

International School of Monterrey



Junior High School

__th Grade

Trimester ____

Literature

Name _____ Date _____ List # ____ - ____

DIRECTIONS: Read the next passage, then answer the questions.

PART A

Questions 43-50

Color in textiles is produced by dyeing, by printing, or by painting. Until the nineteenth century, all dyes were derived from vegetable or, more rarely, animal or mineral sources.

Line Since madder plants could be grown practically everywhere, the roots of some
5 species of the madder plant family were used from the earliest period to produce a whole range of reds. Red animal dyes, derived from certain species of scale insects, were also highly valued from ancient times through the Middle Ages. Blues were obtained from indigo, which was widely cultivated in India and exported from there,
10 and from woad, a plant common in Europe and also used in the Near East from the beginning of the Christian era. Before the first, nonfading "solid" green was invented in the early nineteenth century, greens were achieved by the over dyeing or overprinting of yellow and blue. However, yellow dyes, whether from weld or some other plant source such as saffron or turmeric, invariably fade or disappear. This accounts for the bluish tinge of what were once bright greens in, for example, woven tapestry.

15 The range of natural colors was hugely expanded and, indeed, superseded by the chemical dyes developed during the eighteenth century. By 1900 a complete range of synthetic colors had been evolved, many of them reaching a standard of resistance to fading from exposure to light and to washing that greatly exceeded that of natural dyestuffs. Since then, the petroleum industry has added many new chemicals, and from
20 these other types of dyestuffs have been developed. Much of the research in dyes was stimulated by the peculiarities of some of the new synthetic fibers. Acetate rayon, for example, seemed at first to have no affinity for dyes and a new range of dyes had to be developed; nylon and Terylene presented similar problems.

25 The printing of textiles has involved a number of distinct methods. With the exception of printing patterns directly onto the cloth, whether by block, roller, or screen, all of these are based on dyeing; that is, the immersion of the fabric in a dye bath.

43. The passage mainly discusses the
- (A) development of synthetic colors for textiles during the nineteenth century
 - (B) advantages of chemical dyes over dyes derived from plants and animals
 - (C) differences between dyeing textiles and printing them
 - (D) history of the use of natural and chemical dyes to color textiles

44. According to the passage, what was the source of most textile dyes that were used before the nineteenth century?
- (A) Animals
 - (B) Minerals
 - (C) Plants
 - (D) Chemicals

45. What was the advantage of using madder plants for different shades of red?
- (A) It was possible to cultivate madder plants in almost every location.
 - (B) Madder plants produced brighter colors than other plant sources.
 - (C) Plant sources produced more lasting colors than animal sources.
 - (D) Dyes derived from the madder plants were easier to work with than other dyes.

46. The word "invariably" in line 13 is closest in meaning to
- (A) without exception
 - (B) steadily
 - (C) after some time
 - (D) noticeably

47. It can be inferred from the passage that the green areas in woven tapestries developed a bluish tinge because
- (A) a darker color, like blue, dominates a light color, like yellow
 - (B) light changed some of the green dye used in the tapestries to blue
 - (C) the yellow dye that was used in the tapestries had faded
 - (D) the dyes used to color woven tapestries were made from minerals

48. The word "superseded" in line 15 is closest in meaning to
- (A) strengthened
 - (B) improved
 - (C) replaced
 - (D) complemented

49. According to the passage, how did chemical dyes compare to natural dyes?
- (A) The chemical dyes had less attractive colors.
 - (B) The chemical dyes were less easy to use.
 - (C) The chemical dyes lost their brightness more quickly when exposed to light.
 - (D) The chemical dyes held up better after washing.

50. According to the passage, what problem led to the development of new dyes after 1900?
- (A) Previously developed dyes did not work on new types of fibers.
 - (B) Dyes derived from petroleum caused damage to new synthetic fibers.
 - (C) New synthetic fibers required brighter colors than natural fibers did.
 - (D) New fabrics easily lost their colors when washed.

PART B

Questions 1-10

The first maps of Venus were made using radar beams transmitted from Earth. Radar was the only way to map its surface, because the clouds on Venus are so thick that the surface cannot be seen through them. The results of these early attempts at mapping were relatively crude and difficult to interpret, although the regions known as Alpha and Beta Regiones were discovered.

The first direct view of the surface came from probes, which were landed on Venus in 1975 by the spacecraft Venera 9 and 10, and showed a dry rock-strewn surface.

Maps of the surface improved dramatically in 1978, when the Pioneer-Venus 1 spacecraft went into orbit around Venus, equipped with a radar altimeter. It showed huge rolling plains stretching right around the planet, some lowland areas, and two highland regions called Ishtar and Aphrodite. The peaks of the highest mountains, Maxwell Montes, in the eastern part of Ishtar, were found to be 12,000 meters above the general surface level, so they are appreciably higher than the Himalayas. Aphrodite, which is larger than Ishtar, has a vast rift valley at its eastern end nearly 3,000 meters deep, 2,200 kilometers long, and 280 kilometers wide. Two shield volcanoes, broad volcanoes formed of successive outpourings of lava, which are much larger than any found on Earth, were also found isolated from the two upland areas. Six years later a great many impact craters and small volcanoes were found by Venera 15 and 16 orbiters.

Later yet, the Magellan spacecraft entered orbit around Venus in August 1990, and over the next two years completed a detailed radar mapping of the surface. It found that the surface is mostly volcanic, with large lava-flooded plains and thousands of volcanoes. There are also signs of tectonic activity, which has caused, for example, multiple faulting and deep fractures. There are a number of rift valleys, some of which have been partly flooded by molten lava, and a number of impact craters, the density of which has enabled the ages of various areas to be estimated. The absence of impact craters in an area suggests an age of no more than a few tens of millions of years.

1. The passage mainly discusses how
- (A) radar technology improved over time
 - (B) the surface of Venus compares to Earth's surface
 - (C) the age of Venus was determined scientifically
 - (D) knowledge about the surface of Venus was obtained

2. The passage mentions that radar beams were used to obtain the first maps of Venus because they
- (A) allowed for mapping more than the two regions already familiar to scientists
 - (B) could penetrate the clouds that concealed the surface of Venus
 - (C) were the least expensive method of mapping at the time
 - (D) could be transmitted easily from Earth

3. The word "equipped" in line 9 is closest in meaning to
- (A) selected
 - (B) adjusted
 - (C) inspected
 - (D) furnished

4. The author discusses Maxwell Montes together with the Himalayas in the passage in order to
- (A) indicate their similar composition
 - (B) establish the height of Maxwell Montes
 - (C) indicate that the terrain on Earth resembles the terrain on Venus
 - (D) compare the origins of the two mountain ranges

5. The word "appreciably" in line 13 is closest in meaning to
- (A) surprisingly
 - (B) probably
 - (C) noticeably
 - (D) consistently

6. The word "vast" in line 14 is closest in meaning to
- (A) extensive
 - (B) remote
 - (C) obvious
 - (D) raised

7. The word "isolated" in line 17 is closest in meaning to

- (A) surrounded
- (B) separated
- (C) accumulated
- (D) elevated

8. Pioneer-Venus 1 discovered that Venus had all of the following features EXCEPT

- (A) impact craters
- (B) lowlands
- (C) mountains
- (D) shield volcanoes

9. The Magellan spacecraft discovered that most of the surface of Venus is covered with

- (A) faults and fractures
- (B) rift valleys
- (C) lava and volcanoes
- (D) impact craters

10. It can be inferred from the passage that scientists use the density of impact craters on Venus to determine which of the following?

- (A) The cause of the faults and fractures
- (B) The age of different areas of the planet's surface
- (C) The areas that are most geologically active
- (D) The amount of flooding of rift valley areas