1. A passive process whereby compounds move from an area of higher concentration to an area of lower concentration is called:

1. diffusion.
2. osmosis.
3. metabolism.
4. inhalation.

Answer: a

Objective: 13-1

Reference: 408

2. Which of the following lists best represents the correct sequence for the passage of air into the lungs once it passes the pharynx?

1. Bronchi, larynx, trachea, cricoid
2. Epiglottis, esophagus, trachea, alveoli
3. Trachea, cricoid, bronchi, alveoli
4. Larynx, trachea, bronchi, alveoli

Answer: d

Objective: 13-2

Reference: 411

3. When the diaphragm and intercostal muscles relax, which of the following events occurs?

1. Inhalation
2. Release
3. Inspiration
4. Exhalation

Answer: d

Objective: 13-5

Reference: 410

4. The most important muscle of respiration is the:

1. pectoralis major.
2. intercostal muscle.
3. diaphragm.
4. sternocleidomastoid.

Answer: c

Objective: 13-3

Reference: 411

5. Which of the following actions causes an individual to inhale?

1. The intercostal muscles relax.
2. The chest cavity decreases in size.
3. The diaphragm contracts and flattens.
4. Pressure within the chest increases.

Answer: c

Objective: 13-5

Reference: 411

6. A tachypneic patient is breathing:

1. more slowly than normal.
2. normally.
3. more rapidly than normal.
4. irregularly.

Answer: c

Objective: 13-6

Reference: 418

7. During a scene size-up, which of the following observations most strongly suggests that your adult patient is suffering from an acute respiratory emergency?

1. The patient is holding a metered-dose inhaler.
2. The patient is in the tripod position.
3. The patient’s respiratory rate is 20.
4. The patient’s hands are trembling.

Answer: b

Objective: 13-8

Reference: 419

8. In an adult, the most common cause of airway obstruction is:

1. the tongue.
2. a food bolus.
3. mucous secretions.
4. an inflamed pharynx.

Answer: a

Objective: Supplemental

Reference: 414

9. When using a metered-dose inhaler, it is important that right after inhaling patients:

1. immediately inhale a second time.
2. pant for 10 seconds.
3. exhale as forcefully as possible.
4. hold their breath for 10 seconds.

Answer: d

Objective: Supplemental

Reference: 425

10. What is the minimum time a patient should wait before taking a second dose from a metered-dose inhaler?

1. 30 seconds
2. 2 minutes
3. 5 minutes
4. 10 minutes

Answer: a

Objective: Supplemental

Reference: 425

11. A patient whose alveoli are filled with fluid and pus secondary to pneumonia is at risk of:

1. decreased movement of air into the lungs.
2. decreased movement of the diaphragm.
3. decreased absorption of oxygen into the body.
4. collapse of the trachea and bronchi.

Answer: c

Objective: Supplemental

Reference: 416

12. Your friend tells you that his doctor just prescribed medication for him that he takes with a metered dose inhaler. He says he was nervous and is not sure he remembers his physician’s directions. Which one of the following statements would be correct?

1. “Take it every four hours around the clock, even if you feel fine.”
2. “Make sure to store the inhaler in your refrigerator.”
3. “When you think you need it, you should call the doctor before taking it.”
4. “Call your doctor and ask her again how you should use it.”

Answer: d

Objective: Supplemental

Reference: 425

13. Involuntary breathing in patients without significant respiratory disease is controlled by:

1. the amount of carbon dioxide dissolved in the blood.
2. a conscious effort of inspiration.
3. the amount of oxygen dissolved in the blood.
4. tissue hypoxia.

Answer: a

Objective: 13-5

Reference: 421

14. You are documenting your assessment of the patient who just left in an ambulance. The patient told you that he felt short of breath. You would document this as:

1. respiratory failure.
2. hypoxia.
3. dyspnea.
4. anoxia.

Answer: c

Objective: 13-1

Reference: 410

15. Which of the following conditions is responsible for a finding of wheezing accompanying shortness of breath?

1. Significant hypoxia
2. Bronchiole constriction
3. Swelling in the throat
4. Mucus in the lungs

Answer: b

Objective: 13-6

Reference: 413

16. Which of the following is within the normal range for respiratory rate in children?

1. 10 breaths per minute.
2. 20 breaths per minute.
3. 35 breaths per minute.
4. 40 breaths per minute.

Answer: b

Objective: 13-7

Reference: 412

17. You receive a call that there is an infant in the lodge who seems to be having difficulty breathing. As you approach the scene with a new candidate patroller, you ask him the normal respiratory rate for infants. Which of the following is within the normal range?

1. 10 breaths per minute.
2. 15 breaths per minute.
3. 25 breaths per minute.
4. 60 breaths per minute.

Answer: c

Objective: 13-7

Reference: 412

18. You and your OEC candidate are evaluating a 67-year-old patient with respiratory distress. You tell the candidate to document that the patient complains of dyspnea. The candidate asks you what “dyspnea” means. You explain that dyspnea is:

1. a term that describes a patient who is in respiratory distress.
2. a subjective complaint of shortness of breath.
3. a term that describes your objective assessment of a patient’s difficulty in breathing.
4. another term for tachypnea.

Answer: b

Objective: 13-1

Reference: 410

19. Which of the following statements about respiratory accessory muscles is *not* correct?

1. They are recruited whenever the body’s oxygen demand exceeds oxygen availability.
2. They include chest, shoulder, and abdominal muscles.
3. They bring more oxygen into the body by helping the chest wall expand more fully.
4. They decrease negative internal chest pressure to draw more air into the lungs.

Answer: d

Objective: 13-1

Reference: 411

20. Which of the following signs would you recognize as an early sign of respiratory distress in a 7-year-old boy who complains of difficulty breathing?

1. Barrel chest
2. Nasal flaring
3. Tremors of his hands
4. Ecchymosis on his chest

Answer: b

Objective: 13-6

Reference: 418

21. You are having a hard time getting the medical history of a patient who is short of breath. Which one of the following pieces of information would lead you to believe that the patient has a history of a chronic lung disease such as chronic emphysema?

1. She takes one aspirin every day.
2. Her chest is barrel shaped.
3. Her respirations are tachypneic.
4. She has a frequent cough.

Answer: b

Objective: 13-9

Reference: 418

22.

A 71-year-old woman is complaining of the sudden onset of shortness of breath. She is cyanotic and appears somewhat panicked. Her respirations are rapid and deep. Her husband tells you that she had knee surgery about one week ago. Based on your assessment and the patient’s history, you suspect that the patient is suffering from:

1. an anxiety attack.
2. an asthma attack.
3. COPD.
4. a pulmonary embolus.

Answer: d

Objective: 13-9

Reference: 415

23.

You are called to aid a 65-year-old man who is having difficulty breathing. When you arrive, you find that he is sitting upright in a chair and is in obvious respiratory distress. His airway is open and his respirations are 28 per minute. At this time you would:

1. provide him oxygen with a nonrebreather mask at 15 liters per minute.
2. assess his breath sounds.
3. try to obtain a medical history from him.
4. assist him to a supine position.

Answer: a

Objective: 13-10

Reference: 417

24. A 30-year-old male arrives in the aid room complaining of shortness of breath. Which of the following actions would you perform first?

1. Ask him if he has an inhaler.
2. Assess the adequacy of his breathing.
3. Determine the cause of his shortness of breath.
4. Check his pulse oximetry.

Answer: b

Objective: 13-10

Reference: 418

25. You are in the cafeteria and suddenly hear someone calling for help because her friend is choking. Which of the following signs would tell you that you need to intervene immediately?

1. The patient appears frightened.
2. The patient cannot speak.
3. The patient was eating steak.
4. The patient says she has a bone stuck in her throat.

Answer: b

Objective: 13-9

Reference: 424

26. You arrive on scene where an unresponsive patient is being treated. The OEC Technician on scene tells you that she thinks the patient may have had a stroke. You suggest to the patroller to first:

1. place a nasal airway and suction the patient.
2. assist ventilations with a BVM.
3. apply a nonrebreather mask and provide oxygen.
4. determine if a pulse is present.

Answer: c

Objective: 13-9

Reference: 424

27. A 74-year-old male with a history of chronic emphysema is complaining of sudden onset of shortness of breath. He appears to be in acute respiratory distress. Physical exam of the anterior chest wall reveals crepitus. Based on the patient’s history and physical exam, you would suspect which of the following conditions?

1. Spontaneous pneumothorax
2. Congestive heart failure
3. Acute bronchitis
4. Carbon monoxide poisoning

Answer: a

Objective: 13-9

Reference: 416

28. You are assessing a 34-year-old man who is complaining of “not feeling well.” He is alert and pale. His respirations are regular at 20 per minute. Based on your training, you recognize that his respirations are:

1. normal for an adult.
2. rapid for an adult.
3. rapid but OK because they are regular.
4. to be bradypnea.

Answer: a

Objective: 13-7

Reference: 412

29. Hyperventilation syndrome is a common psychological condition that:

1. is always benign and resolves with no treatment.
2. is characterized by shallow, irregular, rapid breaths.
3. is often precipitated by exercise.
4. results in abnormally low blood carbon dioxide levels.

Answer: d

Objective: 13-9

Reference: 418

30.

Several abnormal lung sounds can be helpful in understanding what condition may be affecting a patient. One such sound is wheezing. Which of the following statements about wheezing is *false?*

1. It indicates constriction of the lower airway passages.
2. It is typically caused by asthma.
3. It may be heard on inhalation, exhalation, or both.
4. It can be heard only with a stethoscope.

Answer: d

Objective: 13-9

Reference: 418

31. You are assessing a 24-year-old skier who is anxious and complaining of shortness of breath. She tells you that this sometimes happens when she is exercising. Her respirations are rapid and shallow. Based on this information, you suspect the patient is suffering from:

1. hyperventilation syndrome.
2. asthma.
3. crepitus.
4. pneumothorax.

Answer: b

Objective: 13-9

Reference: 418

32. You are called to assist a 16-year-old female who is reportedly having trouble breathing. Your assessment reveals an anxious female with rapid respirations who is complaining of pins and needles around her lips. Based on your training you suspect that:

1. she is close to respiratory failure.
2. these findings will disappear if she slows her rate of breathing.
3. having her lie down with her feet elevated 8–12 inches will relieve the pins and needles.
4. she is having an allergic reaction and should be treated with an epi-pen.

Answer: b

Objective: 13-10

Reference: 421

33. Which of the following respiratory rates may signify significant respiratory issues in an adult?

1. Fewer than 8 respirations per minute
2. More than respirations 24 per minute
3. Fewer than 12 respirations per minute
4. More than 20 respirations per minute

Answer: a

Objective: 13-11

Reference: 418