

The history of pencil

A. Lightning struck first in the history of pencils. In 1564, during a thunderstorm in Borrowdale, England, graphite was discovered when lightning struck a nearby tree. The black substance found at the base of the unfortunate tree was determined to be something other than wood ash by the locals. Because of how pliable it was, it was easily marked. Since chemistry was still in its infancy at the time, it was mistaken for lead because both are equally dark and heavy. The locals quickly found a practical application for it in marking their sheep with symbols of ownership and numerical value.

B. Graphite mines have been found and developed in Britain more so than in any other country. However, a pencil wasn't created until much later. Graphite needs protection because it is so soft. For stability, Italians first wrapped graphite sticks in string or sheepskin, creating the world's first pencil. Next, in the 1560s, an Italian couple likely created the first plans for the modern, wood-encased carpentry pencil. The pencils they used were smaller and flatter than the standard variety. As part of their plan, they carved a hole in a juniper stick. Not long after that, in 1662, Germans figured out how to make a better one by carving a piece of wood in half, inserting a graphite stick, and glueing the two pieces together. This is the same basic process that is still used today. Artists from all over the known world became interested in these primitive pencils after hearing about their usefulness.

C. The "lead" of a modern pencil is actually a mixture of finely ground graphite and clay powders, despite the fact that the graphite core is still referred to as lead. The amalgamation is crucial as the quantity of clay added to graphite depends on the intended pencil hardness. In addition to this, the amount of time spent on crushing the mixture determines the quality of the produced lead. The middle portion becomes more durable by the addition of excessive clay. The European system of grading is used for a large percentage of pencils worldwide and is universal in Europe. A pencil's grade was indicated by a sequence of Hs or Bs, such as BB and BBB for progressively softer leads and HH and HHH for progressively harder ones; B stood for black and H for hard in this naming system. Then, the most common pencil for writing is an HB.

D. In England, they kept using whole sawn graphite to make pencils. But with the mass production of pencils, they are getting drastically more popular in many countries with each passing decade. Graphite usage has been on the rise due to rising demand. China, India, Brazil, North Korea, and Canada are the top five exporters of natural graphite, with total global production in 2012 at 1,100,000 tonnes, according to the United States Geological Survey (USGS). When the government realised how valuable graphite was, they stepped in to take control of the mines and put guards in place. As moulds for making cannon balls, it saw extensive use in the second half of the 16th century, during the reign of Elizabeth I. It was armed stagecoaches that carried graphite from Keswick to London. The stealing of "wad" or its receipt became a crime under an Act of Parliament passed in 1751. This crime carried a sentence of hard labour or exile.

E.By spending \$1000 the United States made a pencil to use in zero gravity conditions in the face of fiction. However, they did not use pencils in outer space before. It is common knowledge that Russian astronauts used grease pencils, which are durable and can't easily be broken. But it is also a fact that their counterparts in the United States used pencils in outer space before real zero gravity pencil was invented. Mechanical pencils were highly preferable over grease pencils which were more favourable to Russians but as they produced smudgy lines, mechanical pencils which produced fine lines were much clearer comparatively. The only detrimental part of such pencils was that they used to break frequently. That bit of graphite floating around the space capsule could get into someone's eye, or even find its way into machinery or electronics or other problems. Americans stayed dependent on mechanical pencils for many years even though they invented zero gravity pencils.

F.The prospects of pencils seemed bleak against the backcloth of the modernising world. In reality, it does not. The use of pencils is widespread and can be seen in classrooms, meeting rooms and art rooms for instance etc. In the future, it will likely be used by a wide variety of people, including students for writing notes in textbooks, artists for sketching ideas, waiters and waitresses for writing orders on whiteboards, cosmetic artists for applying products to skin, and architects for drawing up plans. It appears that anything is possible.

The history of pencil Reading Questions

Questions 1-4 (h3)

Finish the sentences below.

For each answer, choose **ONE WORD ONLY** from the passage.

Fill in the blanks **1-4** on your answer sheet with your answers.

Graphite was discovered beneath a **1.**_____.

It was filthy to use in Borrowdale because it was **2.**_____.

Graphite was used by ancient people to sign **3.**_____.

People discovered graphite **4.**_____ in Britain.

Questions 5-7

Complete the notes below:

5. _____ mines have been discovered and developed in the United Kingdom more than in any other country. A pencil, on the other hand, was invented much later. Because graphite is so 6. _____, it must be protected. Italians first wrapped graphite 7. _____ in string or sheepskin for stability, resulting in the world's first pencil.

Questions 8 -13

Do the following statements agree with the information given in Reading Passage?

In boxes **8-13** on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

8. Italy was most likely the first country in the world to manufacture pencils.
9. Germany made pencils out of various types of wood.
10. Graphite hardens and sharpens pencils.
11. Pencils are no longer manufactured in the United Kingdom.
12. In space, American astronauts did not use a pencil.
13. Pencils will most likely not be used in the future.

The history of pencil Reading answers with Explanation

The history of pencil Reading answers with explanations can help you correct errors and identify the information needed for your answer.

(Note: The text in italics from the reading passage shows the location from where the answer is taken or inferred.)

1. Tree

Explanation: In the second line of paragraph A, *“Borrowdale, England, graphite was discovered when lightning struck a nearby tree”*.

2. Soft

Explanation: In the second and third lines of paragraph B, *“Graphite needs protection because it is so soft”*.

3. Sheep

Explanation: In the last line of paragraph A, *“marking their sheep with symbols of ownership and numerical value”*.

4. Mines

Explanation: In the first line of paragraph B, *“Graphite mines have been found and developed in Britain more so than in any other”*.

5. Graphite

Explanation: In the first line of paragraph B, *“Graphite mines have been found and developed in Britain more so than in any other”*.

6. Sticks

Explanation: In the third line of paragraph B, *“For stability, Italians first wrapped graphite sticks in string or ”*.

7. Wood-encased

Explanation: In the fifth line of paragraph B, *“the first plans for the modern, wood-encased carpentry pencil”*.

8. True

Explanation: In the fourth, fifth and sixth lines of paragraph B, *“For stability, Italians first wrapped graphite sticks in string or sheepskin, creating the world's first pencil. Next, in the 1560s, an Italian couple likely created the first plans for the modern, wood-encased carpentry pencil”*.

9. Not given

Explanation: —

10. False

Explanation: In the second and third lines of paragraph C, *“The amalgamation is crucial as the quantity of clay added to graphite depends on the intended pencil hardness”*.

11. False

Explanation: In the first line of paragraph D, *“In England, they kept using whole sawn graphite to make pencils”*.

12. False

Explanation: In the fourth and fifth line of paragraph E, *“But it is also a fact that their counterparts in the United States used pencils in outer space before real zero gravity pencil was invented”*.

13. False

Explanation: In the first line of paragraph F, *“The prospects of pencils seemed bleak against the backcloth of the modernising world”*.