Are we like robots?

JEOPARDY
<table>
<thead>
<tr>
<th>Parts of EV3</th>
<th>Parts of Human</th>
<th>EV3 Movement</th>
<th>Human Movement</th>
<th>Humans Vs. EV3</th>
<th>Grab Bag</th>
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<tbody>
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Name the part of the EV3 which understands its program and follows it.

**Question**

Q: What is the EV3 computer brick?
Parts of EV3
200

Name the part of the EV3 that allows it to move

Question
Q: What are the motors?
Parts of EV3
300

Name the part of the EV3 that reads input from the surroundings

Q: What are sensors?
Name the part of the EV3 that transmits signals between the EV3 computer brick and the sensors

Q: What are the wires?
Describe the two different kinds of sensors.

Question

Q: What are those that just detect the presence of a stimulus and those that can detect amounts of a stimulus?
This is the part of the human body which commands the rest of the body.

Q: What is the Brain?
This part of the human body allows us to move

Q: What are the muscles?
Parts of Human
300
Give an example of a sensor in your body

Q: What is anything involved with the five senses, temperature, etc?
Parts of Human

400

This is what transmits signals between your brain and the sensors and muscles in your body

Question

Q: What is your nervous system?
Q: What is 200?

About this many muscles are required for you to walk.
This is where the EV3 gets the information that it needs to move.

**Question**

Q: What is from its program?
In order to move the robot, the robot’s motors have to perform this kind of motion.
EV3 Movement
300

Name a situation in an EV3 program that would cause a robot to stop

Question

Q: What is the duration of the movement coming to an end?
EV3 Movement
400

Name three different types of durations you can give the movement of your robot

**Question**

Q: What are unlimited, rotations, seconds, and degrees?
Name two benefits of using an ear train to move a wheel.”

Q: What are increases in power or speed, or the linear displacement of motion?
Human Movement

100

This is where a human gets the information that it needs to move

Question

Q: What is the brain?
In order for you to move, your muscles have to do this

**Question**

Q: What is contract?
Human Movement
300

These are the two main muscles involved in the bending of your elbow

Question

Q: What are your biceps and triceps?
Human Movement
400

Your muscles move your bones by pulling on these, which attach to bones

Question

Q: What are tendons?
If your elbow is bending, this action has to occur for it to stop

Q: What is contraction of your triceps?
Q: What is the nervous system?
The touch sensor of an EV3 is like this part of a human

Question

Q: What is the skin or any area sensitive to touch?
Human vs. EV3
300

The sound sensor of an EV3 is like this part of the human body

Q: What are ears?
Humans vs. EV3

400

The light sensor of an EV3 is like this part of a human

**Question**

Q: What are the eyes?
Human vs. EV3
500

This is the main difference between how humans and robots decide to do something

Q: What is the fact that humans can think about actions while the EV3 reads its program?
Grab Bag
100

This is the name of the type of robot that we program

Q: What is a bevelbot?
If the circumference of a wheel is 8 centimeters, how far would a taskbot move if made to go for 13 rotations?
Grab Bag
300

Give an example of a type 2 sensor

Q: What are many?
Grab Bag

400

This is the major quality seen in Disney’s WALLE robot that we are unable to give to our robots

Question

Q: What is the ability to think?
The ultrasonic sensor works by sending out a signal and judging how long it takes for that signal to come back. This is very similar to a process called echolocation performed by several animals. Give an example of one such animal.

Q: What are dolphins, bats, toothed whales, certain species of shrews and oilbirds?
List the steps involved in a person hearing a sound, then walking toward it.