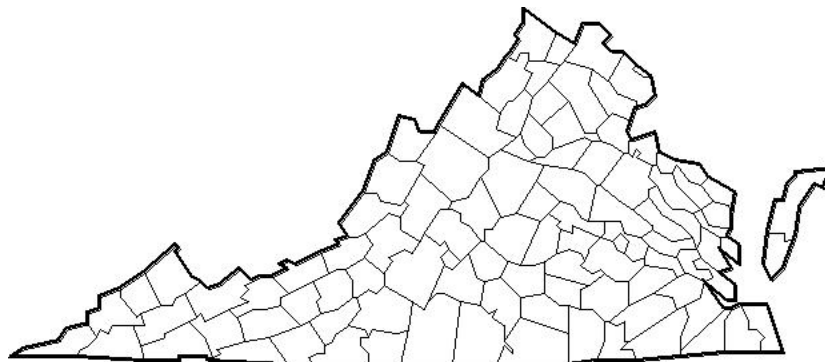


TESTS FOR HIGHER STANDARDS

Science



Simulation Test

Based on the 2003 Standards

Grades 6 – 8

**Dr. David E. W. Mott
Dr. S. Stuart Flanagan, Professor Emeritus
College of William and Mary**

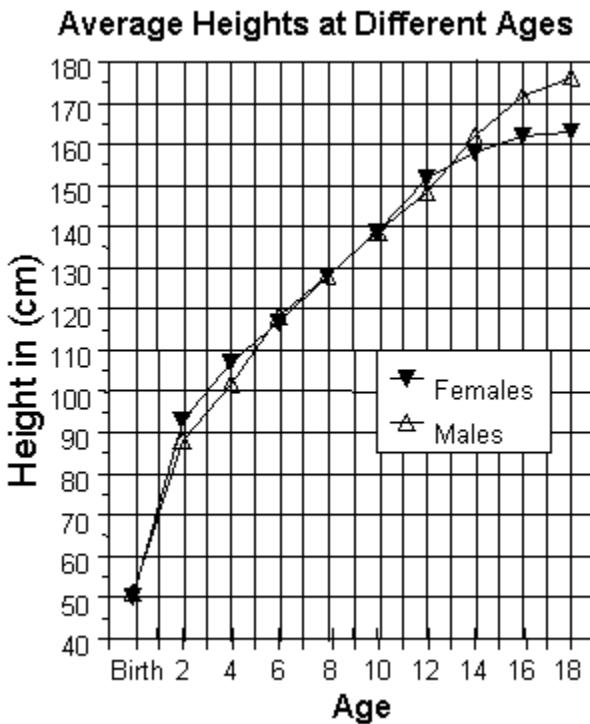
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6.1h

7. Which *metric* units would best be used to measure the height of a tree?

- A** feet
- B** meters
- C** millimeters
- D** inches

Use this graph of children's heights by age to answer the next 2 questions.



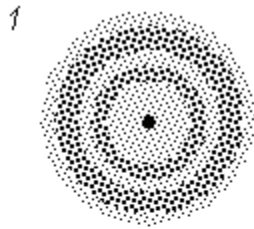
LS.1h

8. What is the average height of 3-year-old females?

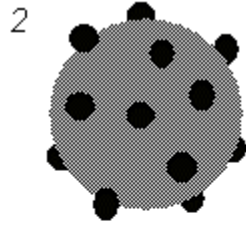
- F** 92 cm
- G** 95 cm
- H** 100 cm
- J** 105 cm

PS.3a

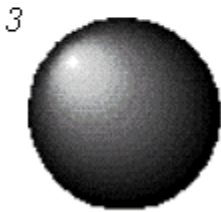
23. The way scientists have shown and thought about the atom has changed over the years. Order the atomic models below from the *oldest* to the *most recent*.



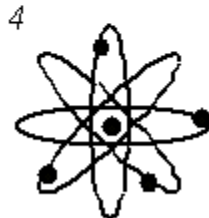
Electron Cloud



Blueberry Muffin



Billiard Ball

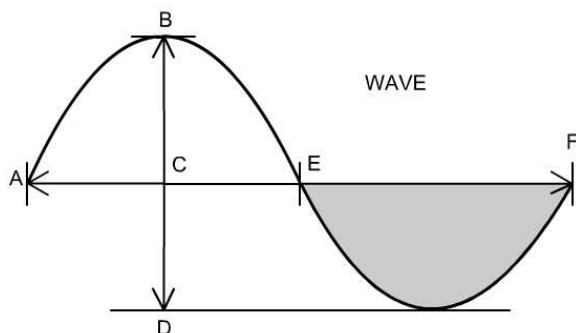


Fixed Orbits

- A** 2, 1, 3, and 4
- B** 1, 2, 4, and 3
- C** 3, 2, 4, and 1
- D** 3, 1, 2, and 4

PS.8a

24. In the diagram below, what is the distance between points B and C called?



- F** crest-to-trough distance
- G** wave amplitude
- H** wave frequency
- J** wave distance

6.8h

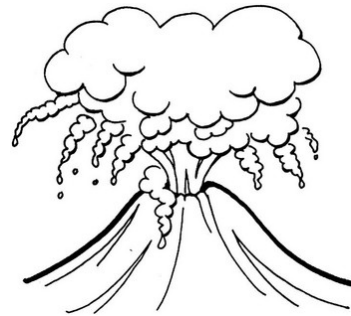
56. The rise and fall of the oceans, called the tides, are caused by the gravitational pull of what object or objects?

- F** the sun
- G** the sun and the planets
- H** the moon and the sun
- J** the planets

6.2d

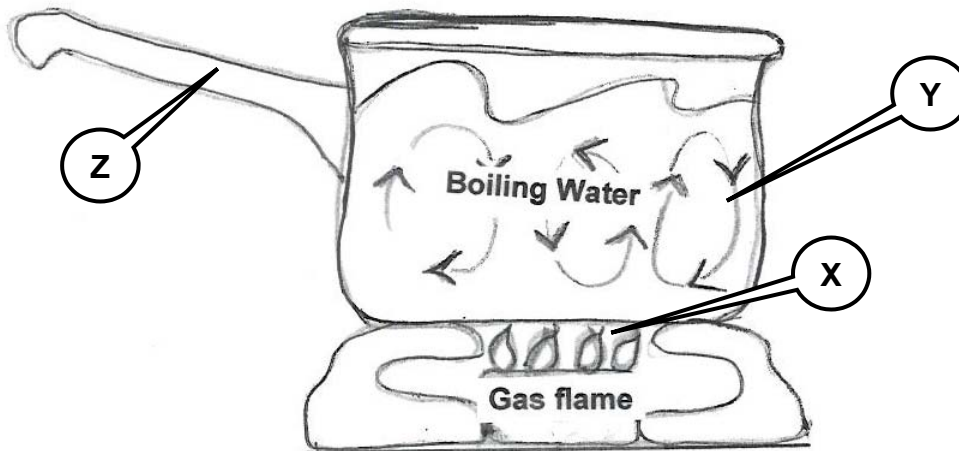
57. This picture best represents which type of energy?

- A** potential energy
- B** electromagnetic energy
- C** mechanical energy
- D** geothermal energy



6.3b

58. Choose the correct labels that identify energy heat transfer in the picture.



- F** X – conduction, Y – convection, Z – radiation
- G** X – convection, Y – conduction, Z – radiation
- H** X – radiation, Y – conduction, Z – convection
- J** X – radiation, Y – convection, Z – conduction