Unit 4—The Metric System

Directions. Place the correct answer in the space provided:

1. The fundamental units of the metric system are:
   a) length ___________________________
   b) volume ___________________________
   c) weight ___________________________

2. Write the prefix for each of the following:
   a) one thousand units _______________________
   b) one-tenth of a unit _______________________
   c) one-millionth of a unit ___________________
   d) one hundred units _______________________
   e) one-thousandth of a unit ___________________
   f) ten units ______________________________
   g) one-hundredth of a unit ___________________

3. It takes approximately __________ centimeter(s) to make an inch.

4. A liter is equal to __________ quart(s).

5. A milliliter is equivalent to __________ cubic centimeter(s).

6. Write in the abbreviation for the unit that makes the equivalent correct.
   a) 1000 mL = 1 ___________________________
   b) 2000 mg = 2 ___________________________
   c) 1000 mcg = 1 ___________________________
   d) 2 kg = 4.4 ___________________________
   e) 0.5 g = 500 ___________________________

7. Correctly convert each of the following metric equivalents:
   a) 1 mcg = __________ mg
   b) 4 g = __________ kg
   c) 5 kg = __________ g
   d) 0.2 L = __________ mL
   e) 1 mL = __________ L
   f) 3.5 mg = __________ g

8. Correctly convert the following pounds to kilograms:
   a) 176 lb = __________ kg
   b) 100 lb = __________ kg
   c) 64 lb = __________ kg
Unit 5—Calculating Adult Dosages: 
Oral and Parenteral Forms

Directions. Correctly calculate the following adult dosages:

1. The physician ordered Lanoxin tabs, 0.125 mg. Available are Lanoxin tabs, 0.25 mg. How many tablets will you give?

2. The physician ordered Coumadin tabs, 2.5 mg. Available are Coumadin tabs, 5 mg. How many tablets will you give?

3. The physician ordered acetaminophen tabs, 650 mg. Available are acetaminophen tabs, 325 mg. How many tablets will you give?

4. The physician ordered Carafate tabs, 500 mg. Available are Carafate tabs, 1 gram. How many tablets will you give?

5. The physician ordered Duricef tabs, 1500 mg. Available are Duricef tabs, 1 gram. How many tablets will you give?

6. The physician ordered Diuril tabs, 250 mg. Available are Diuril tabs, 0.25 g. How many tablets will you give?

7. The physician ordered amoxicillin caps, 500 mg. Available are amoxicillin caps, 250 mg. How many capsules will you give?

8. The physician ordered Lasix oral solution, 30 mg, to be given as a single dose. Available is Lasix oral solution, 60 mL bottle that contains 10 mg/mL. How many milliliters will you give?

9. The physician ordered Demerol, 50 mg IM. On hand is Demerol, 100 mg per 2 mL. How many milliliters will you give?

10. The physician ordered Vistaril, 75 mg IM. On hand is Vistaril, 50 mg per mL. How many milliliters will you give?

11. The physician ordered a medication, 600,000 units for deep IM injection. On hand is 1,200,000 units per 2 mL. How many milliliters will you give?

12. The physician ordered Tigan, 200 mg IM. On hand is Tigan, 100 mg per mL. How many milliliters will you give?

13. The physician ordered 30 units of Acthar IM. Available is Acthar, 40 units per milliliter. How many milliliters will you give?
Unit 6—Calculating Children’s Dosages

Directions. Correctly calculate the following children’s dosages:

1. The child weighs 66 pounds and the physician has ordered a medication to be given 30 mg/kg of body weight. What dosage will be given to the child?

2. The child weighs 44 pounds and the physician has ordered a medication to be given 30 mg/kg of body weight. What dosage will be given to the child?

3. The physician orders Cefadroxil (Duricef), 30 mg/kg of body weight, for a child who weighs 44 pounds. The dose is to be divided and given every 12 hours. How many milligrams will you give?

4. The physician orders codeine phosphate 0.5 mg/kg of body weight for pain. The patient weighs 50 pounds. The medication may be given every 4 to 6 hours. How many milligrams will the patient receive?

5. The physician orders cephapirin sodium (Cefadyl) 20 mg/kg every 6 hours, for a child who weighs 46 pounds. How many milligrams will you give?