inventions.

1 **Work in pairs. Look at the list of inventions below. What do they help people do? Which invention do you think is the most useful? Why?**

Band-Aid bionic arm Braille alphabet wheelchair hearing aid sign language glasses and contact lenses

2 **Read the text and match questions 1–6 with the inventors in paragraphs A–C. There are three questions that you do not need.**

Which inventor(s) ...

1 wanted to solve a problem that all elderly people often have? ☐
2 got their idea from watching a superhero film? ☐
3 created something to be used in bad accidents? ☐
4 was/were inspired by a close friend's problem? ☐
5 invented something that helps people understand others better? ☐
6 has/have won several prizes for their invention? ☐

3 **Are the sentences true (T), false (F) or not given (NG)?**

1 When people look at inventions they rarely think about how long it took to create them. ☐
2 Anton Holovchenko created the exoskeleton to help his grandmother walk again. ☐
3 The gloves created by quadSquad send messages in Ukrainian. ☐
4 Vitalii Zapeka's invention can only be used by doctors and nurses. ☐
5 There are several different versions of the zip. ☐
6 It took Vitalii about ten years to design the zip. ☐

4 **Match the highlighted words in the text with the definitions below.**

1 arms and legs _____
2 send electronic signals _____
3 make something less or smaller in size _____
4 a device that supports or connects things _____
5 pieces of thread doctors use to join the edges of a wound together _____
6 damage that stops something working properly _____

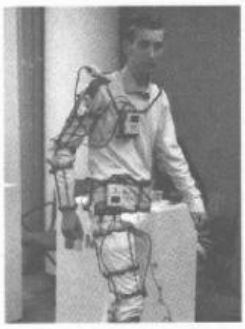
5 **Write an article about a Ukrainian inventor and their invention. Use the ideas below or think of your own.**

Selman Waksman (antibiotics) Mykola Amosov (prosthetic heart valves) Boris Paton (electric welding of soft tissue) Vladimir Filatov (corneal transplantation) Roman Bielkin (wearable biosensor)

- Give information about the inventor.
- Say what they invented and what it is used for.
- Say how it has changed the way people do things.

Inspired inventions

In an age of constant innovation and discovery, technology is often taken for granted and most people don't realise that new inventions take years to develop. Innovators get their ideas from many sources: observing nature, reading books, watching films, travelling to new places. Some of the best inventions, however, come from trying to solve the problems of people close to us.



A Anton Holovchenko, a young inventor from Kyiv, came up with the idea of making an exoskeleton to help disabled people move after his grandmother's arm became paralysed. *Iron Man 3* was a popular film at the time and the suit *Iron Man* wears gave Anton an idea. He developed a prototype of braces which cover disabled limbs. The braces are activated electronically. The advantage of this is that people can become mobile again without a long and expensive period of physiotherapy. Anton's invention won the European Youth Award at UniExo in 2015.

B Worldwide, 70 million people with hearing and speech impairments rely on sign language to communicate with others. But not everyone understands sign language and these people often need an interpreter. To solve the problem, a group of Ukrainians called quadSquad invented gloves that can turn sign language into speech. The gloves contain sensors which transmit messages to a smartphone when people sign. The phone then converts them into spoken words. This invention won Microsoft's Imagine Cup competition in 2012.

C A few years ago, Vitalii Zapeka, from Poltava, came up with a medical invention that can save lives. He designed a zip that you can put on a wound to stop the bleeding. It can also replace stitches after operations. This reduces problems caused by bacteria and it allows doctors to look at the wound to make sure it is clean. It is ideal for emergencies because it is simple to use. What's more, there are six different types of zip for different types of wounds. All you need to do is choose a zip and glue it to the cut before you go to hospital. The doctor there can then unzip the wound and take care of it.

LIVEWORKSHEETS