

# ROBOTS

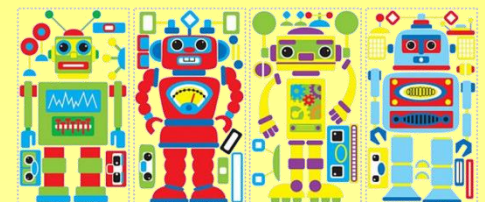




# What are robots?

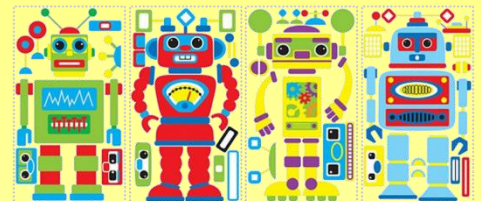


Robot is a Czech word 'robota' that means forced work or labour.



# What are robots?

Nowadays, the word robot is used to mean a man-made machine that can perform work or other actions normally performed by humans, either automatically or by remote control.

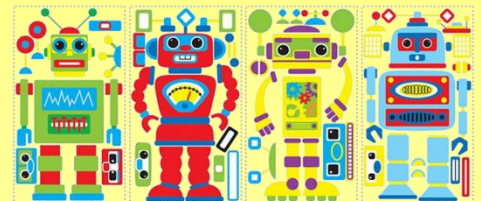


# What do robots do?

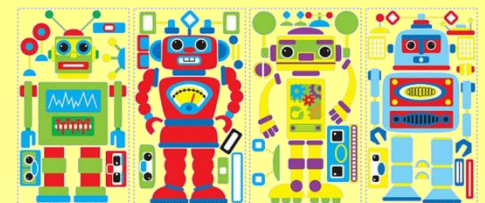
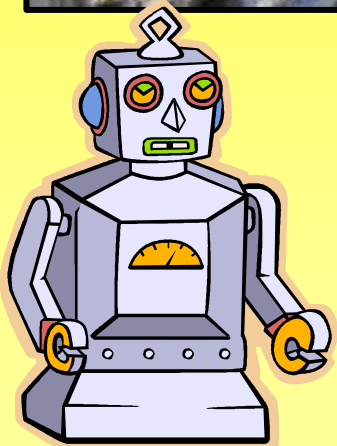
Most robots today are used to do repetitive or boring actions or jobs considered too dangerous for humans.

They are used in factories to build things like cars, chocolate bars, and electronics.

Some robots are even designed to explore deep underwater and out in space. NASA has sent robots to explore other planets!



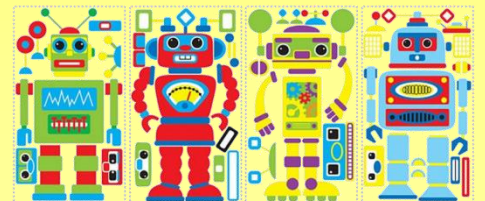
# What do robots do?



# Why do we use robots?

It is cheaper, easier and sometimes the only way we can get things done!

Robots can explore inside gas tanks, volcanoes, Mars and other places too dangerous for humans to go! Robots also can do one thing over and over again without getting bored. Robots never get sick, they don't need to take a day off, they can work 24 hours a day if necessary, and best of all they don't ever complain!

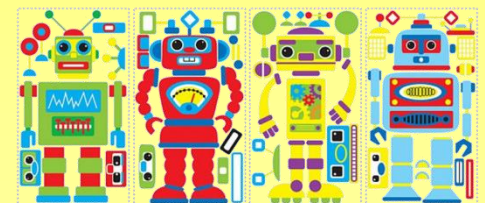
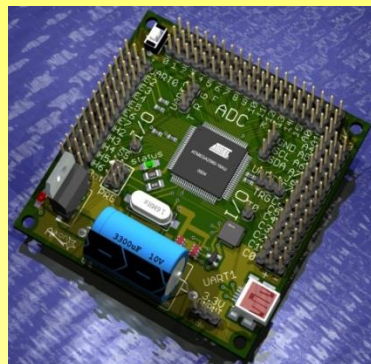


# What are robots made of?

Robots can be made of a variety of materials, including metals and plastics.

Most robots usually have at least 3 main parts:

1. The controller 'brain' which is run by a computer program



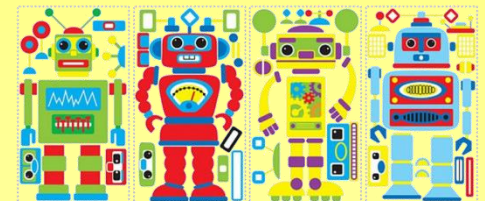


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2. Mechanical parts that make the robot move



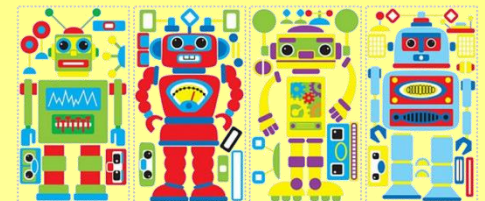
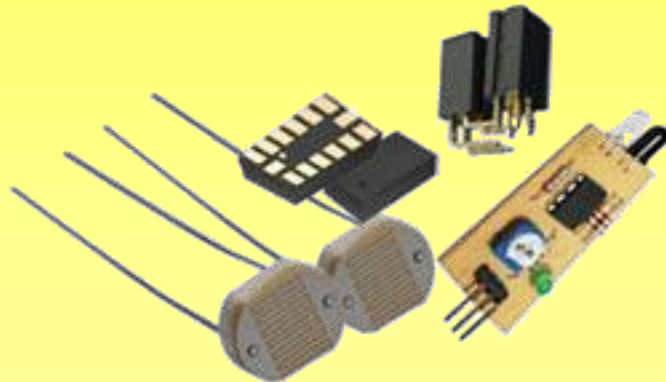
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## 3. Sensors to tell the robot about its surroundings

- Light sensors
- Cameras
- Sound sensors
- Touch sensors
- Temperature sensors
- Distance sensors

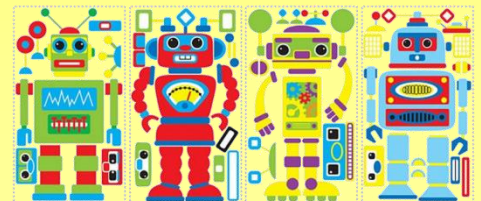


# Robot limitations

Unlike in films, robots are unable to think or make decisions.

They are only tools to help us get things done.

But, who knows what robots may be able to do in the future...maybe you will design the super-robot of tomorrow!



# Design your own robot



1. What useful job will your robot do?
2. How will you communicate with it?
3. What will power it?
4. How will it move?
5. What resources will you need to make it?
6. What will it be called?

