

Cover (page 1):

1. Measure the width of this page to the nearest 0.1 cm. _____
2. How much of a 400 gram sample of K40 is left after 2 half-lives? _____
3. During which phase change is the most energy gained? _____
4. The mass of an object is 56.3g and the volume is 45.5 ml. Density = _____, sink or float in water _____
5. A material has a density of 4.5 g/ml and a mass of 2.6 grams, what is the volume? _____
6. What is the eccentricity if the foci distance is 7.6 cm and the major axis is 15.2 cm? _____

PAGE 2

8. List the landscape regions in New York State: _____

9. What landscape is Eastchester Located within ? _____

PAGE 4:

10. Describe the motions of the Gulf Stream. _____
11. In what direction does the California current flow? _____

Page 5 :

12. List the major plates of the world: _____

13. List the major motions of plates due to plate tectonics. _____
14. What is the relationship of this map and volcanic activity. _____

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15. If a stream's velocity 50 cm/sec , what sediments can be carried? _____
16. A particle .055 cm in diameter will most likely form what type of rock? _____
17. Sandstone differs from limestone based on particle size. How is their point of origin different?
18. What minerals are found in granite? _____
19. How does rhyolite differ from granite? _____
20. Which minerals are not present in felsic type igneous rocks
but are present in mafic type igneous rocks? _____

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- 21. How do felsic and mafic igneous rocks differ in density, color, and mineral content? _____

- 22. What process must a rock undergo in order to become igneous? _____
- 23. What process must a rock undergo in order to become metamorphosed? _____
- 24. List all the terms associated with the formation of sedimentary rocks. _____
- 25. What are the two major divisions of sedimentary rocks? _____
- 26. How is a breccia different from a conglomerate? _____
- 27. What is the composition of rock salt? _____
- 28. What are the main types of metamorphism? _____
- 29. What are the two major textures of metamorphic rocks? _____
- 30. Complete:

metamorphic rock -----> parent rock	
slate	_____
marble	_____
quartzite	_____

Page 8 and Page 9

- 31. During which period were trilobites common? _____
- 32. What is the approximate age of the Appalachian plateau? _____
- 33. Which span of geologic time is the longest? _____
- 34. For how long did dinosaurs roam the earth? _____
- 35. How long ago did dinosaurs become extinct? _____
- 36. Which is the most recent time period where North and South America are believed to be separated? _____
- 37. When was the taconic orogeny and how did it happen? _____
- 38. When did the Atlantic Ocean started to open? _____
- 39. What is the official fossil of NYS- see page 1? _____

PAGE 10:

- 40. Which of earth layers is the most dense ? _____
- 41. What is the approximate pressure at the mantle-outer core interface? _____
- 42. In which strata of the earth is the Earth' s temperature change the greatest? _____
- 43. How thick is the asthenosphere? _____
- 44. What is the composition and phase of the inner core? _____

PAGE 11:

- 45. What is the scale on the y-axis (eq chart)? _____
- 46. What is the scale on the x-axis (eq-chart)? _____
- 47. How far can a P-wave travel in 9 minutes? _____
- 48. If P waves arrive 5 minutes and 20 seconds before S waves from an earthquake, what is the distance of the observer from the epicenter? _____
- 49. What is the most common element, by volume, in the earth's crust? _____

PAGE 12:

- 50. Find the dewpoint if the wet bulb reading is 3° C and the dry bulb is 6°C _____
- 51. What is the relative humidity if the air temp. is 10°C and the wet bulb is 6°C? _____

PAGE 13:

52. Find the equivalent values of the following:

a) 64° F = _____ °C

b) 64° C = _____ ° F

- 53. a. From what direction is the wind blowing on the station model? _____
- b. What is the wind speed in knots on the station model? _____
- 55. What is the present weather symbol for thunderstorms? _____
- 56. Draw and label each type of weather front:

- 57. a) What is the air pressure of 1 atmosphere? _____
- b) 30 " Hg = _____ mb (pressure) _____

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- 58. Which wavelength is 10^{-3} meters in size? _____
- 59. All of our weather is found below ? km. _____
- 60. At which zone in the atmosphere does the temperature go over 50°C ? _____
- 61. Describe the relationship of winds and wet and moist climates. _____
- 62. Which latitudes have high and low pressure? _____

PAGE 15:

- 63. Which planet has an orbit most like a circle? _____
- 64. What planet has the longest period of revolution? _____
- 65. What is the most dense planet? _____
- 66. What type of star is the sun? _____
- 67. How are stars classified? _____

PAGE 16:

- 68. What mineral is dark and cleaves into sheets? _____
- 69. What metallic mineral has a red streak? _____
- 70. List 2 outstanding properties of olivine. _____