

Name: _____

Main Idea with Robots

Directions: Read each passage and ask yourself, “What is the author doing in this paragraph?” Write your answer in the summary box and then think of an appropriate title for the passage based on the main idea of the passage.

1. What do you get when you cross a robot and an astronaut? A Robonaut! Robonauts are robot helpers designed to work side-by-side with astronauts. Work on the first Robonaut began in 1997, and by 2002 Robonaut B was revealed to the public. Robonaut B featured interchangeable lower bodies, like four-wheel mode or hydraulic legs. Yet scientists and engineers continued to improve Robonaut. In February of 2010, Robonaut 2 was released to the public. Robonaut 2 moved four times faster than the first Robonaut. An advanced version of Robonaut 2 was finally tested in outer space in 2011. Robonaut 2 functioned exactly as designed.

Summarize this paragraph in one sentence. **Be specific and clearly explain the main idea.**

An appropriate title: _____

2. *Automation* is the use of machines to reduce the need for human labor. In other words automation is when jobs done by people become jobs done by robots. Automation can be a good thing. Clothing, cars, and other manufactured products are available at good prices and in large supply because of automation. But automation can also be a bad thing. Because of automation there are over 700,000 robots in America that do jobs once performed by humans. The way of automation may not be best for humanity, but it is the course we are taking.

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3. My grandma may not look very strong, but with the help of hydraulic power, she can stop a car with her foot. How does hydraulic power work? First, fluid is rapidly released into a chamber through a valve. As the fluid collects, the valve is slammed shut. This causes a pressure spike, but since the chamber is sealed, the pressure has nowhere to go. The hydraulic mechanism channels the pressure and provides great power. And that’s how, with the help of hydraulics, my grandma can stop a speeding car with one foot.

Summarize this paragraph in one sentence. **Be specific and clearly explain the main idea.**

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4. Many people use the words cyborg and android interchangeably, but these words have different meanings. Both refer to beings powered by robotics, but an android is powered entirely by machinery. Cyborgs are partly powered by a living organism. They also look different. Androids may be completely mechanical, but they are designed to look like humans. They may have synthetic skin, hair, and other human-like features. Cyborgs are usually designed in a way that accents their robotic modifications. A cyborg's mechanically enhanced eye may cast a red light or have a chrome plate surrounding it, for instance. So you see, though the terms cyborg and android seem similar, they refer to different things.

Summarize this paragraph in one sentence. **Be specific and clearly explain the main idea.**

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5. It is a widely acknowledged fact that machines are stronger than people. Is it possible for them to become smarter than us too? Some scientists fear that it is, or so says the theory of technological singularity. In a nutshell, the theory of technological singularity says that there will be a moment when a computer can improve its own capabilities. This computer will go into an infinite loop, getting progressively smarter. Inevitably this will lead to machines becoming smarter than people, or so the theory goes. Such gains in available intelligence might lead to huge improvements in science and medicine. Diseases could be cured and such. But it could also lead to the total domination or replacement of mankind by robots, which would be bad. If the latter were the case, I, for one, would welcome our new computer overlords.

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6. Fellow Members of the Springfield Robotics Club: we have a problem. It has come to my attention that the workshop has been left an absolute mess on at least two separate occasions. Remember, that this is a shared space, so we must clean up behind ourselves after every meeting. It is in the spirit of keeping our club meeting space that we establish this rule: when you take a tool off the rack, put it back. If everyone puts their tools back immediately after using them, there will be minimal mess to clean up, and we won't get kicked out of the spot. So, if you like having a meeting place, and being part of our club, put your tools back.

Summarize this paragraph in one sentence. **Be specific and clearly explain the main idea.**

An appropriate title: _____