

## Lesson 9 – Robots II

### I. Discuss

1. What is the most important machine in your life?
2. Which machines do you use on a daily basis?
3. Which are the most useless machines, the machines we could live without?
4. Can you drive? Do you know a lot about cars? What is the most difficult thing about driving?
5. What are the most fascinating devices used in physics?

### II. Instruments and their function.

#### 1. Complete the blanks:

- a) The thermometer is an instrument for \_\_\_\_\_ temperature.
- b) The telescope is a device for \_\_\_\_\_ distant objects.
- c) The scales are an instrument for \_\_\_\_\_ things.
- d) The microscope is an instrument for \_\_\_\_\_ very small things.
- e) The funnel is a device for \_\_\_\_\_ liquids.
- f) The tripod is a device for \_\_\_\_\_ chemicals during experiments.
- g) The beaker is a cup for \_\_\_\_\_ liquids.
- h) The bunsen burner is a device for \_\_\_\_\_ heat.

Now rewrite the sentences using the structure *The function of \_\_\_\_\_ is to \_\_\_\_\_.*

*E.g. The function of the tap is to control the supply of water.*

#### 2. The car

**Study the structure:** *The controls enable the driver to drive the car.*

**This means:** *With the help of the controls, the driver can drive the car.*

Now make sentences from the table:

The door handle The steering wheel The seat adjustor The gear lever The accelerator lever The clutch pedal The brake pedal The oil pressure gauge The water temperature gauge The speedometer The starter switch	enables the driver to	check the temperature. stop the car. steer the car. check the oil pressure. change gear. start the engine. check the speed. get in and out. control the speed. adjust the seat. operate the gear lever.
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### 3. Describing machines and pieces of equipment

Read the definitions of the adjectives listed below. What machines do they make you think of?

**all-singing, all-dancing**

an all-singing, all-dancing system or piece of equipment is very advanced and able to do everything you want it to

**cordless**

a cordless tool or piece of equipment works without being connected to the electricity supply

**cranky**

likely to stop working at any time

**fail-safe**

designed to make a machine or piece of equipment stop working if part of it stops operating normally

**high-performance**

designed to be very fast or powerful

**incompatible**

ideas, systems, or machines that are incompatible are not able to work or exist together because of basic differences

**inflatable**

an inflatable object must be filled with air before you can use it

**labour-saving**

labour-saving equipment do jobs in a quick and effective way so that you needn't spend a lot of time doing them yourself

**low**

used about equipment that is not producing much energy, or that has not got much energy left

**portable**

something that is portable, for example a small computer, television, or other small piece of electrical equipment

**smart**

smart machines, especially weapons, use computer technology to make them effective

**spring-loaded**

operated by a spring inside

**submersible**

a submersible machine or vehicle can work under water

**two-way**

able both to send and to receive messages

**unfriendly**

not easy to use or operate

**unmanned**

used for describing a building or machine that does not have any staff there to manage or operate it. Some people avoid using this word because they consider it offensive to women, and use unstaffed or uncrewed instead

**unsophisticated**

used for describing simple tools and pieces of equipment that are not advanced

**user-friendly**

a user-friendly system or piece of equipment is easy to use or understand

#### 4. Designing a robot

You are the representatives of a team of inventors who devised a new type of robot. In groups, prepare a short presentation describing your prototype.

Decide on the following:

- Name of the robot
- Form and size
- Material
- Use
- Operating instructions
- Estimated production cost
- Market prospects – what is new about your prototype

Be prepared to answer questions. Then listen to the other investors' presentations. You may ask for more details about the other robots. In the end, as a whole class, select one prototype for future production. Try to be as objective as possible and think about your company's interests.

#### 5. Is artificial intelligence dangerous?

<http://curiosity.discovery.com/question/artificial-intelligence-dangerous>

Listen to experts discussing A.I. and summarise their viewpoints.

### III. Language focus

#### 1. Expressing wishes or regrets

**Imagine you are no longer happy with the invention of your robot. Look at the way you might express your regrets and wishes.**

- a) I wish I had never created such a robot.
- b) If only I had realised then what a tremendous effect it would have.
- c) I wish people stopped using it at once.
- d) I wished they wouldn't manufacture it any more.

**Which of the sentences above express:**

- regrets about the past, for something that has already taken place
- a wish for the present
- a wish for the future

**Now imagine the situations described below. For each situation make one or more sentences beginning with *I wish...* or *If only...***

- a) You watched a thriller in which alien robots were invading the Earth and you've had nightmares ever since.
- b) The managing director of your company intends to replace 70% of the labourers in the assembly line with a robotic system.
- c) You have just failed in a difficult exam and you realise you didn't work hard enough for it.

**Share with your partner three regrets about your past, referring to the things you did or did not do.**

## 2. Back to the future

Think of how your life has already changed thanks to technology.  
Complete the columns with as many examples as you can.

Past	Present	Future
E.g. Wrote letters	send e-mails	?

## 3. Adjectives about problems

<http://www.ihbristol.com/free-english-exercises/test/esol-smc-adjectives-about-problems>

For each sentence, choose the best word or phrase to complete the gap from the choices below.

1. That knife's no good. It's \_\_\_\_\_.  
**A) flat B) worn C) blunt D) loose**
2. We need a new carpet for the bedroom. This one's \_\_\_\_\_.  
**A) mouldy B) dog-eared C) smudged D) worn**
3. You shouldn't eat that cheese. It's \_\_\_\_\_.  
**A) stale B) mouldy C) jaded D) worn**
4. I've washed these jeans many times so they're a bit \_\_\_\_\_.  
**A) faded B) scratched C) worn D) filthy**
5. Have you got a new battery for the radio? This one's \_\_\_\_\_.  
**A) stale B) worn C) flat D) off**
6. Careful when you drink from that cup. The rim is \_\_\_\_\_.  
**A) split B) dented C) scratched D) chipped**
7. I had a small accident with the car. One of the wings is a little \_\_\_\_\_.  
**A) stained B) dented C) jammed D) cracked**
8. Someone spilt red wine on the carpet and now it's \_\_\_\_\_.  
**A) worn B) scratched C) cracked D) stained**
9. I can't open the window. I think it's \_\_\_\_\_.  
**A) run out B) stained C) stuck D) loose**
10. She's read this book twice already. That's why it's so \_\_\_\_\_.  
**A) smudged B) dusty C) dented D) dog-eared**
11. Charlie doesn't have as much hair as he used to. He's got a receding hairline at the front and it's \_\_\_\_\_ on top.  
**A) shrinking B) thinning C) lightening D) weakening**