What are robots?

Okay friends, welcome to Creative Steam. We will be playing and learning or should I say we will be learning as we play. Have you seen robots before? How do Robots work? Okay, let's try to understand about robot a bit more. Come on, let's go!

Robots fall into two broad categories.

Task-specific robots, designed to do one job and repeat it over and over again.

General-purpose robots capable of doing a wide variety of jobs (VERY RARE)

What is the term given to the following about Robots;

- A robot with its body shape built to resemble that of the human body? **Humanoid robot**
- A set of instructions a robot follows to perform a specific task? **Program**
- A person who creates and tests programs for devices including robots? **Programmer**
- Creating step-by-step plan or activities for robots to follow? **Programming**
- A device that detects some type of input such as light, heat, pressure, motion, or sound from a physical environment? **Sensor**

Shall we try to make a robot?

Here are some ideas to think of:

1) How to detect or Sense objects.

2) Those objects must be common and simple as can be, just anything you can think of

3) How to react to the objects, that is, how the robots respond to the things it detects and thinks about

TRY OUT A ROBOT WITH ANOTHER PERSON

1. In pair, choose who will be the **programmer** and who will be the **robot**
2. Collect your materials which should contain blocks of different shapes, sizes and colors, programmer and robots should have exactly same materials.
3. Programmer builds a structure using the materials. At the same time, programmer gives robot instructions on what to build step-by-step as they move along.
   a) Remember robots cannot ask programmer any questions, so program instructions need to be clear and simple so that the robot understands exactly what to do.
4. Robot follow programmer's instructions the best as can be. Just follow the instructions as you understand them, Remembers Robots can't ask questions.
5. At the end of the building compare the two structures, from programmers thoughts and structure with robots understanding translated to the structure.
6. Was the instructions clear? How could programmer improve the instructions?

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