

Green Airplanes

The next **generation** of airplanes has arrived. They have bigger seats. Their windows are larger. They have more space for **luggage**. And they are coming to an airport near you. These new airplanes, such as the Boeing 787 Dreamliner or Bombardier CSeries, are more comfortable for passengers. They also **benefit** the environment. By using less fuel, they will create less pollution. Airline companies are excited, but scientists wonder if the airplanes' designers could do even more.

The secret to using less fuel is less weight. Therefore, these new planes are **made up of** carbon fiber, a very light but strong plastic. Unlike older planes, they do not contain much heavy metal. As a result, they require 20 to 25 percent less fuel than similarly sized older planes.

By using less fuel, these new airplanes will create less pollution. Because of this, Boeing and Bombardier like to describe their new products as "green airplanes". In a speech in front of 15,000 workers, Boeing president Scott Carson called the Dreamliner the most environmentally friendly aircraft ever built.

Some people, however, are still not **satisfied**. They say that the new airplanes only produce 20 percent less pollution. "We need to go further than that," says transport expert Geoff Hoon. Experts like Hoon hope airlines will one day use only biofuel. Unlike **regular** fuel, made from oil, biofuel is made from plants like corn or sugarcane. Scientists believe that the use of biofuel produces half the carbon dioxide of oil-based fuel.

Some scientists also complain about new airplanes' design. Although they weigh less, the Dreamliner and CSeries still look like regular planes. And for the last fifty years, the design of airplanes hasn't changed much.

Scientists say that creating planes with a new shape could save much more weight and fuel. One idea is to make planes that look like a very large single wing. Another is to create planes in the shape of a flying saucer, scientists say, would use half the fuel of modern planes.

If you fly on an airplane soon, it won't be a flying saucer, but it may be a new Dreamliner or CSeries. If so, enjoy the **extra** room and big windows. Just don't forget about the air outside.

(biofuel: fuel produced from plant materials, such as corn, or from organic waste, such as animal waste)

sugarcane: a tall tropical plant from which sugar is obtained

flying saucer: a type of aircraft shaped like a plate that some people believe carries creatures from another world)

1) Vocabulary check

Complete the sentences with the boldfaced words from the reading.

1. I hate everything I want in life. I feel completely _____.
2. I lost my pen; do you have a (n) _____ one I can borrow?
3. Exercising can _____ your health; it helps you lose weight and live longer.
4. She made a cake in the _____ of an airplane for her son's birthday party.
5. The _____ seats in the airplane cost \$800. If you want a first-class seat, you will have to pay \$1,200 extra.
6. Many cars today waste a lot of fuel, but the next _____ of cars will use less fuel.

7. The bus driver told the _____ to sit down while the bus was moving.
8. Carbon dioxide is a gas that is _____ carbon and oxygen.
9. My flight was late, and my luggage was lost. I'm going to _____ to the airline company.
10. I usually pack only one small bag when I travel. I don't like to carry a lot of _____.

2) Comprehension check

Circle the letter of the correct answer to complete each sentence.

1. The new generation of airplanes can carry more _____.
 - a. luggage
 - b. passengers
 - c. biofuel
2. Carbon fiber is beneficial because it _____ less than heavy metal.
 - a. costs
 - b. breaks
 - c. weighs
3. Airline companies are excited about the new airplanes because they _____.
 - a. look like very large single wings
 - b. use less fuel
 - c. cost more to build
4. The Dreamliner is a "green" airplane because it _____.
 - a. Is very comfortable
 - b. produces less air pollution than older airplanes
 - c. uses biofuel instead of regular fuel
5. Some _____ are not happy with the new generation of airplanes.
 - a. Boeing workers
 - b. passengers
 - c. transport experts
6. If their design changes, future airplanes may not need _____ in order to fly.
 - a. two wings
 - b. fuel
 - c. carbon fiber

3) Complete the summary of "Green Airplanes." Do not look back at the reading. There is more than one way to complete some of the sentences. You do not need to use the same words as in the reading, but make sure the meaning is the same.

New airlines such as the Boeing Dreamliner are made of special (1) _____, such as carbon fiber. This reduces the airplanes' (2) _____. Because of this, they use about 20 to 25 percent less (3) _____, and they produce 20 percent less _____ (4) pollution. Passengers will like the airplanes because they are comfortable and have large (5) _____. But some people are not (6) _____ with these new airplanes. They want airplanes to use (7) _____, which is made from plants. They also want to change the

(8) _____ of airplanes. One suggestion is to create a plane in the shape of a (9) _____. In the future, airplanes may look very (10) _____ from the way they look today.