



Modern wheelchairs are a big improvement on the first wheelchairs, which were just wheelbarrows like the ones we use in the garden. Professor Stephen Hawking's wheelchair, for example, is a vehicle, an office, and a domestic servant, all in one.



The first real wheelchair was owned by King Philip of Spain in the sixteenth century. It had the latest technology – removable arm rests and leg rests – and was made of wood. Modern wheelchairs are made from the same strong, light metal as aircraft, and electric engines mean that users don't need to use their arms or have someone to push.

Wheelchair design made a big jump forward with the invention of a computer program that responds to voice commands. For users who cannot speak, computer technology also makes it possible to manoeuvre a machine by small movements of the head, hand, tongue, and breath.

Some things that able-bodied people do without thinking can be a major problem for disabled people, for example climbing stairs, entering and leaving buildings, and using toilets. A wheelchair can either help or make the problems worse. So before choosing a wheelchair there are many questions you have to ask: Will the wheelchair be self-propelled or manual? Which is more important, manoeuvrability or stability? How do you get in and out of it?

The iBOT claims to solve many of the problems of standard wheelchairs. It is a highly advanced, all-purpose wheelchair that can travel up stairs, raise the user to reach high shelves, and balance on two wheels in the shower. It is great fun to use, but beware the price – the iBOT costs as much as a luxury car.



Reading

Wheelchairs

1 Read the article on p.15 quickly. Tick the things that are mentioned.

- 1 ☐ computer programs
- 2 ☐ hospitals
- 3 ☐ problems getting around buildings
- 4 ☐ sport
- 5 ☐ what wheelchairs are made of
- 6 ☐ children
- 7 ☐ history of wheelchairs
- 8 ☐ high-speed wheelchairs

2 Read the text again and answer the questions.

- 1 What material was the first wheelchair made of?
- 2 What are modern wheelchairs made of?
- 3 What difference does an electric engine make?
- 4 Apart from your arms, what can you use to control a wheelchair?
- 5 What three things can an iBOT do that an ordinary wheelchair can't?

3 Find words in the text with these meanings.

- 1 the place you put your arms _____
- 2 orders _____
- 3 not disabled _____
- 4 moved by the user's own power _____
- 5 how easy it is to move around _____
- 6 that does everything _____