**Article of the Week #12**

**Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\* Circle words that are unfamiliar and define using context clues.

\*Write at least 5 questions that show what you are wondering as you read.

\*Underline at least 3 facts and draw a symbol/picture in the margins to represent each fact.

\*Write comments that show you understand the text.

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| **Annotation Rubric** | Exceeds Expectations | Meets Expectations | Progressing | Not There Yet |
| **Strong** evidence of interaction with the text. | **Good** evidence of interaction with the text. | **Some** evidence of interaction with the text. | **Little/no** evidence of interaction with the text. |
| **50 points** | **40 points** | **30 points** | **20 points**  (or below) |

**Sidewalk robots could eventually replace delivery cars and trucks**

By The Kansas City Star - 12.19.16

WASHINGTON, D.C. — Designers of futuristic cities picture delivery drones dropping off packages from the sky. They see driverless cars taking people to work. But robotic delivery services have already arrived. The machines look like drink coolers on wheels. They scoot along the sidewalks, delivering groceries and other packages.

The company Starship Technologies developed the robots. Any day now they will appear in Washington, D.C. and in Redwood City, California. The robots could soon be in up to 10 cities, carrying deliveries from a neighborhood "hub" to people's front doors. Deliveries will cost as little as $1 for each trip.

A second company called TeleRetail is also developing delivery robots. It plans to test its sidewalk robots in cities next year.

The delivery robots run like driverless cars. They use cameras, GPS and radar to “see” the world and navigate through it.

**A Better Delivery Option than Cars**

The companies see the robots as a cheaper, better alternative to delivering things with cars. Futurists see the little robots as an essential part of a digitally based "smart city." However, it will take time for humans to adjust to them.

Allan Martinson is one of the leaders at Starship Technologies. He thinks there will eventually be "thousands" of robots on the ground around the world.

Starship's delivery robots are simple. Customers use a smartphone mobile application to order their delivery. Once the robot is near their home or business, it sends them a text message. Then the customer uses a code to unlock the robot's box.

Some cities have welcomed the robots. They see practical promise in what can first appear to be a passing fancy gizmo.

**Cities Are Open to the Idea Of Robots**

Catherine Ralston works for Redwood City. She is excited about the robots. “They did a video in our downtown of the robot going into the bakery, picking up baked goods," she said. "At the moment it rolled into City Hall, it popped open and presented the cookies to City Council.” The city is thinking of using the robots for city services, such as delivering library books.

Washington, D.C. opened the door to the machines by passing a new law last month. It allows up to five different robot companies to operate in the area.

Leif Dormsjo is the head of the District's Department of Transportation. “I’m not at all futuristic," he said. Still, he wants the District to welcome "new and interesting technologies."

Whether city dwellers will be as accepting of the robots remains to be seen.

**HitchBOT Only Lasted Two Weeks In The U.S.**

A year ago, a robot called HitchBOT traveled across Canada, the United Kingdom and the Netherlands before it was brought to the United States. The robot looked like a cartoon human. It was designed to be picked up on the side of the road by drivers, like a hitchhiker.

It posted photos of its adventures online, and people seemed to like it. But after just two weeks in the United States, the HitchBOT was found broken in pieces in Philadelphia. Some worry that the same could happen to delivery robots.

**Robots Are Already Working In 16 Other Countries**

Starship Technologies already has robots operating in 58 cities in 16 countries around the world. More than 1.7 million people have encountered the robots on sidewalks, or used their services. There haven't been any problems, Martinson said.

Ralston of Redwood City said test robots rolling around the city haven’t caused any problems either. “People enjoy seeing the little robots,” she said. “They realize, OK, there’s something rolling along the sidewalk. It looks all right.”

In Washington, D.C., one Starship robot drew some attention recently. It was scooting down a busy sidewalk.

Timothy Sanders stopped his bike to watch it weave in and out of traffic, avoiding walkers and bikers. “It’s amazing, it’s very futuristic,” he said.

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| **Monday:**  Read the article and annotate – *follow the annotation directions at the top of the page!* |
| **Tuesday:** Answer the following questions in complete sentences.   1. What type of robot has Starship Technologies developed? 2. According to the section titled “A Better Delivery Option Than Cars,” how does the robot delivery system work? 3. In which section\* could you find text evidence to support the following claim?   **Robot delivery services may not be as successful as some hope.**   1. Why does the author include the following information?   “Starship Technologies already has robots operating in 58 cities in 16 countries around the world. More than 1.7 million people have encountered the robots on sidewalks, or used their services.” |
| **Wednesday**: Answer the following questions. Explain your answers in complete sentences.   1. **Based on information in the article, which of these statements is TRUE?** 2. The HitchBOT robot will soon be delivering packages. 3. Some people are worried that the new robots could get destroyed. 4. Starship Technologies only uses its robots in the United States. 5. Washington, D.C. passed a law against using new robots there.   I chose \_\_\_\_ because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.   1. **Which sentence from the article is MOST important to include in its summary?** 2. The robots could soon be in up to 10 cities, carrying deliveries from a neighborhood "hub" to people's front doors. 3. Futurists see the little robots as an essential part of a digitally based "smart city." 4. They see practical promise in what can first appear to be a passing fancy gizmo. 5. A year ago, a robot called HitchBOT traveled across Canada, the United Kingdom and the Netherlands before it was brought to the United States.   I chose \_\_\_\_ because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| **Thursday:** On a separate sheet of paper, respond to each prompt in **at least** **four detailed sentences**.   1. If you were going to add another picture or a chart to this article to help readers better understand an important point, what would it be and why? 2. Write a letter to Starship Technologies. Include the following:  * At least two questions you have about their robot delivery service * A description of a possible problem with the delivery service **AND** a possible solution * An explanation of why you think they should try the delivery service in your city **OR** why you think they should not try the delivery service in your city |

**Interested in this topic? Check out this related resource!**

* **“Awesome 8 – Rad Robots!”** [*http://tinyurl.com/8radrobots*](http://tinyurl.com/8radrobots) *(check out NC State in number 4 ☺)*