

Section 1 Verbal

1. FOE

- (A) author
- (B) warrior
- (C) poet
- (D) spy
- (E) enemy

2. FABRICATE

- (A) stitch
- (B) fasten
- (C) falsify
- (D) deter
- (E) decorate

3. CONCISE

- (A) clever
- (B) brief
- (C) small
- (D) exclusive
- (E) subdued

4. AGGREGATE

- (A) median
- (B) agent
- (C) organization
- (D) total
- (E) equipment

5. DIMINISH

- (A) grow
- (B) impede
- (C) lessen
- (D) forecast
- (E) disappear

6. THESIS

- (A) guess
- (B) hypothesis
- (C) debate
- (D) theme
- (E) definition

7) REQUIRED

- (A) unknown
- (B) given
- (C) compulsory
- (D) decisive
- (E) spotless

8. INFIDEL

- (A) frill
- (B) zoo
- (C) quirk
- (D) unbeliever
- (E) prudent

9. LATENT

- (A) conversational
- (B) unsophisticated
- (C) hidden
- (D) round
- (E) serene

10. BURST:

- (A) explode
- (B) distract
- (C) collide
- (D) execute
- (E) muffle

11. NOVICE:

- (A) expression
- (B) beginner
- (C) agreement
- (D) beggar
- (E) burden

12. PLIABLE :

- (A) thrill
- (B) tool
- (C) rigid
- (D) useful
- (E) flexible

13. TENACIOUS:

- (A) divisive
- (B) timid
- (C) stranded
- (D) thin
- (E) unyielding

14. PARADOX:

- (A) contradiction
- (B) curse
- (C) imperfection
- (D) dislike
- (E) submission

15. MUNDANE:

- (A) immense
- (B) common
- (C) extraordinary
- (D) weekly
- (E) stupid

16. KEEN:

- (A) nice
- (B) forgiving
- (C) sharp
- (D) rotund
- (E) dense

17. NOISE:

- (A) crowd
- (B) siren
- (C) music
- (D) locomotive
- (E) sound

18. BREVITY:

- (A) imagination
- (B) conflict
- (C) shortness
- (D) ambition
- (E) consistency

19. COMPLIMENTARY:

- (A) free

(B) matched

(C) secondary

(D) charming

(E) attractive

20. MANIFEST:

- (A) nefarious
- (B) insidious
- (C) methodical
- (D) obvious
- (E) vital

21. FORMULATE:

- (A) reproduce
- (B) confirm
- (C) restore
- (D) deprecate
- (E) devise

22. MITIGATE:

- (A) revive
- (B) magnify
- (C) nurture
- (D) moderate
- (E) concoct

23. CELEBRATE:

- (A) praise
- (B) criticize
- (C) condemn
- (D) recognize
- (E) consider

24. REFURBISH:

- (A) requisition
- (B) enlarge
- (C) renovate
- (D) demolish
- (E) relocate

25. DEROGATORY:

- (A) depreciative
- (B) professional
- (C) episodic

- (D) didactic
- (E) unsolicited

26. SANCTIMONIOUS:

- (A) tyrannical
- (B) disingenuous
- (C) hypocritical
- (D) cantankerous
- (E) morose

27. SUPERFLUOUS:

- (A) voracious
- (B) redundant
- (C) obstreperous
- (D) duplicitous
- (E) incredulous

28. RESPECT

- A. encourage
- B. expose
- C. relax
- D. revere
- E. award

29. ABASHED

- (A) oppressive
- (B) aggressive
- (C) sneaky
- (D) corrupt
- (E) embarrassed

30. HUBRIS:

- (A) optimism
- (B) shame
- (C) arrogance
- (D) indifference
- (E) laziness

31. Actor is to ensemble as

- (A) captain is to crew
- (B) character is to plot
- (C) character is to play
- (D) player is to team
- (E) jockey is to horse

32. Gum is to stick as

- (A) wad is to money
- (B) ice is to cube
- (C) spice is to taste
- (D) bubble is to branch
- (E) chocolate is to wrapper

33. Subtle is to obvious as

- (A) shadow is to pale
- (B) inferred is to implied
- (C) meek is to timid
- (D) bright is to sunny
- (E) quiet is to loud

34. POTENTATE: POWER:

- (A) broadcaster: news
- (B) virtuoso: skill
- (C) protégé: sponsorship
- (D) maverick: group
- (E) colleague: camaraderie

35. bouquet is to flowers as recipe is to

- (A) success
- (B) cookbook
- (C) ingredients
- (D) chef
- (E) suffering

36. insipid is to boredom as

- (A) tasty is to craving
- (B) gratuitous is to freedom
- (C) morose is to rebellion
- (D) jovial is to optimistic

(E) trepid is to cold

37. Pilothouse is to ship as

- (A) land is to water
- (B) cockpit is to plane
- (C) canoe is to barge
- (D) kitchen is to house
- (E) basement is to bedroom

38. Cacophonous is to raucous as gregarious is to

- (A) flippanant
- (B) sociable
- (C) garish
- (D) gullible
- (E) reclusive

39. Caring is to trait as

- (A) miracle is to disaster
- (B) denial is to lawyer
- (C) minute is to hour
- (D) award is to praise
- (E) division is to contract

40. Possible is to hope as probable is to

- (A) expect
- (B) arrange
- (C) remember
- (D) prefer
- (E) forget

41. Weight is to scale as

- (A) pressure is to barometer
- (B) number is to ruler
- (C) mercury is to thermometer
- (D) length is to width
- (E) abacus is to calculator

42. Charm is to evil as

- (A) fort is to attack
- (B) bungalow is to rest
- (C) tip is to dinner
- (D) insignia is to uniform
- (E) seesaw is to play

43. Tangible is to wealth as intangible is to

- (A) emotion
- (B) stocks
- (C) inheritance
- (D) estate
- (E) success

44. Distill is to water as

- (A) synchronize is to clock
- (B) overhaul is to system
- (C) transpose is to word
- (D) coax is to customer
- (E) thresh is to wheat

45. Quack is to physician as

- (A) poacher is to hunter
- (B) acquaintance is to friend
- (C) pseudonym is to author
- (D) valedictorian is to student
- (E) monarch is to queen

46. Picador is to bull as

- (A) platoon is to private
- (B) Olympian is to coach
- (C) arsonist is to fireman
- (D) heckler is to speaker
- (E) colony is to pilgrim

47. Holocaust is to fire as inundation is to

- (A) air
- (B) famine

- (C) earthquake
- (D) avalanche
- (E) water

48. Intermission is to performance as

- (A) direction is to procession
- (B) layover is to trip
- (C) catalyst is to reaction
- (D) margin is to paper
- (E) ambassador is to embassy

49. Bee is to swarm as

- (A) beaver is to chew
- (B) fish is to reproduce
- (C) horse is to stampede
- (D) peacock is to flaunt
- (E) buffalo is to roam

50. Romantic is to realistic as

- (A) marital is to formal
- (B) faithful is to refined
- (C) affectionate is to imaginary
- (D) fanciful is to actual
- (E) skeptical is to risky

51. Igloo is to ice as

- (A) pipe is to house
- (B) mansion is to hovel
- (C) building is to car
- (D) hut is to adobe
- (E) steel is to skyscraper

52. Absolution is to forgiveness as

- (A) notion is to proof
- (B) ammunition is to fray
- (C) perception is to ignorance
- (D) retribution is to punishment
- (E) inception is to conclusion

53. Consider is to decide as

- (A) yell is to shout
- (B) explain is to scold
- (C) ponder is to determine
- (D) growl is to groan
- (E) trade is to exchange

54. Joyful is to sad as empty is to

- (A) bare
- (B) crowded
- (C) productive
- (D) vacant
- (E) trepid

55. racket is to tennis as paddle is to

- (A) hit
- (B) punishment
- (C) wheel
- (D) ping pong
- (E) flail

56. CONTEMPORARIES: AGE:

- (A) housemates: residence
- (B) faculty: scholarship
- (C) idols: worship
- (D) kin: reunion
- (E) authors: anthology

57. Saunter is to sprint as drizzle is to

- (A) hail
- (B) speed
- (C) pour
- (D) taste
- (E) trickle

58. Palatial is to space as

- (A) labyrinthine is to corridors
- (B) somber is to mood
- (C) character is to morality
- (D) insomniac is to sleep
- (E) sorry is to wrong

59. Mumble is to speak

- (A) chuckle is to laugh
- (B) nap is to dream
- (C) wail is to cry
- (D) grumble is to moan
- (E) snore is to sniffle

60. Violet is to vanilla as

- (A) fuchsia is to red
- (B) tangy is to mint
- (C) sound is to smell
- (D) rose is to cinnamon
- (E) blue is to color

Section 2 Math

1. If the vertices of a triangle are A (1, 3), B (3, -4), and C (1, -4), find its area.

- (A) 10
- (B) 7
- (C) 9
- (D) 12
- (E) 8

2. $4 \times 3 \times 6 \times 2$ is equal to the product of 24 and

- (A) 6
- (B) 7
- (C) 8
- (D) 9
- (E) 11

3. Renee deposits \$4,000 in a saving account that earns 2% simple interest per year.

How much interest will she earn after 2 years?

- (A) \$100
- (B) \$160
- (C) \$165
- (D) \$180
- (E) \$195

4. Aaron has 256 cans of soup that he needs to pack into boxes that hold 30 cans each. How many cans of soup are left over after he fills as many boxes as he can?

- (A) 4
- (B) 16
- (C) 18
- (D) 22
- (E) 24

5. If a Set R contains four positive integers whose average is 9, what is the greatest number Set R could contain?

- (A) 4
- (B) 9

- (C) 24
- (D) 33
- (E) 36

6. Which of the following is most nearly 40% of \$19.95?

- (A) \$8.00
- (B) \$4.00
- (C) \$14.50
- (D) \$12.00
- (E) \$6.75

7. How many more absences does Don have than Bert?

- (A) 1
- (B) 2
- (C) 3
- (D) 6
- (E) 20

8. For all real numbers m , $*m = 10m - 10$.

If $*m = 120$, then $m =$

- (A) 11
- (B) 12
- (C) 13
- (D) 120
- (E) 130

9. What is the eighth term in the sequence 0, 1, 1, 2, 3, 5, ...?

- A. 13
- B. 21
- C. 34
- D. 55
- E. 89

10. Janice weighs x pounds. Elaina weighs 23 pounds more than Janice. June weighs 14 pounds more than Janice. In terms of x , what is

the sum of their weights minus 25 pounds?

- (A) $3x + 37$
- (B) $3x + 12$
- (C) $x + 12$
- (D) $3x - 25$
- (E) $x = 4$

11. Anita bowled a 100, 120, and an 88 on her first three games. What must her score be

- (B) $2x - 21$
- (C) $4x - 3$
- (D) $5x - 1$
- (E) $2x + 1$

12. What percentage of 220 is 26.4?

- (A) 909%
- (B) 99%
- (C) 40%
- (D) 27%
- (E) 12%

13. A 3-foot, 2-inch board is how many times bigger than a 2-foot board?

- (A) 1.5
- (B) 1.6
- (C) 1.7
- (D) $\frac{19}{12}$
- (E) $\frac{17}{12}$

14. Find the value of y in the proportion

$$\frac{30}{48} = \frac{5}{y}$$

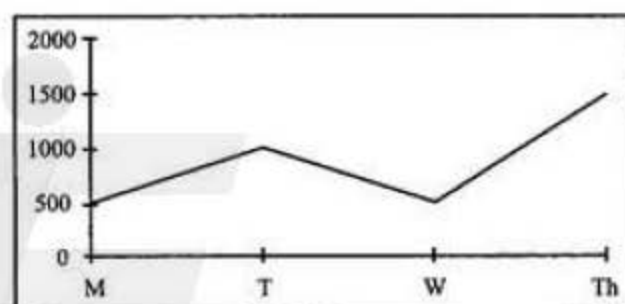
- (A) $\frac{3}{8}$
- (B) 3
- (C) 15
- (D) 8
- (E) $8\frac{1}{3}$

on the fourth game to raise her average for the day to a 130?

- (A) 80
- (B) 95
- (C) $102\frac{2}{3}$
- (D) 145
- (E) 212

15. According to the graph in Figure 5, what is the average number of 911 calls made from Monday through Thursday, inclusive?

911 Emergency Calls



- (A) 500
- (B) 750
- (C) 875
- (D) 1,000
- (E) 1,125

16. If cats sleep $\frac{3}{5}$ of every day, how many full days would a cat sleep in a five-day period?

- (A) $\frac{1}{4}$
- (B) $\frac{3}{4}$
- (C) 1
- (D) 3
- (E) 4

17. The number of students in a certain school is expected to increase from 1,050 students in 2010 to 1,470 students in 2011. What is the expected increase to the nearest

(E) I, II, and III

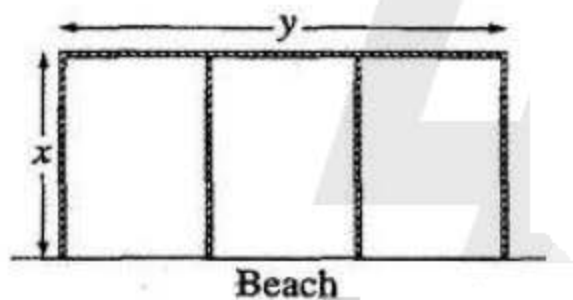
23. Kerry has a corner lot that can operate with a telephone receiver from the telephone's base station. The base station is due north. From the base station, Kerry walks east and stops at the telephone receiver. In which of the following directions can Kerry walk within the range of the telephone receiver?

I. Due west
II. Due east
III. Due south

- 9

- (B) \$375
- (C) \$400
- (D) \$408
- (E) \$425

25. At a beach, a rectangular swimming area with dimensions x and y meters and a total area of 4,000 square meters is marked off on three sides with rope, as shown below, and bounded on the fourth side by the beach. Additionally, rope is used to divide the area into three smaller rectangular sections. In terms of y , what is the total length in meters, of the rope that is needed both to bound the three sides of the area and to divide it into sections?



- (A) $y + \frac{4,000}{y}$
- (B) $y + \frac{16,000}{y}$
- (C) $y + \frac{16,000}{3y}$
- (D) $3y + \frac{8,000}{3y}$
- (E) $3y + \frac{16,000}{3y}$

SECTION 3

1. Find the quotient of 2.112 and 0.6.

- (A) 2.54
- (B) 0.349
- (C) 3.52
- (D) 4.118
- (E) 2.47

2. $3.5 \times 0.93 =$

- (A) 2.886
- (B) 2.965
- (C) 3.255
- (D) 3.311
- (E) 3.405

3. Which of the following is NOT equal to a whole number?

- (A) $\frac{50}{3}$
- (B) $4 \times \frac{12}{16}$
- (C) $16 \div \frac{1}{16}$
- (D) $\frac{5}{9} \times 8$
- (E) $10.2 + 12.8$

4. $102\frac{3}{4}\% =$

- (A) 102.75
- (B) 10.275
- (C) 1.0275
- (D) 0.10275
- (E) 0.010275

5. Express in simplest form the following ratio:
15 hours to 2 days.

- (A) $7\frac{1}{2}$
- (B) $\frac{16}{5}$
- (C) $\frac{5}{8}$
- (D) $\frac{15}{2}$

(E) $\frac{5}{16}$

6. The length of a side of a square is represented by $x + 2$, and the length of a side of an equilateral triangle is represented by $2x$. If the square and the equilateral triangle have equal perimeters, find x .

- (A) 24
- (B) 16
- (C) 12
- (D) 8
- (E) 4

7. Which of the following is closest in value to 3?

- (A) $(12 \times 6) \div 3$
- (B) $23 \div 8$
- (C) $\frac{1}{3}$ of 30
- (D) 1.5×1.75
- (E) $14 \div 4$

8. A gumball machine contains five red and three blue gumballs. If one gumball is removed, what is the probability that it will be red?

- (A) $\frac{5}{3}$
- (B) $\frac{3}{5}$
- (C) $\frac{5}{8}$
- (D) $\frac{3}{8}$
- (E) $\frac{8}{3}$

9. An instrument store gives a 10% discount to all students off the original cost of an instrument. During a back to school sale additional 15% is taken off the discounted price. Julie, a student at the local high school, purchases a flute for \$306. How much did it originally cost?

- A. \$325
- B. \$375
- C. \$400
- D. \$408
- E. \$425

10. Which of the following fractions, when entered into the triangle, makes the statement true?

$$3/8 < \Delta < 13/24$$

- (A) $7/8$
- (B) $5/8$
- (C) $5/12$
- (D) $1/3$
- (E) $1/4$

11. What is the value of $(9x^3 - \frac{z^2}{2})(\frac{y}{11})$ when $x = -1$, $y = 1$, $z = 2$?

- (A) $\frac{25}{11}$
- (B) $\frac{1}{11}$
- (C) $\frac{-1}{11}$
- (D) $\frac{-7}{11}$
- (E) -1

12. During the 4 fishing trips that Rich and Andy made, Rich caught a total of 27 fish. If Andy caught more fish than Rich, Andy must have caught an average of a least how many fish per trip?

- (A) $6\frac{3}{4}$
- (B) 7
- (C) 36
- (D) 140
- (E) 144

13. If the outer diameter of a metal pipe is 3.01 inches and the inner diameter is 2.21 inches, the thickness of the metals _____.

- (A) 0.40 in
- (B) 0.90 in
- (C) 1.42 in
- (D) 1.94 in
- (E) 2.39 in

14. One half the difference between the number of degrees in a rectangle and the number of degrees in a triangle is _____.

- (A) 360
- (B) 240
- (C) 180
- (D) 90
- (E) 45

15. A plumber needs eight sections of pipe, each 3'2" long. If pipe is sold only by the 10' section, how many sections must he buy?

- (A) 1
- (B) 2
- (C) 3
- (D) 4
- (E) 5

16. Which of the following is NOT less than $\frac{1}{4}$?

- (A) $\frac{2}{9}$
- (B) $\frac{3}{14}$
- (C) $\frac{14}{64}$
- (D) $\frac{19}{70}$
- (E) $\frac{27}{125}$

17. How many more 9" x 9" linoleum tiles than 1' x 1' tiles will it take to cover a 12' x 12' floor?

- (A) 63
- (B) 98
- (C) 112
- (D) 120
- (E) 144

18. Tracy has a test average of 90 after five tests. She only knows the scores of four of her tests: they are 80, 87, 94, and 89. What

- was the score on her other test?
- (A) 100
(B) 98
(C) 97
(D) 90
(E) 87
19. If the base of a right triangle is $8\sqrt{2}$ and the hypotenuse is 18, what is the area of the triangle?
- (A) 14
(B) $14\sqrt{2}$
(C) $56\sqrt{2}$
(D) 64
(E) $64\sqrt{2}$
20. Two partners divide a profit of \$ 2,000 so that the difference between the two amounts is half of their average. What is the ratio of the larger to the smaller amount?
- (A) 6:1
(B) 5:3
(C) 4:1
(D) 3:1
(E) 2:1
21. What is the greatest number of rectangles 4 centimeters wide and 6 centimeters long that can be cut from a square piece of paper with a side of 24 centimeters?
- (A) 2
(B) 10
(C) 24
(D) 36
(E) 48
22. The width of a rectangular swimming pool is one quarter of its length. If the length is 60 meters, what is the perimeter of the pool?
- (A) 60 m
(B) 120 m
(C) 150 m
(D) 180 m
(E) 240 m
23. A store has square rugs in three sizes. A side of the largest rug is twice as long as a side of the middle one, and a side of the middle one is twice as long as a side of the smallest one. What is the ratio of the area that the largest rug will cover to the area that the smallest one will cover?
- (A) 3 to 1
(B) 4 to 1
(C) 8 to 1
(D) 9 to 1
(E) 16 to 1
24. If x is divided by 5, the remainder is 4. If y is divided by 5, the remainder is 2. What is the remainder when $(x + y)$ is divided by 5?
- (A) 0
(B) 1
(C) 2
(D) 3
(E) 4
25. A certain hen house contains x hens. A farmer put 12 new hens into the house, and later that day moves one-quarter of the hens out of the hen house. If no other hens are put into or taken from the house, then in terms of x , how many hens are left in the hen house?
- (A) $3x/4 + 9$
(B) $x + 4$
(C) $4x + 12$
(D) $(x + 12)/4$
(E) $4x + 48$

Section 4

Alchemy is the name given to the attempt to change lead, copper, and other metals into silver or gold. Today, alchemy is regarded as a pseudoscience. Its associations with astrology and the occult suggest primitive superstition to the modern mind, and the alchemist is generally portrayed by historians as a charlatan obsessed with dreams of impossible wealth. For many centuries, however, alchemy was a highly respected art. In the search for the elusive secret to making gold, alchemists helped develop many of the apparatuses and procedures that are used in laboratories today. Moreover, the results of their experiments laid the basic conceptual framework of the modern science of chemistry.

1. The passage is mainly about the _____.
(A) manufacture of gold from other metals
(B) mystery surrounding the origins of chemistry
(C) links between chemistry, astrology and sociology
(D) specific results of alchemists' experiments
(E) early history of a scientific field
2. According to the passage, alchemists are generally portrayed in history books as _____.
(A) rogues motivated by greed
(B) the ancestors of today's chemists
(C) brilliant scientists
(D) talented but misunderstood individuals
(E) wealthy businessmen
3. It can be inferred from the passage that a "charlatan" _____.
(A) practiced an early form of chemistry
(B) uses his research for criminal purposes
(C) is not respected by historians
(D) understood the secret to making gold
(E) existed only in the Middle Ages
4. The style of the passage is most like that found in a _____.
(A) newspaper article
(B) history textbook
(C) novel about alchemists
(D) personal letter
(E) scientist's diary
5. With which of the following statements would the author most likely agree?
(A) Alchemists helped pave the way for scientists today.
(B) Astrology and the occult also deserve consideration as legitimate sciences.
(C) Alchemy was a primitive, superstitious field of science.
(D) Alchemy is becoming increasingly respectable among today's chemists.
(E) Few alchemists ever became wealthy from their work.
6. The following questions are all answered by the passage EXCEPT: _____.
(A) How did alchemists turn metals into gold
(B) Has the general consensus always been that alchemists were charlatans
(C) What have alchemists contributed to science
(D) How do historians view alchemy
(E) What did alchemists hope to achieve

Passage 2

Some myths are stories told by early civilizations to explain the origins of natural phenomena. The Greek myth that explains the origin of the seasons is about Demeter,

the goddess of the harvest. She had a daughter, Persephone, whom she loved very much. Hades, god of the underworld, fell in love with Persephone, and he asked Zeus,

- 5 the ruler of the gods, to give Persephone to him as his wife. Zeus did not want to offend either Hades or Persephone, so he said he would not agree to the marriage, but neither would he forbid it. Hades, therefore, decided to take the girl without permission. As

she was picking flowers in a meadow, he seized her and took her to the underworld.

- 10 When Demeter found out what happened to Persephone, she became so angry that she caused all plants to stop growing. People were in danger of starving. But Demeter

swore that no food would grow until Persephone was returned to her. Zeus, still not wanting to offend Hades, set a condition for Persephone's return. She could go back to her mother if she had not eaten anything while she was in the underworld. Demeter did

- 15 not know it, but Persephone had eaten several pomegranate seeds in the underworld. When Zeus discovered this, he permitted a compromise. Persephone could spend part of the year with her mother, but because she had eaten the seeds, she must spend part of

the year in the underworld. And when Persephone is in the underworld, Demeter is sad, and therefore will not let the crops grow. That is why we have winter, when

- 20 plants do not grow. When Persephone returns, Demeter is happy, it is spring, and plants begin to grow again.

7. Demeter is the goddess of _____.

- (A) the underworld (B) marriage (C) food plants
(D) the weather (E) humanity

8. Myths are stories that _____.

- (A) have a religious purpose
(B) are always about gods and goddesses
(C) explain the origin of the seasons
(D) try to explain nature
(E) tell about mysteries

9. According to the story of Demeter, winter occurs because _____.

- (A) Demeter disliked Hades
(B) Hades stole Persephone from her mother
(C) Persephone is unhappy
(D) Zeus did not give Hades permission to marry Persephone
(E) Demeter is sad

10. Zeus did not give permission to Hades to marry Persephone because he _____.

- (A) wanted Persephone to be his wife
(B) disliked him
(C) was the ruler of all the gods and goddesses
(D) did not want to upset him
(E) thought this might make Demeter angry

11. Demeter stopped the growth of crops when _____.

- (A) Persephone was returned to her
(B) Zeus did not forbid the marriage
(C) Hades took Persephone to the underworld
(D) she discovered what Hades had done
(E) Persephone ate some pomegranate seeds

Passage 3

The Big Bang theory, an explanation of the origins of our universe, is one of the greatest intellectual achievements of the twentieth century. According to this theory, about ten to twenty million years ago, the matter of which the universe is made was infinitely tightly compressed. Something —called the Big Bang —turned this matter into

- 5 a gigantic and flew away from its compressed state, bits of it became glued together to create galaxies and, later, stars and planets. The motion of the matter that flew out of the fireball continues today, and the universe appears to be expanding. The theory grew out of observations of the Doppler effect. It explains that the frequency of radiation given off by a moving body decreases as the sources get farther from the
- 10 observer. In 1965, scientists discovered that the radiation bathing the earth is at the precise micro-wave frequency that would be expected if the universe began with a big bang. Some scientists think the expansion of the universe will continue to infinity, while others theorize that gravity will, at some point in the far distant future, collapse back onto itself in a “big crunch”, returning it to a state of compressed matter.

12. The best title for this passage is _____.

- (A) “Our Expanding Universe”
- (B) “The Big Bang”
- (C) “Scientific Discoveries”
- (D) “The Big Crunch”
- (E) “The Doppler Effect”

13. As a moving object gets farther from its source, its radiation frequency _____.

- (A) collapses
- (B) stays the same
- (C) grows larger
- (D) grows smaller
- (E) expands

14. The matter of which the universe is made was originally _____.

- (A) growing
- (B) expanding
- (C) loosely connected
- (D) decreasing
- (E) tightly packed

15. According to the passage» which of the following is true?

- (A) Gravity will cause the universe to collapse.
- (B) Scientists believe the universe will expand infinitely.
- (C) The Doppler effect created the universe.
- (D) Scientists do not agree about the universe's future.
- (E) Stars and planets grew out of galaxies.

16. The author of this passage thinks the Big Bang theory _____.

- (A) shows the frequency of radiation bathing the earth
- (B) is a very important contribution to knowledge
- (C) explains what happens when a moving body gets farther from its source
- (D) does not explain the creation of the universe
- (E) has not been proven

Passage 4

When you buy a house plant, if the plant is healthy, it is likely to grow successfully in your home. How do you decide if a plant is sound? First, look at the leaves. If they are brown at the edges, the plant has been given too much fertilizer or has been kept in temperatures that are too warm for its species. If the leaves are pale or yellow, the

5 plant has been given too much or too little water. If the leaves are very far apart from each other on the stem, this may mean the plant has been pushed to grow abnormally fast, and new leaves will not grow to fill in the gaps. You should look for a plant whose foliage is dense.

After checking the leaves' general appearance, look carefully at the underside of the leaves and the places where the leaves join the stem for evidence of insects.

- 10 Because the insects that infest house plants are very tiny, it may be hard to see them. But they leave clues that they are living on the plant. Some secrete a shiny sticky substance called honeydew on the plant. Others leave behind tiny fine white webs.

Finally, check to see if the plant's roots are growing out through the drainage hole in the bottom of the pot. If the roots are growing through the hole, the plant has
15 outgrown its pot, and it may not be the larger container.

17. If a plant has been given too much fertilizer, _____.

- (A) there will be tiny webs on the leaves
- (B) its leaves may have brown edges
- (C) the foliage will be dense
- (D) the soil will appear dry
- (E) its leaves may be yellow

18. To check a plant's health, examine _____.

- (A) leaf density
- (B) the bottom of the pot
- (C) the stem
- (D) leaf color
- (E) All of the above

19. In context, "infest" most likely means _____.

- (A) live on
- (B) grow from
- (C) secrete
- (D) infect
- (E) eat

20. Too much or too little water will cause _____.

- (A) large gaps between the leaves
- (B) yellow or pale leaves
- (C) roots to grow out of the drainage hole
- (D) shiny spots on the stem
- (E) dark-colored foliage

21. Based on this passage, a reader can infer that _____.

- (A) some plants for sale have not been cared for properly
- (B) it is difficult to care for a plant at home
- (C) a plant's health is based on its environment
- (D) plants are forced to grow abnormally fast
- (E) all growers of plants for sale raise them in perfect conditions

Passage 5

The dark and the sea are full of dangers to the fishermen of Norway. A whale may come and destroy the floating chain of corks that edge the nets, break it, and carry it off. Or a storm may come suddenly, unexpectedly, out of the night. The sea seems to turn somersaults. It opens and closes immense caverns with terrible clashes, chasing
5 boats and men who must flee from their nets and the expected catch. Then the men may lift their nets as empty as they set them. At other times the herring may come in such masses that the lines break from the weight when lifted, and the men must return home empty-handed, without lines, nets, or the herring.

But often the nets are full of herring that shine and glisten like silver. Once in a
10 while, a couple of men will venture in their boats along the net lines to see whether the herring are coming, and when the corks begin to bob and jerk, as if something were hitting the nets to which they are attached, then they know that the herring are there. The nets are being filled, and all the men sit in quiet excitement. They dare only to whisper to each other, afraid to disturb, and quite overcome by the overwhelming
15 generosity of the sea. Eyes shine in happy anticipation; hands are folded in thanks. Then muscles strain with power. It is as though the strength of the body doubled. They can work day and night without a thought of weariness. They need neither food nor rest; the thought of success keeps their vigor up almost endlessly. They will take food and rest when it is all over.

22. The best title for this passage is ____.
- (A) "The Perils and Rewards of Fishing"
- (B) "Hard Work in Norway"
- (C) "The Generosity of the Sea"
- (D) "Whaling in Norway"
- (E) "Risky Business"
23. The fishermen's difficulties include ____.
- (A) an attack on the men by the herring
- (B) interference by rough seas
- (C) becalming
- (D) the eating of the herring by whales
- (E) the jerking of the corks
24. At the first indication that herring are entering the nets, the men ____.
- (A) glisten like silver
- (B) row quickly along the edge of the nets
- (C) collect the nets quickly
- (D) try not to frighten the fish away
- (E) strain every muscle to haul in the catch
25. Which quality of the sea is NOT mentioned?
- (A) Its power.
- (B) Its beauty.
- (C) Its destroying strength.
- (D) Its sudden changes.
- (E) Its generosity.
26. The fishermen are described as ____.
- (A) angry, weary, and sickly
- (B) strong, angry, and reckless
- (C) skillful, impatient, and weary
- (D) hardworking, surly, and excitable
- (E) patient, brave, and cautious
27. Which is NOT mentioned as a problem to fishermen?
- (A) Rough seas.
- (B) Unexpected storms.
- (C) Too large a catch.
- (D) Theft of the nets by other fishermen.
- (E) Destruction of the nets.

Passage 6

Pearl opened her eyes when Ezra turned a page of his magazine. "Ezra," she said. She felt him grow still. He had this habit -he had always had it- of becoming totally motionless when people spoke to him. It was endearing but also in some ways a strain, for then whatever she said to him ("I feel a draft," or "the paper boy is late again") was

5 bound to disappoint him, wasn't it? How could she live up to Ezra's expectations? She plucked at her quilt. "If I could just have some water," she told him.

- He poured it from the pitcher on the bureau. She heard no ice cubes clinking; they must have melted. Yet it seemed just minutes ago that he'd brought in a whole new supply. He raised her head, rested it on his shoulder, and tipped the glass to her lips. Yes. Lukewarm--not that
- 10 she minded. She drank gratefully, keeping her eyes closed. His shoulder felt steady and comforting. He laid her back down on the pillow.

"DR. Vincent's coming at ten," he told her.

"What times is it now?"

15 "Eight-thirty."
"Eight-thirty in the morning?"
"Yes."
"Have you been here all night?" she asked.
"I slept a little."

20 "Sleep now. I won't be needing you."
"Well, maybe after the doctor comes."

25 It was important to Pearl that she deceive the doctor. She didn't want to go to the hospital. Her illness was pneumonia, she was almost certain, she guessed it from a past experience. She recognized the way it settled into her back. If Dr. Vincent found out he would take her out of her own bed, her own house, and send her off to Union Memorial, tent her over with plastic. "Maybe you should cancel the doctor altogether," she told

Ezra. "I'm very much improved. I believe."

"Let him decide that."

"Well, I know how my own self feels, Ezra"

"We won't argue about it just now," he said.

28. Where is Pearl in the passage above?

- (A) in the hospital
- (B) staying with Ezra at his house
- (C) at home
- (D) on a European vacation
- (E) at a health clinic

29. Pearl has spent the night

- (A) talking to Ezra about the past
- (B) making plans to go to the hospital
- (C) sleeping in her bed
- (D) talking on the telephone
- (E) worrying about the future

30. How does the author reveal the passage of time in the second paragraph?

- (A) Ezra has finally arrived
- (B) The sun has just come up
- (C) Pearl closes her eyes and dreams
- (D) The water in the pitcher is cold
- (E) The ice cubes in the pitcher have melt

31. If Ezra knew that Pearl had pneumonia, he would most probably

- (A) agree to let her stay where she is
- (B) insist that she go to the hospital
- (C) make sure that she eats enough food
- (D) agree to lie to the doctor about her illness
- (E) ask another doctor for a second opinion

32. How could Pearl know the name of her illness

- (A) she guesses it from her experiences
- (B) she identifies it from the report given by a doctor
- (C) she has a red back and then she knows it
- (D) she finds the melt ice warmed in her lips
- (E) the plastic tents her over in the hospital

Passage 7

When in disgrace with fortune and men's eyes,
I all alone between my outcast state,
And trouble deaf heaven with my bootless cries,
And look upon myself and curse my fate,
5 Wishing me like to one more rich in hope,
Featured like him, like him with friends possessed,
Desiring this man's art, and that man's scope,
With what I most enjoy contented least,
Yet in these thoughts myself almost despising,
10 Haply I think on thee, and then my state,
Like to the lark at break of day arising,
From sullen earth, sings hymns at heaven's gate,
For thy sweet love remembered such wealth brings.
That then I scorn to change my state with kings.

—William Shakespeare

33. What is the theme of this poem?

- (A) The misfortunes that plague everyone
- (B) The beauty of a new morning
- (C) How the thought of the speaker's beloved can change one's mood
- (D) The speaker's envy of other peoples' lives
- (E) The resentment that heaven has given the speaker a poor lot in life

34. Which of the following choices best describes the change of mood in this passage?

- (A) from joy to sadness
- (B) from anger to confidence
- (C) from resignation to heartache
- (D) from self-pity to elation
- (E) from calm to despair

35. What is the meaning of the phrase "trouble deaf heaven" in line 3?

- (A) The heavens are in peace.
- (B) People in love are deaf to the will of God.
- (C) God's is believed to have deaf ears.
- (D) Troubled times are not heard in heaven and the turmoil remains.
- (E) One prays, but God does not hear the prays.

36. What does the poet mean when he writes "that man's scope"?

- (A) The man has made a benefit in industry.
- (B) This is an intelligent man.
- (C) The man has strong power.
- (D) By chance, the man has made a fortune.
- (E) A telescope is rewarded to the man.

Passage 8

It was always very cold on that lake shore in the night, but we had plenty of blankets and were warm enough. We never moved a muscle all night, but waked at early dawn in the original positions, and got up at once, thoroughly refreshed, free from soreness, and brim full of friskiness. There is no end of wholesome medicine in such an experience. That morning we could have whipped ten such people as we were the day before —sick ones at any rate. But the world is slow, and people will go to "water cures" and "movement cures" and to foreign lands for health. Three months of camp life on Lake Tahoe would restore an Egyptian mummy to his pristine vigor, and give him an appetite like an alligator. I do not mean the oldest and driest mummies, of course, but the fresher ones. The air up there in the clouds is very pure and fine, bracing and delicious. And why shouldn't it be?—it is the same the angels breathe. I think that hardly any amount of fatigue can be gathered together that a man cannot sleep off in one night on the sand by its side. Not under a roof, but under the sky, it seldom or never rains there in the summertime. I know a man who went there to die. But he made a failure of it. He was a skeleton when he came, and could barely stand. He had no appetite, and did nothing but read tracts and reflect on the future. Three months later he was sleeping out of doors regularly, eating all he could hold, three times a day, and chasing game over the mountains three thousand feet high for recreation. And he was a skeleton no longer, but weighed part of a ton. This is no fancy sketch, but the truth. His disease was consumption. I confidently commend his experience to other skeletons.

— Mark Twain

37. Which of the following is the best statement of the theme of this passage?

- (A) Visitors must keep Lake Tahoe clean.
- (B) Lake Tahoe's air and water quality are fantastic.
- (C) The imagination of Lake Tahoe.
- (D) The area of Lake Tahoe has amazing powers to restore people's health.
- (E) How to live near a Lake.

38. Identify the writer's tone of this passage.

- (A) determined
- (B) persuasive
- (C) entertaining
- (D) homesick
- (E) scornful

39. According to the passage, which of the following is most likely agreed by the author?

- (A) The author is afraid to move a muscle all night.
- (B) The skeletons are laying on the lake shore to meditate human beings.
- (C) The author feels his body refreshed when he gets up.
- (D) "Water cures" means the polluted water should be cleaned.
- (E) It rains a lot in summer in this area.

40. It can be inferred from the passage that

- (A) The author is interested in the inhabitants of the Lake.
- (B) Twain is fascinated by the area.
- (C) He wishes that it were not so freezing.
- (D) He is angry that the area lacks the cultural depth.
- (E) The writer has deeper nostalgic feelings for the River

[illegible]