

# Airbus A 380

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## The Airbus A380

The Airbus A380 is a double-deck, wide-body, four-engine jet airliner. It is the world's largest passenger airliner; many airports have upgraded their facilities to accommodate it because of its size. Airbus *designed* the aircraft to challenge Boeing's monopoly in the large-aircraft market; the A380 made its first flight on 27 April 2005 and began commercial service in October 2007 with Singapore Airlines.



The A380's upper deck extends along the entire length of the fuselage, with a width equivalent to a wide-body aircraft. This gives the A380-800's cabin 478 square meters of floor space; with 49%

more floor space than the next-largest airliner, the Boeing 747-8, the cabin provides seating for 525 people in a *typical* three-class configuration or up to 853 people in all-economy class configurations. The A380-800 has a design *range* of 15,700 kilometers sufficient to fly from New York to Hong Kong, and a cruising speed of Mach 0.85 or about 900 km/h at cruising altitude.

## Improvements for Passengers

The cabin has *features* to reduce traveler fatigue such as a quieter interior and higher pressurization than previous generation of aircraft; the A380 is pressurized to the equivalent altitude of 2,100 m up to 12,000 m. It has 50% less cabin noise, and 50% more cabin area and *volume*. There are larger windows, and bigger overhead bins, and 60 cm extra headroom. Seating options range from four-across in first class to eleven-across in economy. On other aircraft, economy seats range from 41.5 cm to 52.3 cm in width while A380 economy seats are up to 48 cm wide.

## Improved A380-800

From 2013, Airbus will introduce a new A380 build standard incorporating a strengthened airframe structure and a 1.5° *increase* in wing twist. Airbus will also offer, as an option, an improved maximum take-off weight, thus providing a better payload/*range performance*. Maximum take-off weight is increased by 4 tons, to 573 tons and an additional 190 km in range. This is achieved by reducing flight loads and partly from optimizing the fly-by-wire control laws.

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## Comprehension Check

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Circle the correct answer.

1. There is 50 % less cabin noise in the Airbus A 380.  
true                      false                      does not say
2. There are laptops available for every passenger on the Airbus A 380.  
true                      false                      does not say
3. The Airbus A 380 has two engines.  
true                      false                      does not say

## Focus Words

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*increase, performance, features, volume, range, typical, designed*

## Word Form Chart

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Complete the word form chart for the focus words. Not all focus words have all parts of speech shown in the table.

	performance	increase	designed	typical
noun				
verb				
adjective				
adverb				

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## Using the focus words

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Is the focus word being used correctly? Circle correct or incorrect. If you circle incorrect, write why in the space.

1. We need to **features** the answers for our lab report.

correct

**incorrect**

Reason: Features is a noun, not a verb. Also, the meaning is not right.

2. The research is based on a **range** of activities with many teachers and students.

correct

incorrect

Reason: \_\_\_\_\_

3. **Typical**, the number of times each person has to speak is three to five.

correct

incorrect

Reason: \_\_\_\_\_

4. What is the **volume** of the bottle in Figure 12.1a?

correct

incorrect

Reason: \_\_\_\_\_

5. The textbook **designed** is not well.

correct

incorrect

Reason: \_\_\_\_\_

6. The **performance** of the new train during the test was excellent.

correct

incorrect

Reason: \_\_\_\_\_

7. The temperature will **increase** by 2.5°C per hour.

correct

incorrect

Reason: \_\_\_\_\_

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## *Time to write I*

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Choose two of the focus words and use them in a short paragraph.

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## *Time to write II*

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Write a 90-100 word summary of the article.

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*Acknowledgments: Reading is adapted from Wikipedia.*