

Lapis lazuli

- A** Lapis lazuli is a type of rock whose name means 'stone of azure' – *lapis* meaning 'stone' in Latin. The second part of the name, *lazuli*, comes from the Persian word *lazward*. This was originally a place name, but soon came to mean 'blue' because of its association with the stone. The English word *azure* also comes from this source.
- B** Lapis lazuli has had a long history. The ancient royal Sumerian tombs of Ur, located near the Euphrates River in lower Iraq, contained more than 6,000 beautifully executed lapis-lazuli statuettes of birds, deer and rodents, as well as dishes used to contain temple incense and possibly food and beads. Later, Egyptian burial sites dating from over 5,000 years ago were found to contain many lapis-lazuli jewellery items. Powdered lapis was favoured by Egyptian ladies as a cosmetic eye shadow. It was also once believed that lapis lazuli had medicinal properties. It was generally ground down, mixed with milk and applied as a dressing for boils and ulcers.
- C** Lapis lazuli is a rock and not a mineral because it is made up from various other minerals. (A true mineral has only one constituent.) The main component of the rock is lazurite, along with calcite, sodalite and pyrite. The most prized lapis lazuli is a dark, nearly blackish blue. However, pyrite, a commonly associated mineral, is often liberally sprinkled throughout the lazurite to create a striking combination of rich blue and brassy gold, and this is also much prized. Unfortunately, lazurite occurs most frequently in lighter shades, commonly mixed with streaks of calcite. Although attractive, this material is less desirable and consequently fetches a lower price. Often a stone with white calcite streaks is stained blue to improve the colour and increase the price, but this dye will fade with time.
- D** Although lapis lazuli can be found in Pakistan, in the Andes Mountains of Chile and around Lake Baikal in Russia, the finest examples have traditionally come from the Badakshan area of Afghanistan. This source of lapis may be the oldest continually worked set of mines in the world, the same mines operating today having supplied the pharaohs of ancient Egypt. The lapis is mined on the inhospitably steep sides of a long, narrow valley, sometimes only 200 metres wide and backed by jagged peaks that rise above 6,000 metres. Sparsely populated and covered with snow for much of the year, the barren region is inhabited by wild boar and wolves. The summer sun is scorching, but temperatures drop below freezing at night. Lazurite gem deposits occur in veins of black and white marble hundreds of metres thick. The gem veins, seldom exceeding 10 metres in length, lie in snow-white calcite.
- E** Ground to a powder and processed to remove impurities, lapis lazuli forms the pigment ultramarine. There is evidence of it being used as a pigment from as early as the sixth and seventh centuries AD from cave paintings found in Afghanistan. It has also been found in some tenth- and eleventh-century Chinese and Indian paintings. However, it is European painters who seem to have made most use of the material. Many of the blues, from medieval illuminated manuscripts to Renaissance panels, were derived from lapis lazuli. This clear, bright blue, which was one of the few blues available to painters before the 19th century, cost a princely sum. Only the highest quality of lapis with a high percentage of lazurite and few impurities was good enough to produce a rich ultramarine. The colour, however, could only be maintained within water solutions, gum Arabic and tempera (painting using egg as a medium for binding the pigment). However, as tempera painting was superseded by oil paint during the 15th century, painters found that the brilliance of ultramarine was greatly diminished when it was ground in oil and this, along with its cost, led to a steady decline in its usage. Since the synthetic version of ultramarine was discovered in the 19th century, production and use of the natural variety has almost ceased in painting.
- F** Lapis lazuli is still a very popular material today. It is made into a variety of hand-crafted objects such as carvings, spheres, beads, large gemstones and other fashionable items.

Questions 1–7

The passage has six paragraphs labelled **A–F**.

Which paragraph contains the following information? **NB** You may use any letter more than once.

- 1 a method of deceiving potential customers
- 2 why the removal of lapis lazuli from the ground is difficult
- 3 an example of the derivation of a word
- 4 a claim that lapis lazuli has not lost its appeal
- 5 reference to a claim that lapis lazuli could have health benefits
- 6 disadvantages of using lapis lazuli
- 7 an account of the constituent parts of lapis lazuli

Questions 8–13

Do the following statements agree with the information given in the passage? 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 In ancient times, only royalty were allowed to wear lapis lazuli.
- 9 Lapis-lazuli mines are among the most ancient.
- 10 Lapis lazuli needs to be totally pure to be of value.
- 11 The quality of the lapis lazuli mined in other parts of the world is inferior to that of Afghanistan.
- 12 Ultramarine was a very expensive colour.
- 13 Most artists in the Renaissance painted with tempera.

Questions 14–16

Choose **THREE** letters **A–G**.

The list below gives some ways of using lapis lazuli.

Which **THREE** ways are mentioned by the writer of the text?

- A as make-up
- B as a charm against harmful influences
- C as an adornment
- D as a container
- E as a food colouring
- F as a modern painting ingredient
- G as a royal crown