



## TOPS on Bloor Entrance Exam Sample Science Questions

- From least to most complex the biological organization of an organism would be best represented by:
  - cell, tissue, organ, organ system, organism
  - cell, organ tissue, organ system, organism
  - organism, organ system, organ, tissue, cell
  - tissue, cell, organ, organ system, organism
  - organism, organ system, tissue, organ, cell
- Chemically combining carbon and oxygen through burning (combustion) produces carbon dioxide and water. The mass of the carbon dioxide and water would be
  - greater than the mass of the carbon and the mass of the oxygen combined.
  - equal to the mass of the carbon and the mass of the oxygen combined.
  - equal only to the mass of the carbon.
  - equal only to the mass of the oxygen.
  - less than the mass of the carbon and the mass of the oxygen combined.
- Global warming is caused by greenhouse gases absorbing energy that would normally be emitted to space and reradiating it back to the earth's surface. If the greenhouse gas concentration increases the likely result will be
  - decreased absorption, increased emission of energy into space, and decreasing temperatures.
  - increased absorption, decreased emission of energy into space, and decreasing temperatures.
  - increased absorption, increased emission of energy into space, and decreasing temperatures.
  - increased absorption, increased emission of energy into space, and increasing temperatures.
  - increased absorption, decreased emission of energy into space, and increasing temperatures.
- Which of the following is **not** one of the postulates of the particle theory of matter?
  - All matter is made up of particles.
  - All particles are in constant motion.
  - All particles of one substance are identical.
  - Temperature affects the speed at which particles move.
  - Only gas particles have spaces between them.
- A student was training on a bicycle race track. The student passed by a 2 km marker flag every 6 minutes. The training session lasted 2 hours. What was the student's average speed for the 2 hour period?

a. 10 km/h	d. 25 km/h
b. 15 km/h	e. 30 km/h
c. 20 km/h	