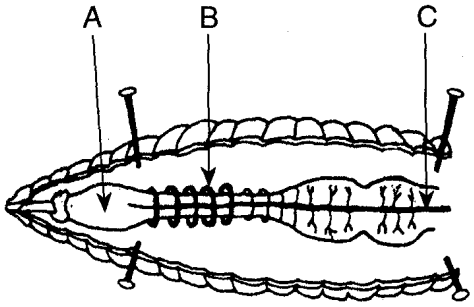
1. A transparent metric ruler is placed on the stage of a microscope and observed under low power. The diameter of the field of vision was found to be 2 millimeters. How many micrometers is the diameter?

   A) 10 B) 200 C) 1,000 D) 2,000

2. Base your answer to the following question on the diagram below of some internal structures of an earthworm and on your knowledge of biology.



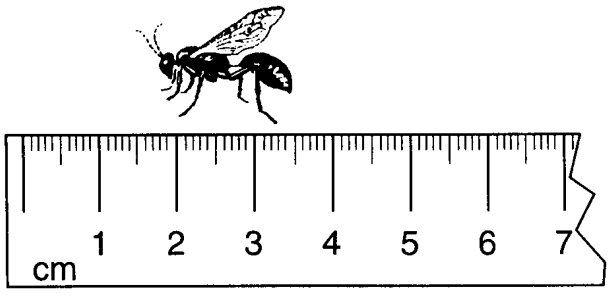
   Structure *A* has a diameter of 3 millimeters. What is the approximate diameter of the blood vessel indicated by arrow *C*?

   A) 2.5 mm B) 2.0 mm
   C) 1.5 mm D) 0.5 mm

3. Which group of measurement units is correctly arranged in order of increasing size?

   A) micrometer, millimeter, centimeter, meter
   B) millimeter, micrometer, centimeter, meter
   C) meter, micrometer, centimeter, millimeter
   D) micrometer, centimeter, millimeter, meter

4. The diagram below shows a wasp positioned next to a centimeter ruler.



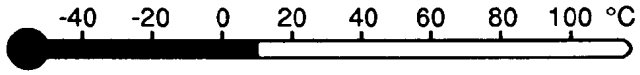
   What is the approximate length of a wing of this wasp?

   A) 1.0 mm B) 1.4 cm
   C) 3.5 cm D) 35 mm

5. Zebra finches are small black-and-white birds that lay eggs about the size of a bean seed. Which unit of measurement is best for accurately measuring the length of these eggs?

   A) millimeters B) micrometers
   C) feet D) meters

6. The diagram below represents a Celsius thermometer.



   The reading on the thermometer might indicate the temperature of a

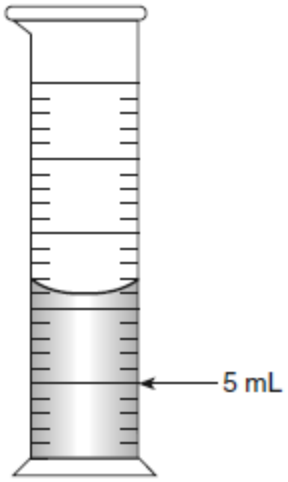
   A) healthy human
   B) human with a fever
   C) very cool day
   D) beaker of boiling water

7. The diagram below represents a thermometer that is inside an incubator.

   A student needs to incubate a bacterial culture at 43°C. According to the reading on the thermometer, how many degrees must the temperature in the incubator be increased to reach this temperature?

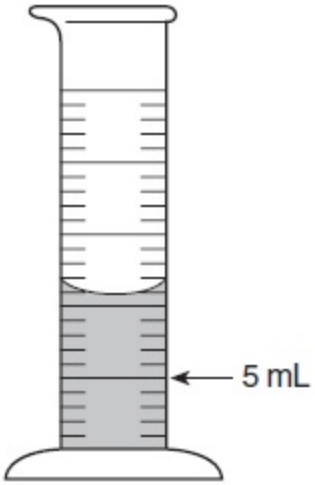
   A) 9 B) 6 C) 3 D) 12

8. How much water should be added to the graduated cylinder shown below to increase the volume to 15 milliliters?



A) 11 mL
B) 10 mL
C) 3 mL
D) 4 mL

9. How much water should be removed from the graduated cylinder shown below to leave 5 milliliters of water in the cylinder?



A) 6 mL
B) 7 mL
C) 11 mL
D) 12 mL