

## CHAPTER 2: PRINCIPLES AND METHODS OF DRUG ADMINISTRATION

### TRUE/FALSE

1. An important component in medication administration is to assess the client for drug allergies.

ANS: T                      PTS: 1                      REF: p. 40  
OBJ: Cognitive Level: Application

2. The right documentation for medication administration includes documenting a client's refusal of a medication.

ANS: T                      PTS: 1                      REF: p. 50, Safe Nursing Practice 2-10  
OBJ: Cognitive Level: Application

3. The deltoid site for IM injections may be used for up to 3 mL of solution.

ANS: F

	Feedback
Correct	The maximum amount of solution to be injected into the deltoid site is 1 mL.
Incorrect	

PTS: 1                      REF: p. 56, Safe Nursing Practice 2-13  
OBJ: Cognitive Level: Comprehension

4. For teaching to be effective, the client must indicate a readiness to learn.

ANS: T                      PTS: 1                      REF: p. 64  
OBJ: Cognitive Level: Application

5. One long teaching session is usually more effective than several short sessions.

ANS: F

	Feedback
Correct	Several brief teaching periods may be more effective than one long session, because the client needs time to absorb the material covered before continuing with the next topic.
Incorrect	

PTS: 1                      REF: p. 65                      OBJ: Cognitive Level: Comprehension

### MULTIPLE CHOICE

A second-year nursing student is preparing to administer medications to clients in a small rural hospital. The questions that follow review some of the information she will need to know in order to administer medications safely and effectively.

1. In measuring liquid medications with a dropper, it is important to hold the dropper:  
a. 4 inches above the receptacle.                      c. horizontally to the receptacle.

- b. at a 45-degree angle to the receptacle.      d. vertically to the receptacle.

ANS: D

Feedback	
A	Incorrect: This would promote splashing of the medication and inaccuracy of the dosage.
B	Incorrect: This will not promote accuracy.
C	Incorrect: This will not promote accuracy.
D	<b>Correct:</b> This will provide the nurse with an eye-level view of the medication and amount markings on the receptacle.

PTS: 1      REF: p. 53, Table 2-6

OBJ: Cognitive Level: Application

2. The muscle(s) used in the ventrogluteal injection site is/are the:
- a. vastus lateralis.
  - b. gluteus minimus and medius.
  - c. gluteus maximus.
  - d. deltoid.

ANS: B

Feedback	
A	Incorrect: This is the muscle in the thigh.
B	<b>Correct:</b> The gluteus minimus and medius muscles are used for the ventrogluteal site.
C	Incorrect: This muscle is used for the dorsogluteal site.
D	Incorrect: This muscle is used for the deltoid site in the upper arm.

PTS: 1      REF: p. 57      OBJ: Cognitive Level: Knowledge

3. Subcutaneous injections:
- a. may be given at either a 45- or a 90-degree angle except insulin and heparin are given at a 90-degree angle.
  - b. are given with a 5/8-inch needle, although a longer needle may be used for obese persons.
  - c. can be given in the abdomen on either side of the umbilicus.
  - d. all of the above

ANS: D

Feedback	
A	Incorrect: Although a true statement, it is not the most complete answer.
B	Incorrect: Although a true statement, it is not the most complete answer.
C	Incorrect: Although a true statement, it is not the most complete answer.
D	<b>Correct:</b> This incorporates all of the other answers, so it is the best answer.

PTS: 1      REF: p. 58, Safe Nursing Practice 2-14

OBJ: Cognitive Level: Comprehension

4. Normally, the gluteal muscles may be used as injection sites for children after:
- a. three months of age.
  - b. one year of age.
  - c. the child has been walking for one year.
  - d. the child has been walking for six months.

ANS: C

	Feedback
A	Incorrect: The dorsogluteal muscle should not be used until walking has been established.
B	Incorrect: The dorsogluteal muscle should not be used until walking has been established.
C	<b>Correct:</b> Established walking helps develop the gluteal muscles, which helps provide adequate muscle tissue for accepting an injection.
D	Incorrect: This is not long enough for adequate muscle development.

PTS: 1 REF: p. 56, Safe Nursing Practice 2-13  
 OBJ: Cognitive Level: Comprehension

5. Which of the following abbreviations means “drop”?
- a. gtt
  - b. O.D.
  - c. aa
  - d. p.o.

ANS: A

	Feedback
A	<b>Correct:</b> This is the approved abbreviation for drop.
B	Incorrect: This is the abbreviation for right eye.
C	Incorrect: This is the abbreviation for of each.
D	Incorrect: This is the abbreviation for per os, or by mouth.

PTS: 1 REF: p. 42, Table 2-1 OBJ: Cognitive Level: Knowledge

6. Which of the following abbreviations means “immediately”?
- a. I.U.
  - b. stat
  - c. p.r.n.
  - d. p.c.

ANS: B

	Feedback
A	Incorrect: This is no longer an approved abbreviation for international unit.
B	<b>Correct:</b> Stat is the approved abbreviation for immediately.
C	Incorrect: This is the abbreviation for as needed.
D	Incorrect: This is the abbreviation for after meals.

PTS: 1 REF: p. 42, Table 2-1 OBJ: Cognitive Level: Knowledge

7. The type of syringe most frequently used for allergy injections is a(n):
- a. tuberculin syringe.
  - b. insulin syringe.
  - c. 2 mL general purpose syringe.
  - d. bulb syringe.

ANS: A

	Feedback
A	<b>Correct:</b> Tuberculin syringes are used for allergy injections, because of the small volume of medication needed and because they are calibrated to 0.01 mL.
B	Incorrect: Insulin syringes are used for insulin administration.
C	Incorrect: This is calibrated to the 0.1 mL.

D	Incorrect: This is used for irrigation and nasal suction.
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PTS: 1                      REF: p. 47, Table 2-4  
 OBJ: Cognitive Level: Application

8. Medications administered under the tongue are said to be given:
- a. buccally.
  - b. sublingually.
  - c. intra-articularly.
  - d. intratracheally.

ANS: B

	Feedback
A	Incorrect: This is in the inner lining of the cheeks.
B	<b>Correct:</b> This is under the tongue.
C	Incorrect: This is in a joint.
D	Incorrect: This is into the trachea.

PTS: 1                      REF: p. 21                      OBJ: Cognitive Level: Comprehension

9. What size syringe is used to administer an intradermal injection?
- a. 1 mL
  - b. 2 mL
  - c. 3 mL
  - d. any of the above

ANS: A

	Feedback
A	<b>Correct:</b> A tuberculin 1 mL syringe is used for intradermal injections.
B	Incorrect: This is too large and does not have the necessary 0.01 calibrations needed.
C	Incorrect: This is too large and does not have the necessary 0.01 calibrations needed.
D	Incorrect: The 2 mL and 3 mL syringes are too large and don't have the necessary 0.01 calibrations needed.

PTS: 1                      REF: p. 60, Figure 2-15                      OBJ: Cognitive Level: Knowledge

10. All of the following are true about effective client teaching *except*:
- a. it takes into account the client's cultural values.
  - b. the client must be ready to learn.
  - c. reinforcement is important.
  - d. teaching targets one of the senses intensively.

ANS: D

	Feedback
A	Incorrect: This is a factor in effective client teaching.
B	Incorrect: This is a factor in effective client teaching.
C	Incorrect: This is a factor in effective client teaching.
D	<b>Correct:</b> Teaching is more effective when several senses are involved.

PTS: 1                      REF: p. 65                      OBJ: Cognitive Level: Comprehension

11. Which of the following routes is used primarily for diagnostic purposes?
- a. intradermal
  - b. subcutaneous
  - c. intracardiac
  - d. intramuscular

ANS: A

	Feedback
A	<b>Correct:</b> The most commonly used intradermal injections are for the detection of exposure to tuberculosis and allergens.
B	Incorrect: This site generally is not used for diagnostic purposes.
C	Incorrect: This site generally is not used for diagnostic purposes.
D	Incorrect: This site generally is not used for diagnostic purposes.

PTS: 1

REF: p. 59

OBJ: Cognitive Level: Comprehension

12. Which of the following routes frequently requires use of a 22 G, 1 1/2-inch needle?
- a. intradermal
  - b. subcutaneous
  - c. intracardiac
  - d. intramuscular

ANS: D

	Feedback
A	Incorrect: Intradermal injections use 26 gauge (G) to 27 gauge (G) and 1/2 to 5/8 inch needles.
B	Incorrect: Subcutaneous injections use 25 gauge (G) to 28 gauge (G) and 1/2 to 5/8 inch needles.
C	Incorrect: Intracardiac needles are 26 gauge (G) and 4 inches long.
D	<b>Correct:</b> Intramuscular injections require the use of 22 gauge (G), 1 1/2 inch needles.

PTS: 1

REF: p. 55, Table 2-7

OBJ: Cognitive Level: Comprehension

13. When pouring liquid medications, the nurse knows to raise the measuring device to eye level and to read the measurement at:
- a. the top of the measuring device.
  - b. the lowest point of the meniscus.
  - c. the highest point of the meniscus.
  - d. the edges of the measuring device.

ANS: B

	Feedback
A	Incorrect: This would lead to an inaccurate reading.
B	<b>Correct:</b> This provides for an accurate reading.
C	Incorrect: This would lead to an inaccurate reading.
D	Incorrect: This would lead to an inaccurate reading.

PTS: 1

REF: p. 54, Figure 2-5

OBJ: Cognitive Level: Application

14. Which route is used most often for the administration of insulin?
- a. intradermal
  - b. subcutaneous
  - c. intracardiac
  - d. intramuscular

ANS: B

	Feedback
A	Incorrect: Insulin usually is administered via subcutaneous injection.

<b>B</b>	<b>Correct:</b> Insulin usually is administered via subcutaneous injection.
<b>C</b>	Incorrect: Insulin usually is administered via subcutaneous injection.
<b>D</b>	Incorrect: Insulin usually is administered via subcutaneous injection.

PTS: 1                      REF: p. 59                      OBJ: Cognitive Level: Comprehension

15. When administering eardrops to children less than 3 years old, the pinna is:
- a. not touched.
  - b. pulled back and down.
  - c. pulled back and up.
  - d. pulled straight out.

ANS: B

	<b>Feedback</b>
<b>A</b>	Incorrect: The pinna has to be touched for ear drop instillation.
<b>B</b>	<b>Correct:</b> This opens their ear canal.
<b>C</b>	Incorrect: This is for children over 3 years of age and adults.
<b>D</b>	Incorrect: This will not open the ear canal.

PTS: 1                      REF: p. 63, Figure 2-18  
OBJ: Cognitive Level: Comprehension

16. Assessing a client for anaphylaxis involves observing for:
- a. dyspnea.
  - b. pruritus.
  - c. nausea.
  - d. all of the above

ANS: D

	<b>Feedback</b>
<b>A</b>	Incorrect: Although true, this is not the best answer.
<b>B</b>	Incorrect: Although true, this is not the best answer.
<b>C</b>	Incorrect: Although true, this is not the best answer.
<b>D</b>	<b>Correct:</b> Assessing for anaphylaxis involves observing the client for all of the responses.

PTS: 1                      REF: p. 20                      OBJ: Cognitive Level: Application

17. Assessing a client for anaphylaxis involves observing for:
- a. dyspnea.
  - b. pruritus.
  - c. nausea.
  - d. all of the above

ANS: D

	<b>Feedback</b>
<b>A</b>	Incorrect: Although true, this is not the best answer.
<b>B</b>	Incorrect: Although true, this is not the best answer.
<b>C</b>	Incorrect: Although true, this is not the best answer.
<b>D</b>	<b>Correct:</b> Assessing for anaphylaxis involves observing the client for all of the responses.

PTS: 1                      REF: p. 20                      OBJ: Cognitive Level: Application

18. Risk factors for a hypersensitivity reaction to medication include:
- a. past history of allergic reaction to drugs.
  - b. no past history of exposure to the drugs.

- c. clients currently receiving oral medications.
- d. all of the above

ANS: A

	Feedback
<b>A</b>	<b>Correct:</b> Previous allergic reactions to medications places the client at higher risk for developing a hypersensitivity reaction to other medications.
<b>B</b>	Incorrect: Allergic reactions do not occur unless the client has previously been exposed to the drug.
<b>C</b>	Incorrect: Receiving medications via the parenteral route is a risk factor.
<b>D</b>	Incorrect: b and c are incorrect.

PTS: 1                      REF: p. 20                      OBJ: Cognitive Level: Comprehension

19. Prior to administering a medication, the nurse should:
- a. ask the client about drug allergies.
  - b. ask the client why he or she is prescribed the medication.
  - c. draw laboratory specimens.
  - d. have the client empty his or her bladder.

ANS: A

	Feedback
<b>A</b>	<b>Correct:</b> Before administering any medication, the nurse should ask the client about all drug allergies.
<b>B</b>	Incorrect: The nurse, not the patient, should provide this information, as well as the name of the drug.
<b>C</b>	Incorrect: This is only necessary for certain medications.
<b>D</b>	Incorrect: This is not necessary for medication administration.

PTS: 1                      REF: p. 40                      OBJ: Cognitive Level: Application

20. The nurse is to administer an IM medication contained in a glass ampule. The nurse knows to:
- a. distribute the medication between the top and bottom of the ampule.
  - b. snap the top of the ampule with bare fingers.
  - c. save any unused medication.
  - d. use a filter needle or straw to withdraw the medication.

ANS: D

	Feedback
<b>A</b>	Incorrect: All of the medication should be in the bottom of the ampule.
<b>B</b>	Incorrect: The nurse should use a dry gauze pad to prevent accidental injury.
<b>C</b>	Incorrect: The unused portion must be discarded.
<b>D</b>	<b>Correct:</b> This prevents small glass fragments from entering the syringe.

PTS: 1                      REF: p. 46                      OBJ: Cognitive Level: Application

21. The nurse always checks the client's wrist band before administering a medication to address which right of medication administration?
- a. medication
  - b. route
  - c. dosage
  - d. client

ANS: D

	Feedback
A	Incorrect: Checking the client's ID wrist band is done to ensure the nurse is administering the medication to the correct client.
B	Incorrect: Checking the client's ID wrist band is done to ensure the nurse is administering the medication to the correct client.
C	Incorrect: Checking the client's ID wrist band is done to ensure the nurse is administering the medication to the correct client.
D	<b>Correct:</b> Checking the client's ID wrist band is done to ensure the nurse is administering the medication to the correct client.

PTS: 1

REF: p. 46

OBJ: Cognitive Level: Comprehension

22. The nurse receives a medication prescription with no route specified. What is the best action by the nurse?
- Give it orally, because that is the most common route.
  - Ask the client how he or she usually takes the medication.
  - Call the health care provider to clarify the prescription.
  - Ask another nurse which route to use.

ANS: C

	Feedback
A	Incorrect: The route must be designated by the prescriber.
B	Incorrect: The route must be designated by the prescriber.
C	<b>Correct:</b> The route must be designated by the prescriber.
D	Incorrect: The route must be designated by the prescriber.

PTS: 1

REF: p. 48

OBJ: Cognitive Level: Application

23. After administering vaginal medication, it is best to encourage the client to do which of the following?
- Ambulate to distribute the medication.
  - Lie in bed.
  - Take a tub bath.
  - Perform pericare.

ANS: B

	Feedback
A	Incorrect: Gravity could cause the medication to drain out.
B	<b>Correct:</b> This will allow the medication to distribute and prevent it from draining out.
C	Incorrect: This could cause the medication to be flushed out.
D	Incorrect: This could cause the medication to be flushed out.

PTS: 1

REF: p. 64, Figure 2-19

OBJ: Cognitive Level: Application

24. When administering medications using a dropper, the nurse knows to do all the following *except*:
- hold the dropper vertically.
  - use the dropper that comes with the medication.
  - touch the medication with the fingers.
  - use the measuring scale on the dropper.

ANS: C



	Feedback
A	Incorrect: This is the correct position for the dropper.
B	Incorrect: The dropper that comes with the medication should be used.
C	<b>Correct:</b> Medication should never be touched with the fingers.
D	Incorrect: The measuring scale on the dropper should be used.

PTS: 1                      REF: p. 61                      OBJ: Cognitive Level: Application

25. Which of the following routes of medication administration is used primarily for local effects?
- topical application
  - sublingual
  - injection
  - oral

ANS: A

	Feedback
A	<b>Correct:</b> Topical applications usually are used on skin or mucous membranes for local effects.
B	Incorrect: Sublingual medications absorb rapidly into systemic circulation.
C	Incorrect: Injections usually are used for systemic effects.
D	Incorrect: Oral medications usually are absorbed from the GI tract into systemic circulation for routing to their intended site of action.

PTS: 1                      REF: p. 8                      OBJ: Cognitive Level: Comprehension

26. When a nurse discovers that a client is not taking medications as prescribed, it is the nurse's responsibility to do which of the following?
- to convince the client that taking the medications is the right thing to do.
  - to notify the prescriber immediately.
  - to ask the client why he or she is not taking the medications as prescribed.
  - to give detailed information about the consequences of not following the prescribed orders.

ANS: C

	Feedback
A	Incorrect: First, the nurse needs to assess why the client is not being compliant.
B	Incorrect: First, the nurse needs to assess why the client is not being compliant.
C	<b>Correct:</b> Most refusal or noncompliance issues are based on the client's lack of knowledge or experience with adverse effects, but the nurse needs to assess why the client is not being compliant before further action is taken.
D	Incorrect: First, the nurse needs to assess why the client is not being compliant

PTS: 1                      REF: p. 50, Safe Nursing Practice 2-11  
OBJ: Cognitive Level: Application

27. Which of the following is one of the seven rights of medication administration?
- right health care provider
  - right client
  - right hospital
  - right syringe

ANS: B

	Feedback
A	Incorrect: The seven rights of medication administration are right client, medication,

	dose, route, time, documentation, and the client's right to refuse.
<b>B</b>	<b>Correct:</b> Right client is one of the seven rights.
<b>C</b>	Incorrect: The seven rights of medication administration are right client, medication, dose, route, time, documentation, and the client's right to refuse.
<b>D</b>	Incorrect: The seven rights of medication administration are right client, medication, dose, route, time, documentation, and the client's right to refuse.

PTS: 1                      REF: p. 41, Safe Nursing Practice 2-4                      OBJ: Cognitive Level: Knowledge

28. Which of the following abbreviations means "in the right eye?"
- a. PRN
  - b. O.D.
  - c. O.S.
  - d. O.U.

ANS: B

	<b>Feedback</b>
<b>A</b>	Incorrect: This means as the occasion arises or when needed or requested.
<b>B</b>	<b>Correct:</b> This means right eye.
<b>C</b>	Incorrect: This means left eye.
<b>D</b>	Incorrect: This means both eyes.

PTS: 1                      REF: p. 42, Table 2-1                      OBJ: Cognitive Level: Knowledge

29. Which of the following measures is equivalent to 30 mL?
- a. 2 tablespoons
  - b. 1/2 fluid ounce
  - c. 3 teaspoons
  - d. 1 gram

ANS: A

	<b>Feedback</b>
<b>A</b>	<b>Correct:</b> One tablespoon equals 15 mL, so two tablespoons equal 30 mL.
<b>B</b>	Incorrect: This equals 15 mL.
<b>C</b>	Incorrect: This equals 15 mL.
<b>D</b>	Incorrect: Gram is a weight volume, not a liquid volume.

PTS: 1                      REF: p. 45, Table 2-3  
OBJ: Cognitive Level: Application

30. Which of the following measures is equivalent to 1 grain?
- a. 15 milligrams
  - b. 30 milligrams
  - c. 45 milligrams
  - d. 60 milligrams

ANS: D

	<b>Feedback</b>
<b>A</b>	Incorrect: This equals 1/4 grain.
<b>B</b>	Incorrect: This equals 1/2 grain.
<b>C</b>	Incorrect: This equals 3/4 grain.
<b>D</b>	<b>Correct:</b> 60 mg equal 1 grain.

PTS: 1                      REF: p. 45, Table 2-3                      OBJ: Cognitive Level:

Knowledge

31. The client with a nasogastric tube is prescribed four medications via the tube. The nurse is aware that optimal administration of these medications is by which of the following methods?
- a. Crush all tablets into a fine powder and mix them together in warm water.
  - b. Crush tablets and place each into a separate medication administration cup diluted in warm water.
  - c. Administer only liquid medications via the nasogastric tube.
  - d. Keep the client n.p.o. as long as the nasogastric tube is in place.

ANS: B

	Feedback
A	Incorrect: Medications should not be mixed.
B	<b>Correct:</b> Each medication should be prepared and administered separately and followed by a flush before the next medication is administered.
C	Incorrect: Only liquids can be administered through the nasogastric tube, but tablets can be crushed and mixed with a fluid for administration.
D	Incorrect: This is the decision of the health care provider.

PTS: 1 REF: p. 54, Figure 2-6  
OBJ: Cognitive Level: Application

32. The nurse is preparing to administer an immunization to a 16-year-old in his deltoid muscle. To locate this site the nurse will need to:
- a. measure 2-3 fingerbreadths below the acromiion process.
  - b. place his or her hand on the greater trochanter and form a V with the index finger toward the anterior superior iliac spine.
  - c. This is not an appropriate site for a child so the nurse should search for a better site.
  - d. locate the abdomen and plan to inject the medication at least an inch away from the umbilicus.

ANS: A

	Feedback
A	<b>Correct:</b> This is the appropriate location for a deltoid injection.
B	Incorrect: This describes locating the ventrogluteal site.
C	Incorrect: A person of 16 years has sufficiently developed deltoid muscles that this is the most appropriate site for immunizations.
D	Incorrect: This describes a subcutaneous site.

PTS: 1 REF: p. 57 OBJ: Cognitive Level: Application

33. One to two hours prior to administering an IM injection to a child the nurse should:
- a. request that the parents remain in the room to assist with the injection.
  - b. apply restraints to the child.
  - c. apply a local anesthetic cream or patch to the injection site.
  - d. explain to the child that he will be receiving a shot.

ANS: C

	Feedback
A	Incorrect: Parents should never be asked to assist with an injection.
B	Incorrect: Children should not be placed in restraints an hour before receiving an



OBJ: Cognitive Level: Application