

Invasion of the Drones

1 It was just after 3 a.m. on January 26, 2015. A Secret Service officer was patrolling the White House lawn. Suddenly, he noticed a suspicious object flying just above the ground. It was about 2 feet wide and had four small propellers, like those on a helicopter. The White House went on high alert. The object crashed into a tree, and officials rushed to check it out. The flying machine was a remote-controlled aircraft known as a drone, or unmanned aerial vehicle (UAV).

2 Luckily, the drone wasn't being used to harm anyone. It was just an expensive toy that had gotten away from someone who was flying it nearby. No one was injured. But the incident raised some serious questions about drones. It's the latest chapter in an ongoing debate: Are these unmanned aircraft useful tools or are they a threat to our safety and privacy?

Drones All Around Us

3 The U.S. military first used drones in the 1930s. Pilots and gunners used them for target practice. They shot them out of the sky. Today, the military remains the leading user of drones. (See "Drones in War," next page.) But companies have also begun making smaller, cheaper drones for civilians. UAVs, like the one that crashed at the White House, can be bought online for as little as \$500.

4 Drones equipped with cameras are being used in many innovative ways. Movie directors use drones to film scenes from a bird's-eye view. Farmers use them to monitor the health of their crops and livestock. Scientists recently used drones to count and study sea lions in Alaska.

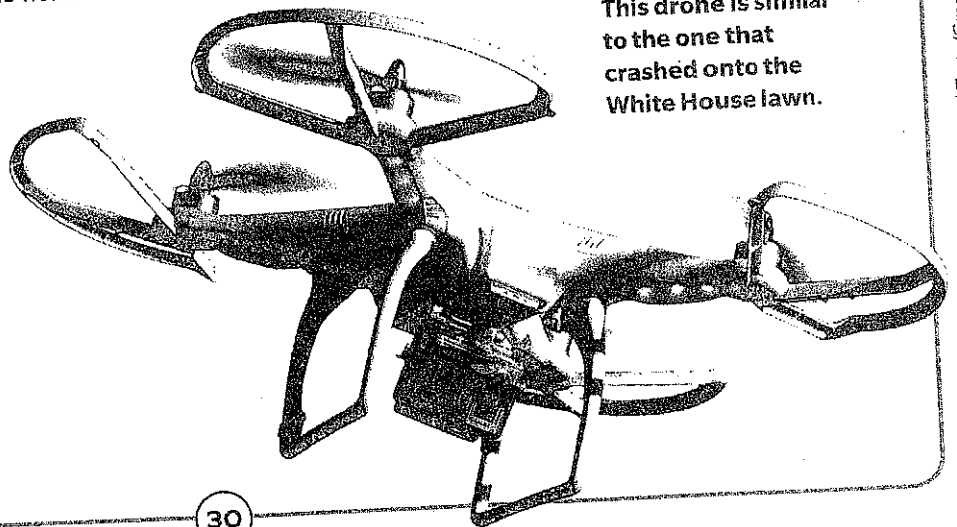
5 Drones can be an effective tool for law enforcement too. Police departments use drones to assist with rescue missions or search for suspected criminals. Drones may even be arriving at your doorstep in the future. Amazon, the online retail store, hopes to use drones to deliver packages someday. Domino's recently tested delivering pizzas using drones.

6 "The uses are limited only by the imagination," says Colin Guinn. He works for 3D Robotics, a major U.S. drone manufacturer.

The Drone Debate

7 The increased popularity of drones has raised safety concerns. Drones can be difficult to control. People have lost control of them because of wind gusts and software glitches. Most of these "flyaways" end with the drones smashing into trees or buildings.

8 Drones have also come dangerously close to colliding with passenger planes. The Federal Aviation Administration (FAA) oversees the use of non-military aircraft in the United States. In 2015, it said that pilots had reported more than 1,000 drone sightings. Many were above 400 feet—the highest a drone is allowed to go. Many people fear that a drone could get sucked



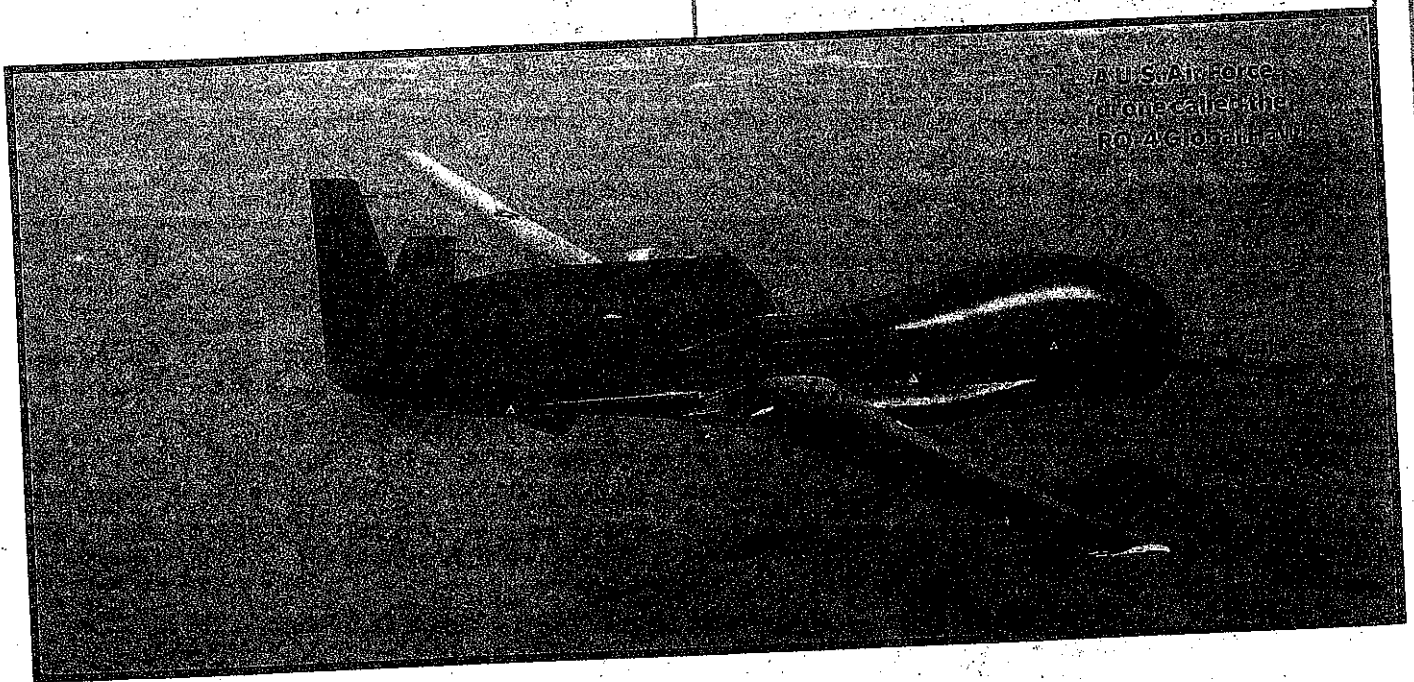
This drone is similar to the one that crashed onto the White House lawn.

into the engine of an airplane. That could cause the plane to crash.

- 9 In addition, many legal experts are concerned that drones with cameras could be used to invade people's privacy.
- 10 "Someone could fly them around the neighborhood and capture images of people in their backyards," says Hillary Farber. She is a professor at the University of Massachusetts School of Law. Farber has written about privacy issues related to drones.
- 11 Many people are also worried that the government and the police could use drones to spy on citizens.
- 12 Recently, the FAA created new rules for the use of drones. It also created a national drone registry, or list. That means people have to register drones when they buy them. The registry will help officials track down the owner of a drone that flies anywhere it shouldn't.
- 13 "It's all about finding balance," says Farber. "How are we going to use [drones] in a way that's safe and not invading people's privacy?"

Drones in War

- 14 Drones are playing a bigger role in warfare than ever before. In fact, nearly one in three U.S. military aircraft is an unmanned aerial vehicle (UAV). Some are the size of large model airplanes. Others are as big as a small jet and can hold up to 3,000 pounds of missiles and bombs.
- 15 Operators use joysticks to control drones thousands of miles away. They sit in front of video screens at military bases in the U.S. The U.S. has used drones to attack hundreds of suspected terrorists in places like Afghanistan and Iraq.
- 16 Drones have some advantages over piloted aircraft. They can stay in the air for days. They can also keep pilots from having to face the dangers of the battlefield. The military says UAV strikes are very precise.
- 17 But the use of military UAVs has created controversy as well. Human rights groups argue that many drone attacks have accidentally killed civilians. Critics also say drones make war seem more like a video game rather than a real life-and-death situation.



A U.S. Air Force drone called the RQ-27 Global Hawk.

Scholastic News Level 4 Informational texts Grade 5 © Scholastic Inc.

Name: _____

Directions: Read the article "Invasion of the Drones." Then answer the questions below.

1. According to the article, people are debating whether drones _____.
 - A. should be used only for target practice
 - B. are too expensive
 - C. are a threat to people's safety and privacy
 - D. should be banned

2. Which of the following would the author probably not consider to be an innovative use of drones?
 - A. Helping rescue pets
 - B. Keeping track of the number of sea lions in Alaska
 - C. Filming scenes from dramatic angles
 - D. Flying drones for fun

3. Why is Hillary Farber concerned about the use of drones?
 - A. The use of drones could invade people's privacy.
 - B. The environmental laws regarding drones are unclear.
 - C. The popularity of drones is declining.
 - D. The commercial regulation of drones is too strict.

4. Which sentence from the article best supports the answer to question 3?
 - A. Many people are also worried that the government and the police could use drones to spy on citizens. (paragraph 11)
 - B. People have lost control of them because of wind gusts and software glitches. (paragraph 7)
 - C. Recently, the FAA created new rules for the use of drones. (paragraph 12)
 - D. Pilots and gunners used them for target practice. (paragraph 3)

5. What is the sidebar "Drones in War" mostly about?
 - A. The history of how drones have been used in war
 - B. How drones are being used in modern warfare
 - C. How drones are used to create video games with war scenes
 - D. The ways filmmakers use drones to realistically portray war

6. In the article, Professor Hillary Farber talks about "finding balance" in the use of drones. What do you think she means? Do you think the FAA is working to find a balance? Explain on a separate sheet of paper, using details from the article.