Module 4

We are going to learn about:

- Robots & technology
- Computers & the Internet
- The Gadget Show
- E-waste

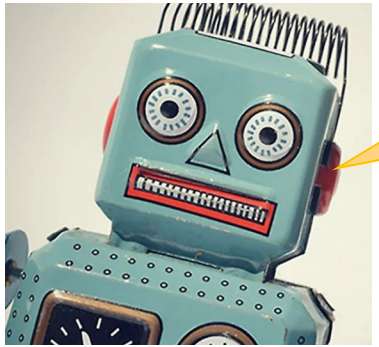
Read Isaac Asimov's Laws of Robotics below and look at the pictures. How do you think they are related to the text?

1 A robot may not injure a human being or through inaction allow a human being to come to harm.

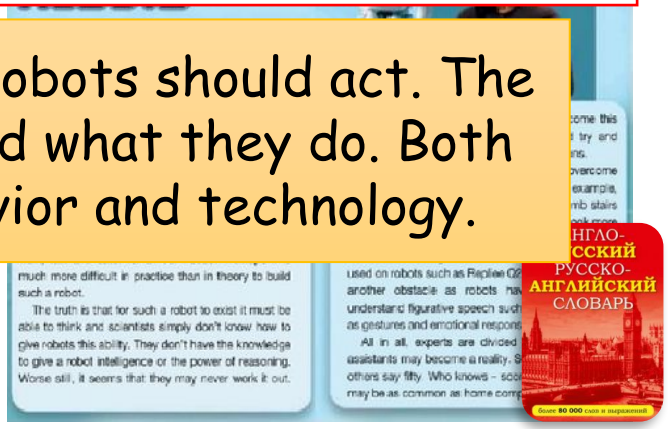
2 A robot must obey orders given to it by human beings, except where such orders would conflict with the First Law.

3 A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

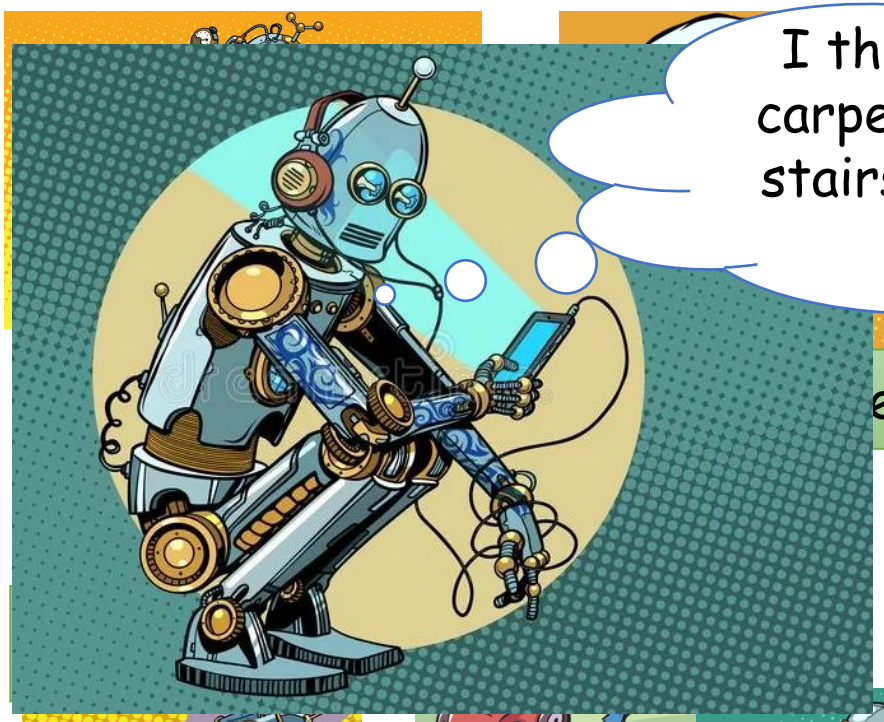
Injure – ранить, причинять вред;
Inaction – бездействие;
Obey – подчиняться;
Existence – существование;
Protection – защита;
Harm – вред;



Asimov's law are about how robots should act. The text is also about robots and what they do. Both are discussing robot behavior and technology.



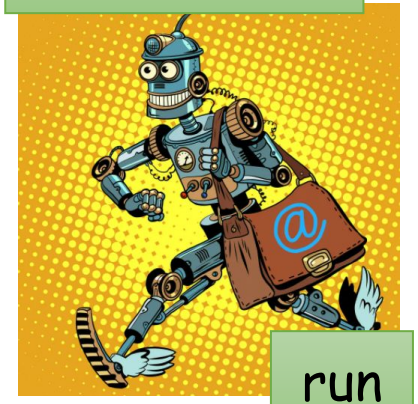
Which of the following do you think robots can do? Decide in pairs.



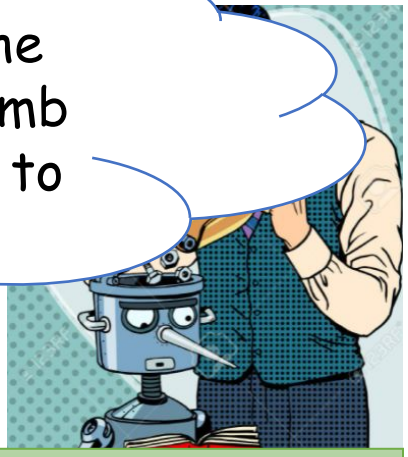
I think robots can vacuum the carpets, mow the lawn and climb stairs. They may also be able to talk.

er

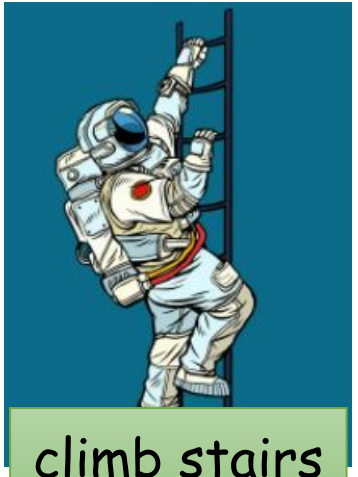
walk the dog



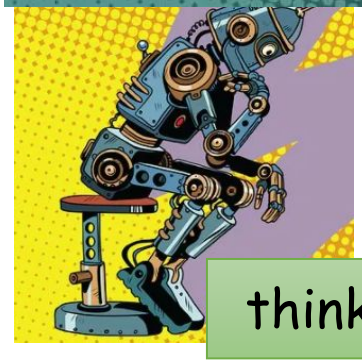
run



make decisions

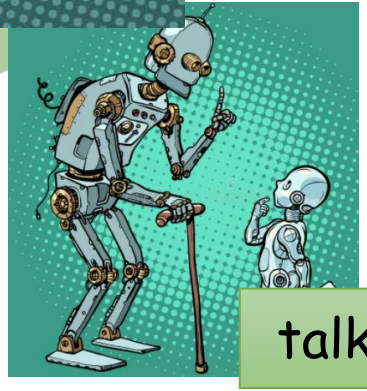


climb stairs



think

mow the lawn



talk

Which of the following do you think robots possess/show? Decide in pairs. Read and check.

intelligence

consciousness

mobility

reasoning

accuracy

creativity

Robots can definitely move and they must be able to follow instructions well. So they possess mobility and accuracy.

I don't think they can think about themselves or reason on their own. So they don't possess consciousness, intelligence or creativity.

Before reading learn new words.

обслуживать	теоретически	способность к умозаключениям
эмоциональная реакция	искусственный	образная речь
убирать	косить лужайку	заграждение, барьер
решение	обнаруживающий разногласия	решить проблему
способность	помеха, преграда	выполнять задание
бездействие	просто	реальность
и так далее	обыкновенный	функция
кроме	атомная энергия	подчиняться
чистить	существование	пылесосить

The truth is that for such a robot to exist it must be able to think and scientists simply don't know how to

All in all, experts are divided as to when robot assistants may become a reality. Some say five years, others say fifty. Who knows – soon household robots may be as common as home computers.

problem is to study the human brain and try and create an artificial brain that copies its functions.

Nevertheless, scientists have already overcome other problems such as mobility. For example, Honda's ASIMO robot can walk, run and climb stairs without any problems. Also, robots can now look more human thanks to roboticist David Hanson's invention of a skin covering called Frubber, which has been used on robots such as Repliee Q2. Language may be another obstacle as robots have to be able to understand figurative speech such as idioms, as well as gestures and emotional responses.

cide which of the

1	True
2	False
3	False
4	False
5	ot Stated
6	True
7	ot Stated
8	True

Text 1

Text 2

Text 3

Read the text 'Where are the robots?' and fill in the gaps 1-6 by choosing one of the phrases (A–G). There is one extra phrase.

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Text 1

Text 2

Text 3

5

Complete with: *built, overcome, divided, become, perform, cater, exist.*

1 One day, robots in our homes will ..... a reality.

2 Today, we h
task only.

3 Scientists h
how to mak

4 Experts are
robot assist

5 It would be
our needs.

6 Honda .....
climb stairs

7 Robots that can think like humans do not .....
yet.

become

orm

come

ded

ter

ilt

exist

Build – строить;
Overcome a problem – решить проблему;
Be divided – разойтись во взглядах;
Become a reality – становиться реальностью;
Perform a task – выполнять задание;
Cater for one's needs – удовлетворять чьи-либо нужды;
Exist – существовать;

Match the words from the text to make phrases, then use them in sentences of your own to talk about the text.

1 nuclear	4 artificial
2 figurative	5 emotional
3 household	6 overcome

a brain	d power
b robots	e speech
c a problem	f responses

Figurative speech

Artificial brain

Emotional responses

Nuclear power

Household robots

Overcome problems

Complete the sentences.

1 _____ is a reality in modern day life.

2 Robots must learn how to use _____ _____

3 Having _____ would make life easier.

4 Scientists are trying to invent an _____ _____

5 Robots cannot produce _____

6 Robots must _____ like language and how to understand expressions.

Find the correct word.

1 The **invention**/**discovery** of a thinking robot lies in the future.

2 Robot factory workers are now a **fact**/**reality**.

3 The main **problem**/**trouble** with creating a robot is how to give it intelligence.

4 I would love to own a robot that could **clean**/**clear** my house.

5 Language is an **obstruction**/**obstacle** to creating a functioning robot.

6 It is quite **ordinary**/**common** for households to have a microwave.

Invention – изобретение;
Discovery – открытие;
Fact – факт;
Reality – реальность;
Problem – проблема;
Trouble – неприятность;
Clean – чистить;
Clear – отчетливый, ясный;
Obstruction – заграждение, барьер;
Obstacle – помеха, преграда;
Ordinary – обыкновенный;
Common – обычный;

ENGLISH P.81✱

Imagine that robots existed that could do all the housework and lots of other tasks, too. In pairs, discuss how your life would change if you had one.

A: Robots could do the boring jobs like cleaning the windows, couldn't they?
B: Yes, and they could even wash the car, so we'd have much more free time.

Clean windows

Wash the car

Vacuum carpets

Make coffee

Wash clothes

Wash dishes

Read the text again. Th
notes under the headin

study skills

Summarising

Make notes on the main points of
appropriate headings. Start your pi
with one sentence that summarises
whole text. Write your summary, in
main points in your own words. Ch
summary is clear, complete and mak

Text 1

Text 2

Text 3

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All in all, experts are divided as to when robot assistants may become a reality. Some say five years, others say fifty. Who knows – soon household robots may be as common as home computers.

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Correct the sentences. Use the words: **common, problem, clean, inventions, obstacles, conflicts, reality.**

Workbook

1 Computers and the Internet are two fascinating **developments** of modern technology. — inventions

2 According to Asimov, a robot must not do anything that **argues** with the three Laws of Robotics. — conflicts

3 It is only a matter of time before there are robots that cook and **clear** in every home. — clean

4 These days it is quite **ordinary** for children as young as ten to have a mobile phone. — common

5 Many of the gadgets we see in films don't exist in **fact**. — reality

6 There are many **difficulties** to overcome when trying to create a perfectly functioning robot. — obstacles

7 In my opinion, the main **trouble** with mobile phones is that their buttons are too small. — problem

Match the words in the two columns. Then, use the phrases to complete the sentences.

1 d	vacuum	a	our needs
2 f	mow	b	tasks
3 c	come	c	to harm
4 a	cater for	d	the carpets
5 b	perform	e	a reality
6 e	become	f	the lawn

1 I need a robot that can ... mow the lawn ..., because one of my chores is to keep the garden tidy.

2 There are many gadgets and machines on the market that already cater for our needs but scientists promise that future robots will satisfy even more of our demands.

3 Robots in factories are there to perform tasks that are dangerous or difficult for humans.

4 Floors in homes will never be dirty again once there are robots to vacuum the carpets ..!

5 Should we trust robots to take on jobs where humans could ... come to harm ..... if they made a mistake?

6 Do you think that robotic doctors will ever ..... become a reality?

ENGLISH P.81

Complete the text using: **figurative, emotional, home, household, artificial.**

Do you think it is possible to have a(n) **1)** .. **emotional** .... response to a robot, such as love? Well, robot researchers do! In a few decades, some think we may have **2)** **household** . robots that look like humans, act like humans and even talk using **3)** .... **figurative** ..... speech like humans! We will feel for these robots the way we feel about other humans and animals.

However, scientists probably need to create a(n) **4)** .. **artificial** .... brain before machines are able to think, and this is no easy task. But if you doubt that this will happen, stop and think: who could have predicted 100 years ago that **5)** ..... **home** ..... computers and the Internet would exist?

Complete the crossword puzzle using the clues.

Across

3 thinking about sth carefully before reaching a conclusion

4 not natural, made by humans

6 the ability to produce original things, ideas, etc.

Down

1 the ability to understand and learn

2 the ability to move from place to place

5 when you are not doing anything