1. The most concerning physical finding in an infant with an acute respiratory infection or RAD exacerbation is:
   a. tachypnea
   b. grunting
   c. abdominal breathing
   d. retractions
   e. wheezing

2. All of the following are consistent with the diagnosis of bacterial tracheitis EXCEPT:
   a. high fever
   b. preceding viral URI
   c. minimal sputum production
   d. stridor
   e. drooling

3. What proportion of bronchiolitis cases are caused by RSV?
   a. 15%
   b. 35%
   c. 50%
   d. 70%
   e. 90%

4. Which of the following is the most likely diagnosis in a 6-week-old infant with a ten-day history of mild cough, who on examination is quietly tachypneic and afebrile:
   a. FB ingestion
   b. RSV/ bronchiolitis
   c. chlamydia pneumonia
   d. congenital airway anomaly
   e. pertussis

5. The BEST induction agent for intubation of infants greater than 3-months-old with respiratory failure due to bronchiolitis is:
   a. versed
   b. etomidate
   c. thiopental
   d. ketamine
   e. fentanyl

6. In the absence of other concerning associated signs, APNEA is defined as a respiratory pause of greater than:
   a. 10 seconds
   b. 15 seconds
   c. 20 seconds
7. Of the following causes of upper airway obstruction, which is LEAST likely to result in an acute, precipitous deterioration in the ED?
   a. croup
   b. epiglottitis
   c. foreign body ingestion
   d. retropharyngeal abscess
   e. smoke inhalation/thermal injury

8. Which of the following is the LEAST LIKELY cause of stridor in an infant or child < 6 years old?
   a. bacterial tracheitis
   b. retropharyngeal abscess
   c. foreign body aspiration
   d. croup
   e. peritonsillar abscess

9. Which of the following is NOT associated with the need for admission in the context of an asthma exacerbation?
   a. Poor social situation
   b. Failure to respond to bronchodilators and steroids
   c. Altered mental status or fatigue
   d. Pneumothorax on CXR
   e. Pneumomediastinum on CXR

10. TRUE or FALSE: the administration of beta-agonists via MDI with a spacer has been shown to be as effective as the use of a nebulizer for the reversal of acute bronchospasm in all age groups (infants, children and adults).

11. All of the following are currently considered standard treatments for bronchiolitis EXCEPT:
   a. hydration (oral or IV)
   b. trial of albuterol (via MDI or nebulized)
   c. trial of racemic epinephrine (nebulized)
   d. steroids (oral, IV or IM)
   e. supplemental oxygen as needed

12. Compared with the adult airway, which of the following is NOT characteristic of the pediatric airway:
   a. more easily visualized with a straight (eg, Miller) blade
   b. narrowest portion located at the cricoid cartilage
   c. more posterior location
   d. smaller diameter and shorter length
   e. more easily obstructed by edema, secretions or posterior displacement of the tongue

13. TRUE or FALSE: oral dexamethasone is as effective as IM dexamethasone in the treatment of croup.

14. RSV testing would be LEAST helpful in the management of which of the following patients:
   a. 3-week-old neonate with nasal congestion and mild cough
b. 6-month-old ex-preemie with BPD and cough/congestion
c. 4-month-old previously healthy infant with significant URI Sx’s and wheezing but no fever
d. 5-month-old intubated for respiratory failure with a peri-bronchial infiltrate on CXR

15. All of the following support a clinical diagnosis of pertussis EXCEPT:
   a. prolonged course
   b. age < 4-years-old
   c. history of incomplete vaccination
   d. temperature > 101
   e. elevated WBC with marked lymphocytosis

16. The most common CXR finding in infants with bronchiolitis is:
   a. normal
   b. hyperinflation
   c. atelectasis
   d. focal infiltrate
   e. pneumothorax

17. TRUE or FALSE: antibiotics given for “Whooping Cough” (pertussis) shorten the course of symptoms.

18. All of the following statements are true of croup (viral laryngotraceobronchitis) EXCEPT:
   a. it is most commonly caused by parainfluenza virus
   b. it can easily be confused with bacterial tracheitis
   c. it primarily affects children aged 6-36 month
   d. it is characterized by a barky cough, hoarse voice and inspiratory stridor
   e. symptoms are often worst at night

19. Regarding pneumonia in the neonate, all of the following are TRUE EXCEPT:
   a. maternally-acquired Group B Strep (GBS) remains the most common bacterial pathogen
   b. mortality is low when promptly diagnosed and appropriately treated
   c. viral etiologies are common
   d. full sepsis work-up, including LP, is mandatory
   e. admission and IV ampicillin & cefotaxime (or gentamicin) is required in all cases

20. Which of the following is the most likely cause of pneumonia in a generally well-appearing 8-year-old with a gradually progressive cough over two weeks and bilateral crackles on lung exam?
   a. *Mycoplasma*
   b. *S. pneumoniae*
   c. *Klebsiella*
   d. Pertussis
   e. Influenza

21. All of the following are true of croup EXCEPT:
   a. first-line treatment includes steroids
   b. oral steroids are as effective as parenteral steroids
   c. racemic epinephrine need only be given to children with stridor at rest (while not agitated) or who appear to be in significant respiratory distress
   d. well-appearing children with croup, who have improved after receiving nebulized racemic
epinephrine, can safely be discharged within 1-2 hours of treatment

BONUS: A 3-week-old infant with several days of mild diarrhea and decreased oral intake presents with severe tachypnea, cyanosis and lethargy. The initial oxygen saturation is 87%, breath sounds are clear throughout and the cardiac exam is normal. Peripheral perfusion is poor (CR > 4 sec.) and the administration of 100% oxygen by face mask results in a saturation of only 94%. A portable CXR is normal. Of the following tests, which is MOST likely to reveal a diagnosis?

a. ECG
b. ABG
c. echocardiogram
d. RSV
e. methemoglobin level