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## SLMS 8 ${ }^{\text {m }}$ GRADE SCIENCE SPRING SEMESTER EXAM 2017 Review



1. What is the contour interval of the above topographic map?
2. What is the change in elevation from point $Y$ to point $Z$ ?
3. Which way does the Maple Stream flow?
4. Which hill is taller?
5. Which hill has the steepest sides?
6. What is the elevation of point $A$ ?
7. In the picture below, describe the motion of letter $A$. $\qquad$
8. Describe the motion of the letter B. $\qquad$
9. Describe the motion of letter C . $\qquad$
10. Which letter causes day and night? $\qquad$
11. Which letter takes a year to occur? $\qquad$
12. Which letter takes approximately 30 days to occur? $\qquad$

13. Describe the Big Bang Theory.
14. Explain how blue-shift and red-shift support the idea of an expanding universe.

THE ELECTRO MAGNETIC SPECTRUM

## Wavelength (metres)


15. Which waves are longest?

Shortest?
16. Which has the higher energy level? Visible or Infrared?
17. How are radio waves used in space?


Galaxy W


Galaxy X


Galaxy Y
18. Describe the shape of each of the galaxies.
19. Galaxy W=
20. Galaxy $X=$
21. Galaxy $\mathrm{Y}=$
22. Which is the youngest type of galaxy?
23. Which galaxy contains the oldest stars?
24. Put the following in order from largest to smallest: Galaxy, Planet, Star, Solar System
25. Define stellar nebula-

26. Describe our sun compared to other stars in the galaxy in terms of brightness, temperature, size and location on the HR Diagram.
27. Describe our sun when compared to Barnard's Star in terms of brightness, temperature, size and location on the HR Diagram.
28. Define Light Year-
29. What are light years best for measuring?
30. If Proxima Centauri is 4.24 light years away, approximately how many years does it take for it's light to reach earth?
31. Give 3 causes of seasons?
32. Draw a picture showing the position of the sun and earth during the 4 seasons. Label the seasons in both hemispheres.
33. Which seasons will have equal hours of day and night?
34. Which season will have shorter days, longer nights?
35. Which season will have longer days, shorter nights?

36. Name the moons at the following positions:

1 $\qquad$ 5 $\qquad$

2 $\qquad$ 6 $\qquad$

3 $\qquad$ 7 $\qquad$

8 $\qquad$
4 $\qquad$ —
37. Define waxing-
38. Define waning-
39. Explain what is happening from position 1 to position 5.
40. Explain what is happening from position 5 to position 2.

41. Name the moon phase at:

Position 1 $\qquad$
Position 2 $\qquad$
Position 3 $\qquad$
Position 4 $\qquad$
42. Draw the moon at position $X$
43. Draw the moon at position $Y$
44. How long does it take to go from position 4 to position 1 ?
45. How long does it take to go from position 2 to position 4 ?
46. By which number would you draw the sun? $\qquad$

| October 2005 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|  |  |  |  |  |  | 1 |
| 2 | $\begin{aligned} & \text { New } 3 \\ & \text { moon } \end{aligned}$ | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | Full 17 moon | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 |  |  |  |  |  |

47. What moon would occur on October $10^{\text {th }}$ ? $\qquad$
Draw a picture of it.
48. What moon would occur on October $24^{\text {th }}$ ?

Draw a picture of it.
49. What causes ocean tides?
50. Label spring tide and neap tide on the picture

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51. Describe the moon phases present for a spring tide.
52. Describe the moon phases present for a neap tide.
53. Which tide will have higher than usual high tides?

Which tide will have lower than usual high tides?

54. What evidence did Alfred Wegener use to support his Theory of Continental Drift?


The picture to the side represents Seafloor Spreading
55. What type of plate boundary is this?
56. Label the oldest crust and the newer crust.
57. What causes the movement of the tectonic plates?

59. What landform can it cause?
60. What is subduction?

Draw a picture to represent subduction.
61.


Identify the landforms created at each of these boundaries.
Boundary 1 $\qquad$
Boundary 2 $\qquad$
Boundary 3 $\qquad$
62. Describe ocean crust-
63. Describe continental crust-
64. Define weathering-

Describe what happens to weathered rock over time.
65. Describe what is necessary for a hurricane to form?
66. Which way do hurricanes spin?
67. Which seasons can we expect hurricanes?
68. What is the symbol for a cold front?
69. What is the symbol for a warm front?
70. What weather occurs when a cold front passes?
71. What weather occurs when a warm front passes?
72. Describe the weather during high pressure.
73. Describe the weather during low pressure.



Use the above food web to answer the following questions (74-78)
74. What would happen is the snake population was killed?
75. Give an example of a producer-consumer relationship.
76. Give an example of a predator-prey relationship
77. Name 2 organisms that compete for food.
78. What would occur if a zebra moved into the ecosystem and began competing for food with the goat?
79. Describe a parasite host relationship. Give an example.
80. How do humans creating trash on the land impact the oceans?

