

Robotics Badges: *Programming Robots 1*

Mystery Robot Design Template

Before the meeting, cut the handout into five strips for Activity 3: Learn About the Parts of a Robot.



HOUSING: This robot is known as a _____ because its main purpose is to _____. It was inspired by _____. Its body is made of _____, so it is able to _____. But it is also very _____, because it has to be able to _____.



ACTUATORS: The robot must operate in places such as _____. That means the best power source is _____. The robot runs on _____, which it gets from _____. As long as it has _____, it can keep going. When its power is low, it's time to _____.



EFFECTORS: This robot has to be able to _____. That's why it has [number] _____ degrees of freedom, or ways that it can move. They include moving its _____ in order to _____. If it needs to, it can also _____.



SENSORS: Since this robot is designed to operate in places such as _____, it is important that it be able to tell when _____ or _____. That's why it has sensors on its _____. One kind of sensor, the _____, lets it know when _____. The other, which is called a _____, prevents it from _____.



CONTROLLERS: Compared to other robots, this robot is very _____. It is controlled by _____, which tells it to _____ when it detects _____.

