MAJOR SUBWAYS OF EUROPE

Words

Look for the following words as you read the passage. Match each word with its correct definition.

Words	Definitions
1. architecture	A. v., to compete with
2. centerpiece[1]	B. n., central office for a military commander
3. clog	C. n., the act of ruining something
4. decorate	D. n., something that serves as protection
5. destruction	E. n., an opening to let air, steam, or smoke out
6. disruptive	F. v., to make bigger
7. expand	G. n., a setting in which to present something
8. headquarters	H. v., to make an object or place beautiful
9. intrinsic	I. n., the style of a building
10. operation	J. v., to use
11. pedestrian	K. adj., basic
12. release	L. n., the working of something, being used
13. rival	M. adv., below the ground
14. shield	N. v., to let something out
15. showcase	O. n., the outer part or top of something
16. spring up	P. adj., stopping the usual course of activity
17. surface	Q. n., the main or most important feature
18. underground	R. v., to fill so much as to make movement difficult
19. utilize[2]	S. v., to appear
20. vent	T. n., a person traveling[3] on foot

[1]BrE: centrepiece
[2]BrE: utilise
[3]BrE: travelling

Reading

Major Subways of Europe

Public transportation[1] is an intrinsic part of every modern city. Many big cities have an underground rail system as their centerpiece. Three of the biggest and busiest underground rail systems in Europe are in London, Paris, and Moscow. The character of each city imprints its railways.

The first of these subways was London's Underground, which opened in 1863. By that time, horses and pedestrians had so clogged the streets of London that city government ruled that no railroads could enter the city except underground. The method used for laying the first underground tracks is called "cut and cover," meaning the streets were dug up, the track was laid, a tunnel was built, and then everything was buried. Although the method was disruptive, it worked. Steam engines chugged under London, releasing steam through vents along the city streets. In its initial day of operation, the London Underground carried 30,000 passengers.

This cut-and-cover method caused massive disruptions in the city and required the destruction of the structures above the tunnel. A better means of expanding the original Underground was needed, and builders did not have to look far to find it. London was also home to the first underwater tunnel, a pedestrian tunnel that had been built under the Thames River in 1825, made possible by the engineer Marc Brunel. He had devised a way of supporting the tunnel while the workers dug, called the Brunel Shield. Two young engineers improved the Brunel Shield for use in expanding the London Underground. The new Harlow-Greathead Shield carved a circular tube more than seven feet in diameter, which is why the London Underground is called the Tube. By then, the tunnels could be deeper than the original ones because electric train engines had become available. These trains did not have to be close to the surface to release steam. The shield could be used to dig deeper tunnels without destroying the surface structures above them.

Paris started designing an underground rail service to rival London's. The first part of its system was not opened until the World's Fair and Olympics were held in that city in 1900. The Paris Metro is shorter than London's, but it carries more passengers every day, second in Europe only to Moscow. Whereas London's Underground is known for its engineering, Paris's Metro is known for its beauty. The stations and entrances are examples of art nouveau architecture, and they are decorated with mosaics, sculptures, paintings, and innovative doors and walls.

The Moscow Metro opened in 1935. It was based on the design of the London Tube, except much of the track is above ground. When Stalin

[1]BrE: transport

came to power, he used the stations as showcases of Russian art, culture, and engineering. The underground Moscow stations are filled with statuary, painting, and mosaics.

Underground railways are not only for transportation. During World War II, all three underground systems were used as bomb shelters for the populace. The Moscow subway was even used as a military headquarters. Stores and malls have sprung up by stations, something that is especially convenient in cold climates.

All three systems are continuing to expand, providing service to more riders in more distant locales. This is all part of an effort to decrease greenhouse gases emitted from personal vehicles.

Answer the questions about **Major Subways of Europe**.

Questions 1–4

Do the following describe the subway system in London, Paris, or Moscow?

*Write the correct letter, **A**, **B**, or **C**.*

A London
B Paris
C Moscow

_____ 1. It was used as a military headquarters during World War II.

_____ 2. It has a large percentage of its track above the ground.

_____ 3. It was originally built for the operation of steam trains.

_____ 4. It is famous for its beautiful architecture.

Questions 5–7

*Choose the correct letter, **A**, **B**, **C**, or **D**.*

5. The Paris Metro stations are decorated with
   A pictures of the Olympics.
   B different kinds of artwork.
   C photographs of the World's Fair.
   D examples of engineering.

6. The London Underground was first built because
   - **A** the underwater pedestrian tunnel had been damaged.
   - **B** a new method for digging tunnels had been developed.
   - **C** the city streets were too clogged for trains on the surface.
   - **D** the city wanted to rival the transportation system in Paris.

7. The introduction of electric train engines allowed for
   - **A** deeper tunnels.
   - **B** more pedestrians.
   - **C** innovative doors and walls.
   - **D** more art showcases in the stations.

My Words

Write the words that are new to you. Look them up in the dictionary and write their definitions.

Words	Definitions
_____	_____
_____	_____
_____	_____
_____	_____
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