

DIAGNOSTIC TEST IN SCIENCE V

Choose the letter of the correct answer and write it on your answer sheet.

1. Why is water a universal solvent?
 1. It can dissolve everything
 2. It can dissolve more materials than solvents.
 3. It is tasteless and colorless
 4. It is always available in big amounts.

A. 1 and 2 B. 2 and 3 C. 2 and 4 D. 1 and 4
2. What happens with a spoon of dried powder juice when placed in water?

A. It will dissolve B. It will change in color C. It will remain the same D. no changes
3. Do all solutes dissolve in all kinds of solvents the same time?

A. yes B. no C. sometimes D. never
4. Which of the following dissolves most of the solutes?

A. kerosene B. alcohol C. vinegar D. water
5. We can say that a solute spreads evenly when mixed with solvents when:

A. it remains suspended beneath C. it settle at the bottom

B. it forms a solution D. it floats
6. How heat transfer by convection best describe?

A. Heat is transferred because of difference in temperature.

B. Heat is transferred from molecule to molecule by contact

C. Heat is transferred by a current of freely moving molecules

D. Statements A and B
7. Which situation shows heat transfer by convection?

A. A stone under the sun becomes warm.

B. The handle of a ladle becomes hot when placed over the fire

C. A fire keeps people sitting around it feel warm

D. A water in a pai
8. Why is convection is a method of heat transfer in liquid and in gas but not in solids ?

A. because the molecules of liquids and gasses are closely packed

B. because molecules of liquid and gasses are freely moving

C. because liquids and gasses are not made of molecules

D. because the molecules floats in air
9. Why did the turbine when the lighted candle is placed in the chimney below the turbine?

A. The heated air rise and turned the turbine

B. The cooled air rise and turned the turbine

C. The heated air blew the turbine sank and turned the turbine

D. The heated air sinks and rises
10. In Eskimo houses made of ice blocks, warm air that comes from the bodies inside the house is trapped. The heat from these bodies transferred to other bodies by

A. convection B. conduction C. radiation D. convection and conduction

I. Study the chart below then answer the question that follow

Date	Time	Temperature	Sky	Wind	Air
Oct. 1	2:00 p.m.	23 C	cloudy	East	rising
Oct. 2	2:00 p.m.	24 C	cloudy	West	rising
Oct. 3	2:00 p.m.	31 C	Clear	West	falling
Oct. 4	2:00 p.m.	30 C	clear	East	falling

11. Which day had the lowest temperature?

A. Oct. 1 B. Oct. 3 C. Oct. 2 D. Oct 3

12. What can you say about air pressure when temperature was low?
 A. Air pressure was rising
 B. There were no air pressure
 C. Air pressure was falling
 D. Air pressure is sinking
13. What happened to air pressure when the temperature gets higher?
 A. Air pressure was rising
 B. There were no air pressure
 C. Air pressure was falling
 D. Air pressure is sinking and rising
14. Why was the temperature low when the sky was cloudy?
 A. Because air pressure was falling
 B. Because there was no air pressure
 C. Because clouds blocked the sun's heat and the air pressure was rising
 D. Because of the clouds formation
15. Which day had the highest temperature?
 A. Oct. 1
 B. Oct. 3
 C. Oct. 2
 D. Oct 4
16. How does a horse embryo grow?
 A. inside the mother's body
 B. inside the mother's pouch
 C. outside mother's body
 D. inside an eggshell
17. What kind of mammal is a horse?
 A. marsupial
 B. placenta
 C. monotreme
 D. egg laying
18. What type of mammal is hatched from egg?
 A. placental
 B. marsupial
 C. monotreme
 D. polytrema
19. Which can affect the growth of the seed?
 A. kind of seed
 B. spacing of seeds
 C. container seeds
 D. fence around the seeds
20. What will happen to the following seed not exposed to enough sunlight?
 A. It will still grow
 B. It will grow bigger
 C. It will turn yellowish
 D. It will become healthy
22. Which does not affect the growth of the seed?
 A. air
 B. wind
 C. water
 D. sunlight
23. Which is the breathing organ of plant in a leaf?
 A. Stomata
 B. Lenticels
 C. Hypocotyls
 D. Chlorophyll
24. Which can affect the growth of the seed?
 A. kind of seed
 B. spacing of seeds
 C. container seeds
 D. fence around the seeds
25. What will happen to the following seed not exposed to enough sunlight?
 A. It will still grow
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 D. It will become healthy
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 B. wind
 C. water
 D. sunlight
27. When you add milk, sugar and coffee to a cup of hot water, which of these explain that what you formed in a mixture?
 A. A new substance is formed
 B. You can no longer taste the sugar
 C. You can still taste the bitterness of the coffee, the sweetness of the sugar and the creaminess of the milk.
 D. Each of the part of the mixture changed in color, amount in taste
28. Which of the following has the characteristic of a mixture?

A. ice cream

B. salt

C. sugar

D. rice

29. Why soil is considered a mixture?

A. It is a physical combination of sand fine particles of rocks and pebbles

B. It is a new substance formed by sand fine particles rock and pebbles

C. Soil composed only solid materials

D. There is only one component of substance in soil

30. Which of the following mixture can be separated by sedimentation?

A. water and kerosene

B. water and sand

C. water and sugar

D. water and alcohol

31. How do you describe the movement of the hands of a clock?

A. Clockwise

B. Counter-Clockwise

C. Left to the Right

D. North to East

32. As seen from the North Pole, Earth rotates in _____ direction.

A. Clockwise

B. Counter-Clockwise

C. East to West D. North to East

33. The South Pole is opposite of the North Pole, the Earth rotates in _____ direction.

A. West to East

B. East to West

C. West to North

D. North to East

34. The Earth rotates from _____.

A. East to West direction

C. North to East

B. West to East direction

D. Clockwise direction

35. What does the Earth's revolution mean?

A. Turning of the earth on its axis

C. The sun's travel around the earth

B. The earth's movement around the sun

D. The distance of earth from the sun

36. How many days does the earth actually complete a revolution?

A. 365 days

C. 366 days

B. 365 $\frac{1}{4}$ days

D. 366 $\frac{1}{2}$ days

37. How many days are there in a Leap year?

A. 365 days

B. 365 $\frac{1}{4}$ days

C. 366 days

D. 365 $\frac{3}{4}$

38. What is an Earth Year?

A. One complete rotation of the Earth

B. One complete revolution of the Earth

C. A year that has 366 days

D. One complete rotation and revolution of earth around the sun

39. As the earth revolves, it follows a path called

A. Orbit

B. Axis

C. Calendar

D. 366 days

40. The moon turns as it ____ around the Earth.

A. Rotates

B. Revolves

C. Turns Away

D. tilts

41. When the moon revolves around the Earth _____.

A. Only one side is facing the earth.

C. The moon does not move

B. We see all parts of the moon.

D. The moon is not visible

42. The side of the moon that we don't see on earth is called the

A. Golden Side

B. Bright Side

C. Dark Side

D. Blue Moon

43. Which statement is true?

A. the Moon does not rotate

B. the Full Moon rises at sunrise

C. a solar eclipse happens every month

D. it is perfectly safe to view a lunar eclipse without eye protection

44. How long does it take for the Moon to complete one cycle of phases?

A. about one day

C. about one year

B. about one week

D. about four weeks d. about one year

45. Why are stars important to man?

- A. they tell time
- B. they tell direction
- C. they predict what will happen to our future
- D. a and b only

6. Why is Polaris useful in sea travel?

- A. it always points to the true north
- B. it makes Orion visible in the night sky
- C. it can be seen during the winter
- D. it can forecast bad weather

47. Zodiac constellations are the same as?

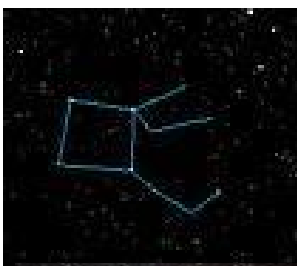
- A. comets
- B. star clusters
- C. birth signs
- D. the sun

48. Which statement is not true?

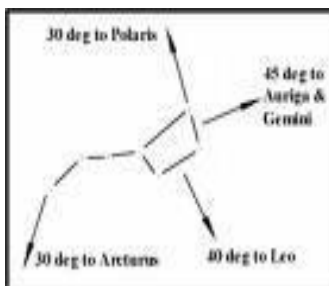
- A. stars can be used to find directions
- B. stars can be use to predict the passing of comets on earth
- C. stars can be use to tell if it is going to rain
- D. stars can be use as birth signs

49. Which of the following resembles the shape of the constellation of smaller dipper?

A.



C.



B.



D.



50. In what constellation is the big dipper found?

- A. Cassiopeia
- B. Little dipper
- C. Great bear
- D. Lyra