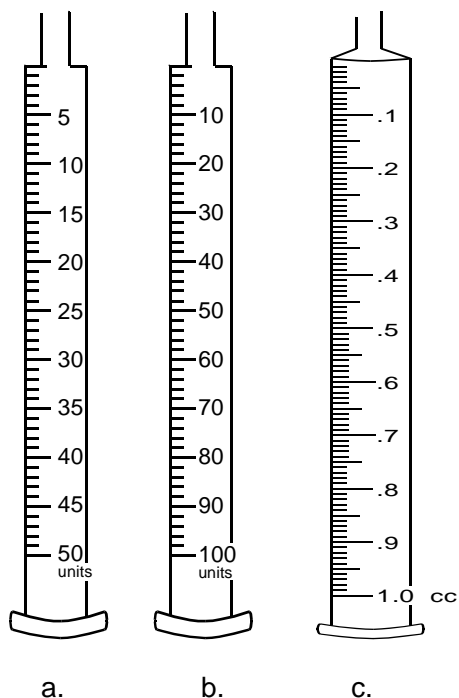


KEY INSULIN SYRINGES (pages 97-106)

Instructions: Work your way through the book, answering the questions as you go.

1. What size is each of the syringes below? a. 50 u b. 100 u c. 1 cc or ml _____
(answer on p. 97)

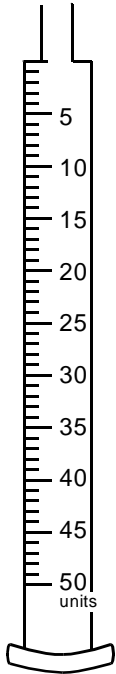
**50 Unit Insulin syringe**

Although not shown in the drawing above, the 50 unit insulin syringe is a little shorter and skinnier than the 100 unit syringe.

- Both Insulin syringes have a orange colored cap to tell them apart from other syringes.
- The insulin syringes are different from your other syringes in two important ways: (answer on page 97)
 - marked in units
 - marked in whole numbers, not decimals
- On a 50 Unit Insulin syringe, there are small and large marks. The large marks are numbered every 5 units up to 50. (page 98)
- If we count all of the marks on the 50 Unit insulin syringe, there are 5 marks from zero to 5 units.
- These marks divide the 5 units into 5 equal parts.
- What is the amount of each unnumbered mark? 1 unit (page 98)

8. The small marks divide the 5 unit large marks into equal parts. If we divide the 5 units into 5 equal parts, how many units does each part represent? 1 (page 99)

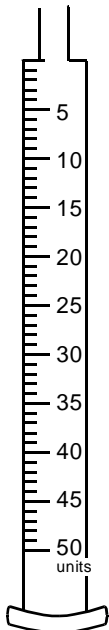
9. Label the one unit marks on the 50 Unit insulin syringe up to 10 units. (See page 99)



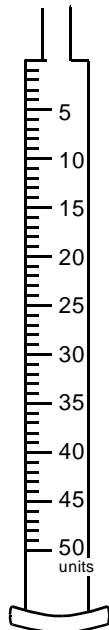
10. Each mark on a 50 Unit insulin syringe equals 1 units of insulin? (page 100.)

11. Draw a line across the listed dose of insulin on the following 50 Unit insulin syringes.

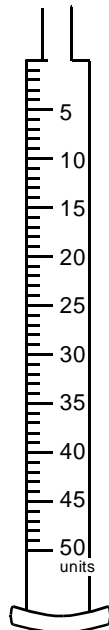
a. 7 Units



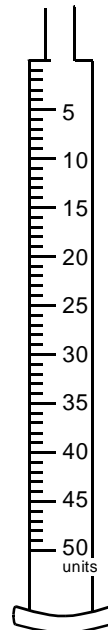
b. 24 Units



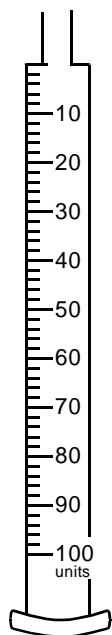
c. 13 Units



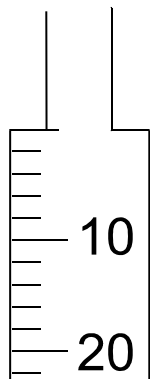
d. 37 Units



The 100 Unit Insulin syringe



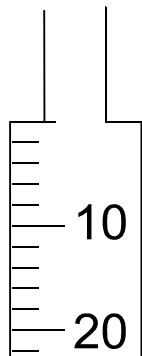
12. On the syringe above, we see little and larger marks along the length of the syringe. The larger marks are numbered every 10 units up to 100. (p. 101)
13. It is important to know what volume each unnumbered mark represents. When counting the 100 unit insulin syringe, how many marks are there from zero to 10 Units? 5 (p. 101)
14. If we divide 10 units into 5 equal parts ($10 \text{ units} \div 5$), we find that each of the 5 equal parts equals 2 units. (p. 102)
15. How many units of insulin are shown by each little mark on the syringe? 2
Label each mark on the side of the syringe below with the number of units.



16. Each mark on the 100 unit insulin syringe shows the volume of liquid that contains 2 units of insulin. (page 102)

Sometimes we might need to give an odd number of units of insulin (1, 3, 5, 7, 9, 11, 13, and so on). On a 50 unit insulin syringe, this would be easy, since there is a mark for every one unit of insulin.

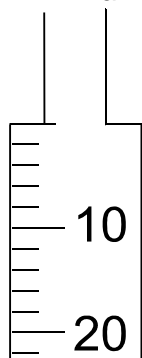
17. For a 100 unit insulin syringe, only the **even** numbers are marked (2, 4, 6, 8, 10, 12, and so on).
18. If we needed to give 7 units of insulin and all we had was a 100 unit insulin syringe, Where would 7 units be on this syringe? (page 104)



Odd numbers are halfway between the even numbers that are on either side of them.

19. Draw a number line from one to 10 below. (see page 105)

20. On the number line mark the line for the number 7.
21. Circle the even number in front of and behind the 7.
22. The number 7 is **halfway** between 6 and 8. (page 105)
23. On a syringe, 7 units should be **halfway** between 6 units and 8 units. (page 105)
24. Draw a line at 7 units on the syringe below.



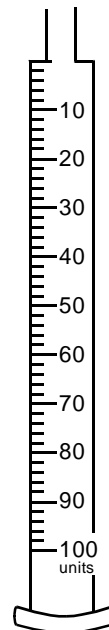
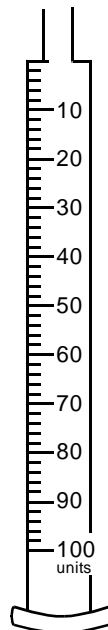
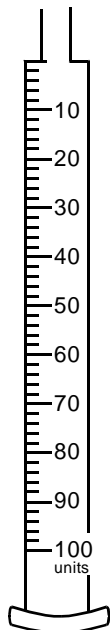
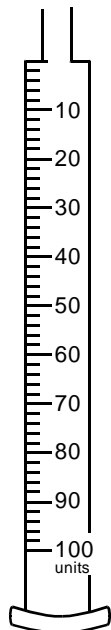
25. Draw a line across the syringes below to show how much liquid you would draw up for the following amounts of insulin.

a. 25 units

b. 18 units

c. 39 units

d. 8 units



Summary of Reading a Syringe (page 107)

1. The key to doing a syringe dosage is to know how much each little mark is **before** you try to use the syringe.
2. This can be figured out by following three steps. (page 107)
 1. count the marks from zero to 1 ml
 2. decide if the marks are a "1" number or a "2" number
 3. count out the little marks by ones or twos and see which choice comes out right
3. The value of a little mark on a 50 unit insulin syringe is 1 unit.
4. The value of a little mark on a 100 unit insulin syringe is 2 units.
5. 5 marks from zero to 10 units = 2 units each on a 100 insulin syringe.
6. 10 marks from zero to 10 units = 1 unit each on a 50 insulin syringe.
7. The key to safe use of a syringe is to count the little marks before you use it and make sure they add up to the numbers written on the syringe. (page 109)