

Key Terms

Apical-radial pulse
Blood pressure
Body temperature
Bradycardia
Diastole

Diastolic pressure
Fever
Hypertension
Hypotension
Pulse

Pulse deficit
Pulse rate
Respiration
Sphygmomanometer
Stethoscope

Systole
Systolic pressure
Tachycardia
Vital signs

Fill in the Blanks: Key Terms

- 1 A rapid heart rate is _____. The heart rate is over 100 beats per minute.
- 2 The _____ is taking the apical and radial pulse at the same time.
- 3 An instrument used to listen to the sounds produced by the heart, lungs, and other body organs is a _____.
- 4 When the systolic blood pressure is below 90 mm Hg and the diastolic pressure is below 60 mm Hg, it is called _____.
- 5 The _____ is the number of heartbeats or pulses felt in 1 minute.
- 6 The amount of heat in the body that is a balance between the amount of heat produced and amount lost by the body is the _____.
- 7 _____ is the period of heart muscle contraction.
- 8 _____ is when the blood pressure measurements remain above a systolic pressure of 140 mm Hg or a diastolic pressure of 90 mm Hg.
- 9 The cuff and measuring device used to measure blood pressure is a _____.
- 10 The beat of the heart felt at an artery as a wave of blood passes through the artery is the _____.
- 11 Temperature, pulse, respirations, and blood pressure are _____.
- 12 _____ is a slow heart rate; the rate is less than 60 beats per minute.
- 13 The amount of force it takes to pump blood out of the heart into the arterial circulation is the _____.
- 14 The period of heart muscle relaxation is _____.
- 15 The difference between the apical and radial pulse rates is the _____.
- 16 _____ is the amount of force exerted against the walls of an artery by the blood.
- 17 Breathing air into and out of the lungs is _____.

18 _____ is the pressure in the arteries when the heart is at rest.

19 Elevated body temperature is _____.

Circle the BEST Answer

- 20 Persons in nursing centers usually have vital signs measured
 - A Once a shift
 - B Every 4 hours
 - C Once a month
 - D Daily or weekly
- 21 Unless otherwise ordered, take vital signs when the person
 - A Is lying or sitting
 - B Has been walking or exercising
 - C Has just finished eating
 - D Is getting ready to take a shower or tub bath
- 22 Body temperature is lower in the
 - A Afternoon
 - B Morning
 - C Evening
 - D Night
- 23 If you are taking vital signs on a person with dementia, it may be better if
 - A You have a co-worker hold the person so he or she does not move
 - B The vital signs are taken when the person is asleep
 - C You take the pulse and respirations at one time, and the temperature and blood pressure at another time
 - D You ask the nurse to take the vital signs
- 24 What should you do if a person asks their vital sign measurements?
 - A You can tell the person the measurements if center policy allows
 - B Tell the nurse that the person wants to know the measurements
 - C Tell the person you cannot tell them this information
 - D This information is private and cannot be shared
- 25 If you take a rectal temperature, the normal range of the temperature would be
 - A 96.6° to 98.6° F (35.9° to 37.0° C)
 - B 97.6° to 99.6° F (36.5° to 37.5° C)
 - C 98.6° to 100.6° F (37.0° to 38.1° C)
 - D 98.6° F (37° C)

- 26 If you are taking the temperature of an older person, you would expect the temperature to be
- A Lower than the normal range
 - B Higher than the normal range
 - C About in the middle of the normal range
 - D The same as a younger adult
- 27 A glass rectal thermometer has
- A A stubby tip color-coded in red
 - B A long or slender tip
 - C A pear-shaped tip
 - D A blue color-coded end
- 28 To read a glass thermometer you should hold it at the
- A Stem above eye level and look up to read it
 - B Bulb end and bring it to eye level
 - C Stem and bring it to eye level to read it
 - D Bulb at waist level and look down to read it
- 29 An oral temperature may be taken with a glass thermometer for a person who
- A Is receiving oxygen
 - B Has a convulsive (seizure) disorder
 - C Breathes through the mouth
 - D Is alert and needs a routine temperature taken
- 30 If you are preparing to take an oral temperature ask the person not to
- A Eat, drink, smoke, or chew gum for at least 15 to 20 minutes
 - B Shower or bathe right before the temperature is taken
 - C Exercise for 30 minutes before
 - D Eat, drink, or smoke for at least 5 to 10 minutes
- 31 A glass thermometer is inserted into the rectum
- A 1 inch
 - B 2 inches
 - C $\frac{1}{2}$ inch
 - D 3 inches
- 32 When recording an axillary temperature of 97.6° F, it is written
- A 97.6°
 - B 97.6° R
 - C 97.6° A
 - D 97.6° axillary
- 33 When using an electronic thermometer, you can prevent the spread of infection by
- A Discarding the thermometer after each use
 - B Discarding the probe cover after each use
 - C Keeping a thermometer for each person at the bedside
 - D Sterilizing the thermometer after each use
- 34 When taking a temperature on a resident with dementia, the best choice would be to
- A Take a rectal temperature
 - B Use a glass oral thermometer
 - C Take an axillary temperature
 - D Use a tympanic or temporal artery thermometer
- 35 Which pulse is most commonly used?
- A Carotid
 - B Brachial
 - C Radial
 - D Popliteal
- 36 A _____ pulse is taken during cardiopulmonary resuscitation (CPR).
- A Carotid
 - B Temporal
 - C Femoral
 - D Radial
- 37 When using a stethoscope you can help to prevent infection by
- A Warming the diaphragm in your hand
 - B Wiping the earpieces and diaphragm with alcohol before and after use
 - C Placing the diaphragm over the artery
 - D Placing the earpieces in your ears so the bend of the tips points forward
- 38 When a pulse rate is 120 beats per minute you
- A Report that the person has bradycardia
 - B Know that this is a normal pulse rate
 - C Report that the person has tachycardia
 - D Report that the pulse is irregular
- 39 The pulse rate is the number of heartbeats or pulses felt in
- A 30 seconds
 - B 15 seconds
 - C 1 minute
 - D 5 minutes
- 40 You cannot get information about pulse _____ with electronic blood pressure equipment.
- A Rhythm and force
 - B Rate
 - C Tachycardia
 - D Bradycardia
- 41 When taking the radial pulse place
- A The thumb over the pulse site
 - B Place two or three fingers on the middle of the wrist
 - C Place two or three fingers on the thumb side of the wrist
 - D The stethoscope on the chest wall
- 42 The apical pulse is taken
- A For a full minute
 - B On infants and children up to 2 years of age
 - C On persons who have an irregular heartbeat
 - D All of the above
- 43 An apical pulse of 72 is recorded as
- A Pulse 72
 - B 72 - Apical pulse
 - C 72Ap
 - D P 72
- 44 An apical-radial pulse is taken by
- A Taking the radial pulse for 1 minute and then taking the apical pulse for 1 minute
 - B Subtracting the apical pulse from the radial pulse
 - C Having one staff member take the apical pulse and a second staff member takes the radial pulse at the same time
 - D Having two persons take the apical pulse at the same time

- 45 When counting respirations the best way is to
 A Stand quietly next to the person and watch the chest rise and fall
 B Keep your fingers or stethoscope over the pulse site so the person thinks you are still counting the pulse
 C Tell the person to breathe normally so you can count the respirations
 D Use the stethoscope to hear the respirations clearly and count for 1 full minute
- 46 Each respiration involves
 A One inhalation
 B One exhalation
 C One inhalation and one exhalation
 D Counting for 30 seconds and multiplying by two
- 47 The blood pressure may be higher in older persons because
 A They have orthostatic hypotension
 B The diet is higher in sodium
 C Blood pressure increases with age
 D They are usually overweight
- 48 The blood pressure should not be taken on an arm
 A If the person has had breast surgery on that side
 B With an IV
 C That has a dialysis access site
 D All of the above
- 49 You will find out the size of the blood pressure cuff needed
 A By asking the nurse
 B By measuring the person's arm
 C In the doctor's orders
 D By asking the person
- 50 When taking the blood pressure, you place the stethoscope diaphragm
 A Over the radial artery on the thumb side of the wrist
 B Over the brachial artery at the inner aspect of the elbow
 C Lightly against the skin
 D Over the apical pulse site
- 51 When getting ready to take the blood pressure, position the person's arm
 A Above the level of the heart
 B Level with the heart
 C Below the level of the heart
 D Abducted from the body
- 52 The blood pressure cuff is inflated _____ beyond the point where you last felt the radial pulse.
 A 10 mm Hg
 B 20 mm Hg
 C 30 mm Hg
 D 40 mm Hg
- E _____ mm
 F _____ Hg
 G _____ TPR
- 54 Vital signs are taken when drugs are taken that affect _____
- 55 When vital signs are taken, immediately report to the nurse if
 A _____
 B _____
 C _____
- 56 Sites for measuring temperature are the
 A _____
 B _____
 C _____
 D _____
 E _____
- 57 Which site has the highest baseline temperature?

- 58 Which site has the lowest baseline temperature?

- 59 If a mercury-glass thermometer breaks, _____ immediately because mercury _____
- 60 When you read a Fahrenheit thermometer, the short lines mean _____
- 61 List how long the glass thermometer remains in place for these sites:
 A Oral: _____ or as required by center policy
 B Rectal: _____ or as required by center policy
 C Axillary: _____ or as required by center policy
- 62 When taking an oral temperature, place the bulb end of the thermometer _____
- 63 When taking an axillary temperature, the axilla must be _____
- 64 Tympanic membrane and temporal artery thermometers are used for confused persons because they are _____
- 65 When using an electronic thermometer, what does the color of the probe mean?
 A Blue _____
 B Red _____
- 66 When you take a rectal temperature, you _____ the tip of the thermometer or the end of the covered probe before inserting it into the rectum.

Fill in the Blanks

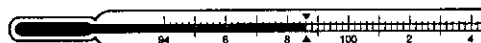
- 53 Write out the meaning of the abbreviations:
 A _____ Ap
 B _____ BP
 C _____ C
 D _____ F

- 67 When taking a tympanic membrane temperature on an adult, pull up and back on the ear to _____
- 68 The adult pulse rate is between _____ per minute.
- 69 List words used to describe:
 A Forceful pulse _____
 B Hard-to-feel pulse _____
- 70 If a pulse is irregular, count the pulse for _____
- 71 When you take a pulse, what observations should be reported and recorded?
 A _____
 B _____
 C _____
 D _____
 E _____
- 72 Do not use your thumb to take a pulse because _____
- 73 When taking an apical pulse, each *lub-dub* sound is counted as _____
- 74 The apical pulse rate is never less than the _____
- 75 A healthy adult has _____ respirations per minute.
- 76 What observations should be reported and recorded when counting respirations?
 A _____
 B _____
 C _____
 D _____
 E _____
 F _____
- 77 One respiration is counted for each _____
- 78 Respirations are counted for _____ if they are abnormal or irregular.
- 79 Blood pressure is controlled by
 A _____
 B _____
 C _____

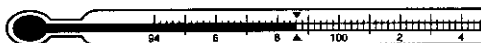
- 80 Report blood pressures that have these readings
 A Systolic over _____ systolic below _____
 B Diastolic over _____ diastolic below _____
- 81 If a person has been exercising, let the person rest for _____ before taking the blood pressure.
- 82 In what positions is the person placed to take the blood pressure? _____
 Sometimes the doctor orders blood pressure in the _____ position.
- 83 When listening to the blood pressure, the first sound you hear is the _____ pressure and the point where the sound disappears is the _____ pressure.

Labeling

84 Name the thermometers shown.



A _____

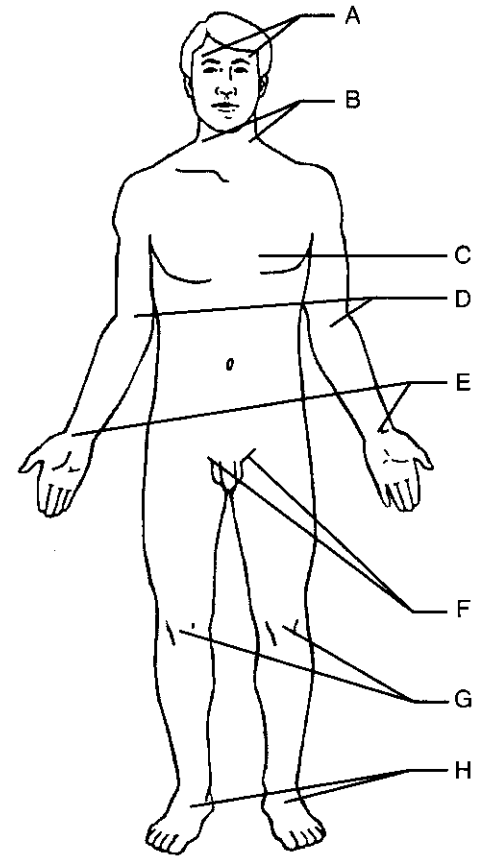
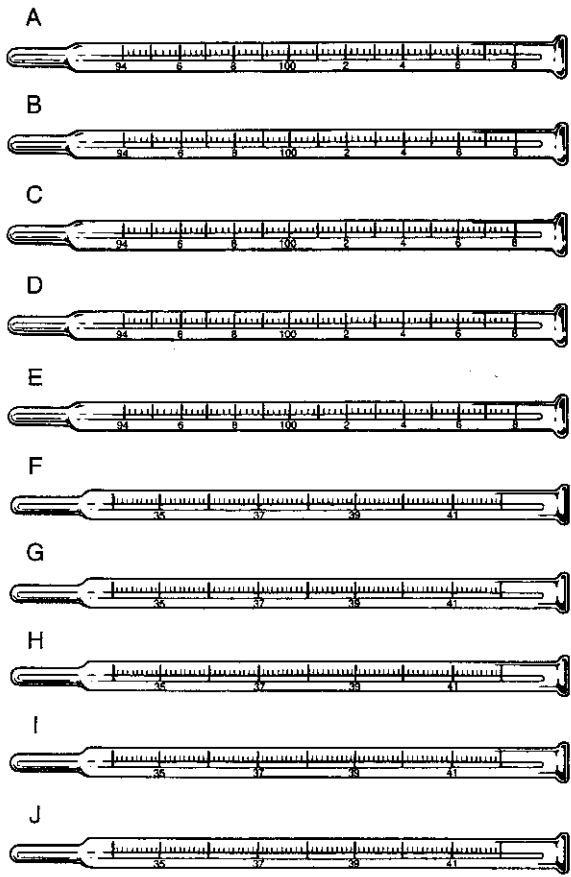


B _____

C _____

D An oral temperature can be taken with _____

E A rectal temperature is taken with _____



85 Fill in the drawings so that the thermometers read correctly.

- | | |
|------------|-----------|
| A 95.8° F | F 35.5° C |
| B 98.4° F | G 36.5° C |
| C 100.2° F | H 37° C |
| D 101° F | I 38.5° C |
| E 102.6° F | J 39.5° C |

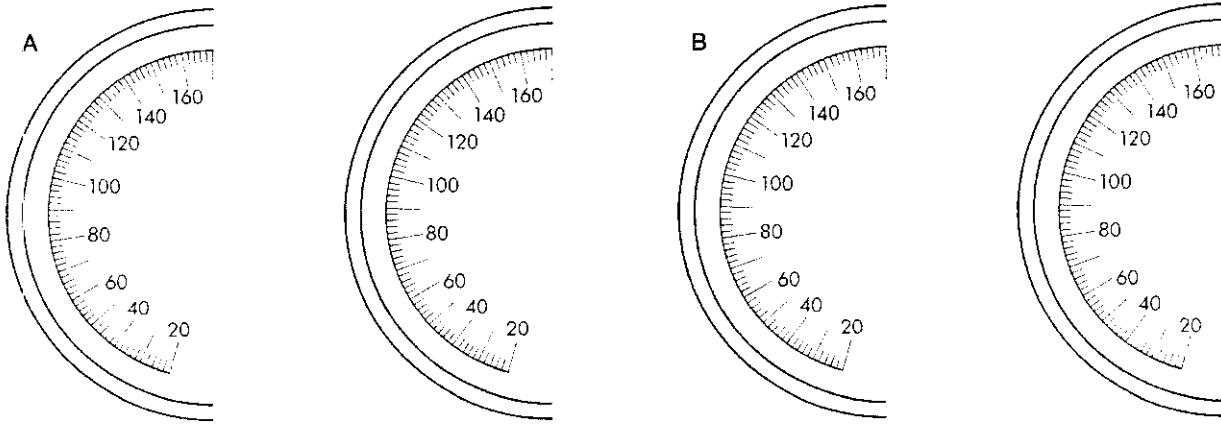
86 Name the pulse sites shown.

- A _____
- B _____
- C _____
- D _____
- E _____
- F _____
- G _____
- H _____
- I Which pulse is used during cardiopulmonary resuscitation (CPR)? _____
- J Which pulse is most commonly taken?

- K Which pulse is used when taking the blood pressure? _____
- L Which pulse is found with a stethoscope?

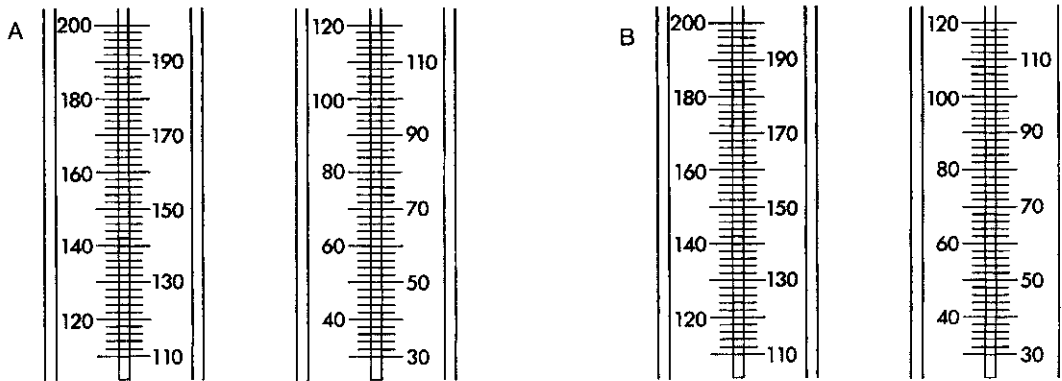
87 Fill in the drawings so that the dials show the correct blood pressures.

- A 168/102
- B 104/68



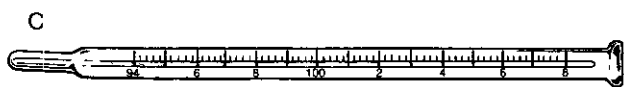
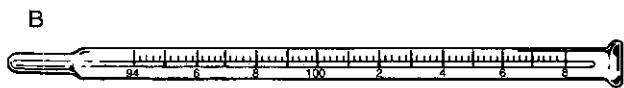
88 Fill in the drawings so the mercury columns show the correct blood pressures.

- A 152/86
- B 198/110



89 Record the readings on the thermometers shown.

- A _____
- B _____
- C _____



Nursing Assistant Skills Video Exercise

For questions 90-96, view the parts of the Measurements video that apply to this chapter to answer these questions.

90 What procedure guidelines are followed for these measurements?

- A Body temperature _____
- B Pulse _____
- C Respirations _____
- D Blood pressure _____

91 Body temperature range is the same for all temperature sites

- A True
- B False

- 92 When using an electronic thermometer, you need to use a new probe cover each time.
 - A True
 - B False
- 93 A rectal temperature must be performed skillfully and with attention to _____, _____, and _____.
- 94 Note the pulse _____, _____, and _____ before you count the pulse rate.
- 95 You need to clean the _____ and the _____ of the stethoscope with alcohol wipes before and after measuring the apical pulse.
- 96 Count each rise of the chest as one respiration and each fall of the chest as one respiration.
 - A True
 - B False

Optional Learning Exercises

Taking Temperatures

- 97 You prepare to take Mr. Harrison's temperature with a glass thermometer. When you take the thermometer from the container, it reads 97.8° F. What should you do? _____
- 98 If the thermometer registers between 2 short lines, record the temperature to the _____.
- 99 How would you record these temperature readings?
 - A An oral temperature of 97.4° F _____
36.5° C _____
 - B A rectal temperature of 99.8° F _____
38.1° C _____
 - C An axillary temperature of 96.2° F _____
36.1° C _____

Taking Pulses and Respirations

- 100 You are assigned to take Mrs. Sanchez' pulse and respirations. You note that the pulse rate and respirations are regular, so you take each one for _____. When you complete counting the pulse, you keep your _____ and count _____. This is done so that Mrs. Sanchez will _____.
- 101 When you finish counting Mrs. Sanchez' pulse and respirations, your numbers are pulse 36 and respirations 9. What numbers should be recorded? Pulse _____ Respirations _____ Why? _____
- 102 The nurse tells you to take an apical-radial pulse on Mrs. Hellman. Why do you ask a co-worker to help you? _____
- 103 How long is an apical-radial pulse counted? _____ After you have taken the apical-radial pulse, how do you find the pulse deficit? _____

Taking Blood Pressures

- 104 You are assigned to take Mr. Hardaway's blood pressure. You know that he goes for dialysis 3 times a week. What do need to know before you take his blood pressure? _____ Why? _____
- 105 When you inflate the cuff, you cannot feel the pulse after you pump the cuff to 130 mm Hg. How high will you inflate the cuff to take his blood pressure? _____
- 106 You should deflate the cuff at an even rate of _____ per seconds.

Independent Learning Activities

Take turns measuring vital signs on 3 or 4 classmates. If possible, use glass, electronic and tympanic thermometers for each person to see if they give similar results. Use this table to record the results.

Person	Temperature	Pulse	Respiration	Blood Pressure
#1	Glass	Radial	Rate	
	Electronic	Apical	Rhythm	
	Tympanic		Depth	
#2	Glass	Radial	Rate	
	Electronic	Apical	Rhythm	
	Tympanic		Depth	
#3	Glass	Radial	Rate	
	Electronic	Apical	Rhythm	
	Tympanic		Depth	
#4	Glass	Radial	Rate	
	Electronic	Apical	Rhythm	
	Tympanic		Depth	

Answer these questions about this exercise.

- If you used different thermometers, how did the results compare?
- What differences did you find in the radial pulses among your classmates?
- What differences did you find in the rates and rhythms?
- How were you able to measure respirations so that the person did not know you were watching?
- What differences in rhythm and depth of respirations did you find among your classmates?
- What differences did you find in locating the brachial artery in different people?
- How did the sounds of the blood pressure differ among your classmates?
- What difficulties did you have with any of the measurements taken?
- What will you change about measuring vital signs on a resident after this practice?

Practice taking an apical-radial pulse with classmates. Take turns acting as the staff members and the person having the pulses taken. Answer these questions after the exercise is completed.

- How was privacy maintained for the person having the pulse measured?
- How did the "staff members" decide who would begin and end the count?
- What problems did you have in counting for a minute?
- How did the apical and radial counts compare?
- What will you change about measuring the apical-radial pulses on a resident after this experience?