

Read *Pencil power* and answer questions 21 to 26.

# *Pencil* power

## The birth of the pencil

The story of pencils began in England more than 500 years ago. Legend says that a tree fell over in a sheep paddock in a part of England called Borrowdale. Curious shepherds found lumps of heavy, greasy, black rock lying among the tangled roots. This mysterious rock left black stuff on the shepherds' hands when they touched it. They soon found a use for it. The dirty black rock was perfect for marking their sheep.

The shepherds also found a way to stop it getting on their hands. They wrapped slabs of the black rock in sheepskin. The first pencils were born!

## A name change

The shepherds who used the greasy, black rock called it *lead* because it reminded them of the metal called lead: it was about the same colour and it felt heavy. It wasn't lead, though. It wasn't even a metal. It was a rock. A German geologist (a scientist who studies rocks) called Abraham Gottlob Werner gave it a new name: *graphite*. He called it that because the ancient Greek word *graphein* means 'mark' or 'write'. So the black rod in the centre of your pencil that everyone calls 'lead' is not lead at all: it's graphite.

## The magic of clay

Lumps of pure graphite like the ones the shepherds found are very rare. Therefore, to make pencils these days, rocks containing small amounts of graphite are crushed and the graphite is extracted (taken out). The graphite is then mixed with clay and made into rods. The graphite and clay rods are cooked until they're hard and dry. They are then encased in wood.

|  |    |  |    |
|--|----|--|----|
|  | 9B |  | F  |
|  | 7B |  | H  |
|  | 4B |  | 2H |
|  | 2B |  | 4H |
|  | B  |  | 7H |
|  | HB |  | 9H |

B pencils have more graphite in them;  
H pencils have more clay.

F pencils have fine points.

Here you can see the sort of marks they make.

21. The words 'Legend says' are used to introduce the story of the shepherds because they indicate that
- (A) only people in ancient times believed the story.
  - (B) the story should not be considered as historical fact.
  - (C) scientists are still trying to prove that the story is not true.
  - (D) the story is believed by the people who live in Borrowdale.
22. Under the subheading 'A name change', the information in the brackets ( ) is provided to explain
- (A) what type of work a geologist does.
  - (B) how a geologist discovered graphite.
  - (C) why Abraham Werner was a famous geologist.
  - (D) how a geologist worked out that graphite was a rock.
23. According to the text, pure graphite is **NOT** used to make pencils because it is
- (A) too soft.
  - (B) too messy.
  - (C) hard to find.
  - (D) difficult to crush.

24. Subheadings are used in this text in order to
- (A) make the text more complete.
  - (B) stress that the information is accurate.
  - (C) help younger children decide what to read.
  - (D) indicate the type of information found in each section.

25. 'B pencils have more graphite in them;

H pencils have more clay.'

What is the best way to combine the two parts of this sentence without changing its meaning?

- (A) B pencils have more graphite in them since H pencils have more clay.
  - (B) B pencils have more graphite in them whereas H pencils have more clay.
  - (C) B pencils have more graphite in them because H pencils have more clay.
  - (D) B pencils have more graphite in them although H pencils have more clay.
26. The purpose of this text is to
- (A) tell a story about the importance of pencils.
  - (B) provide information about the history of pencils.
  - (C) instruct readers on how to make a pencil at home.
  - (D) explain the importance of geologists in the discovery of pencils.