1. 1, 2, 4, 7.
   1. An electrocardiogram can indicate ischemia of the heart muscle.
   2. An electrocardiogram can indicate injury to the heart muscle.
   3. An electrocardiogram does not indicate CO.
   4. An electrocardiogram can show dysrhythmias.
   5. An electrocardiogram does not show SVR.
   6. An electrocardiogram does not show occlusion pressures.
   7. An electrocardiogram does show conduction delays.
   **TEST-TAKING HINT:** The electrocardiogram checks the electrical system of the heart, not the mechanical system. CO is mechanical; occlusion pressure does not have to do with the electrocardiogram; and SVR measures pressures in the peripheral system.

2. PDA.
   **TEST-TAKING HINT:** This is a defect with increased pulmonary flow. It should close in the first few weeks of life.

3. 1, 2, 4, 6.
   1. TOF is a congenital defect with ventricular septal defect, right ventricular hypertrophy, pulmonary valve stenosis, and overriding aorta.
   2. TOF is a congenital defect with ventricular septal defect, right ventricular hypertrophy, pulmonary valve stenosis, and overriding aorta.
   3. TOF is a congenital defect with ventricular septal defect, right ventricular hypertrophy, pulmonary valve stenosis, and overriding aorta.
   4. TOF is a congenital defect with ventricular septal defect, right ventricular hypertrophy, pulmonary valve stenosis, and overriding aorta.
   5. TOF is a congenital defect with ventricular septal defect, right ventricular hypertrophy, pulmonary valve stenosis, and overriding aorta.
   6. TOF is a congenital defect with ventricular septal defect, right ventricular hypertrophy, pulmonary valve stenosis, and overriding aorta.
   7. PDA is not one of the defects in tetralogy of Fallot.
   **TEST-TAKING HINT:** Tetralogy of Fallot has four defects. Pulmonary stenosis causes decreased pulmonary flow.

4. To make the diagnosis of RF, major and minor criteria are used. Major criteria include carditis, subcutaneous nodules, erythema marginatum, chorea, and arthritis. Minor criteria include fever and previous history of RF.
   **TEST-TAKING HINT:** It is an inflammatory disease caused by group A beta-hemolytic streptococcus.

5. 1. Yellow sclera has nothing to do with CHF. It is seen in patients with liver disease.
   2. The apical pulse rate is ordered because digoxin decreases the HR, and if the HR is <60 digoxin should not be administered.
   3. Cough would not be assessed before administration. It is more commonly seen in patients who have been prescribed ACE inhibitors.
   4. Liver function tests are not assessed before digoxin is administered. Digoxin can lower HR and cause dysrhythmias.
   **TEST-TAKING HINT:** The test taker should know that yellow sclera and liver function tests have nothing to do with digoxin. Cough could be associated with ACE inhibitors.

6. 1. This is appropriate for digoxin administration.
   2. This is appropriate for digoxin administration.
   3. This is appropriate for digoxin administration.
   4. If the medication is mixed in his formula, and he refuses to drink the entire amount, the digoxin dose will be inadequate.
   **TEST-TAKING HINT:** What if the child does not drink all the formula?

7. 1. This may be a reason the child needs the catheterization.
   2. A child with severe diaper rash has potential for infection if the interventionist makes the standard groin approach.
   3. Shellfish, not soy, is an allergy concern.
   4. This may be a reason the child needs the catheterization.
   **TEST-TAKING HINT:** Consider the risk for infection as a delaying factor.

8. 1. This is not an appropriate action.
   2. This is not an appropriate action.
3. This can be done after number 4.
4. Applying direct pressure 1 inch above the puncture site will localize pressure over the vessel site.

**TEST-TAKING HINT:** Consider the risk for volume depletion.

9. 1, 4, 5, 6, 7.
1. Rocking by the parents will comfort the infant and decrease demands.
2. The infant would not be fed when crying because crying increases cardiac demands. The infant might choke if the nipple is placed in the mouth and the child inhales when trying to swallow.
3. Keep the child normothermic to reduce metabolic demands.
4. Frequent position changes will decrease the risk for infection by avoiding immobility with its potential for skin breakdown.
5. An infant sucking the fists could indicate hunger.
6. Change bed linens only when necessary to avoid disturbing the child.
7. Organize nursing activities to avoid disturbing the child.

**TEST-TAKING HINT:** Do all that can be done to decrease demands on the child.

10. PDA.

**TEST-TAKING HINT:** Prostaglandins allow the duct to remain open; thus, a prostaglandin inhibitor, such as Indocin or ibuprofen, can help close the duct. Consider the defect with increased pulmonary blood flow.

11. Prostaglandin E.

**TEST-TAKING HINT:** Prostaglandin E maintains ductal patency to promote blood flow until the Norwood procedure is begun. Consider the opposite of wanting to close the PDA.

12. 1. This is not a collegial response.
2. The increased CO of the fever increases the intensity of the murmur, making it easier to hear.
3. The increased CO of the fever increases the intensity of the murmur, making it easier to hear.
4. This child does not need to see an interventionist cardiologist. The murmur needs to be diagnosed first, and then a treatment plan would be developed.

**TEST-TAKING HINT:** Consider the pathophysiology of fever.

13. 1. Pulmonary hypertension is a pulmonary condition, which does not create a heart murmur.
2. The main identifier in the stem is the machine-like murmur, which is the hallmark of a PDA.
3. A VSD does not produce a machine-like murmur.
4. Bronchopulmonary dysplasia is a pulmonary condition, which does not create a heart murmur.

**TEST-TAKING HINT:** Know murmur sounds.

14. 1, 2, 3.
1. Thrombosis, stenosis, and aneurysm affect blood vessels. The child with KD has hypercoagulability and an increased sedimentation rate due to inflammation.
2. Thrombosis, stenosis, and aneurysm affect blood vessels. The child with KD has hypercoagulability and an increased sedimentation rate due to inflammation.
3. Thrombosis, stenosis, and aneurysm affect blood vessels. The child with KD has hypercoagulability and an increased sedimentation rate due to inflammation.

**TEST-TAKING HINT:** KD is an inflammation of small- and medium-sized blood vessels.

15. KD.

**TEST-TAKING HINT:** Classic signs of KD include red eyes with no discharge; dry, cracked lips; strawberry tongue; and red, swollen and peeling palms and soles of the feet. Incidence of KD is higher in males than females. The strongest indicator for this disease is the hallmark strawberry tongue.

16. 1. High-dose immunoglobulin G and salicylate therapy for inflammation are the current treatment for KD.
2. Immunoglobulin G is correct, but ACE inhibitors are incorrect for treatment.
3. Heparin may be used for the child with an aneurysm, but not immunoglobulin E.
4. Immunoglobulin E and ibuprofen are not correct.
   **TEST-TAKING HINT:** Consider anti-inflammatory medications for treatment.

17. 3, 4, 5, 6.
1. Heart defects are no longer classified as cyanotic or acyanotic.
2. Heart defects are no longer classified as cyanotic or acyanotic.
3. Heart defects are now classified as defects with increased or decreased pulmonary blood flow.
4. Heart defects are now classified as defects with increased or decreased pulmonary blood flow.
5. Heart defects are now classified as defects with increased or decreased pulmonary blood flow.
6. Heart defects are now classified as defects with increased or decreased pulmonary blood flow.
7. A murmur may be heard with a CHD, but a murmur does not classify the defect.
   **TEST-TAKING HINT:** Know the new classifications, not the older ones.

18. 1. Laying the child flat would increase preload, increasing blood to the heart, therefore making respiratory distress worse.
2. Laying the child flat with legs elevated would increase preload, increasing blood to heart, therefore making respiratory distress worse.
3. Sitting the child on the parent’s lap with legs dangling might possibly help, but it would not be as effective as the knee-chest position in occluding the venous return.
4. The increase in the SVR would increase afterload and increase blood return to the pulmonary artery.
   **TEST-TAKING HINT:** The test taker should choose the response that decreases the preload in this patient.

19. 1, 2, 3, 4, 6.
1. Hypoxia causes polycythemia, which can lead to increased blood viscosity, which can lead to blood clots and a stroke.
2. Hypoxia causes polycythemia, which can lead to increased blood viscosity, which can lead to blood clots and a stroke.
3. Hypoxia causes polycythemia, which can lead to increased blood viscosity, which can lead to blood clots and a stroke.
4. Developmental delays can be caused by multiple hospitalizations and surgeries.
5. The child usually catches up to the appropriate level.
6. Hypoxia can increase the risk for bacterial endocarditis, not viral pericarditis.
7. Brain damage can be caused by hypoxia, blood clots, and stroke.
   **TEST-TAKING HINT:** Consider hypoxia and hemoglobin B and hematocrit level.

21. 1. This is not a real dysrhythmia.
2. Sinus bradycardia is a slow rate for the child’s age.
3. Rapid atrial fibrillation is an irregular rhythm.
4. SVT is often above 200 and a result of dehydration, which a vomiting child could have. The rapid rate causes a low CO, resulting in the low BP and prolonged capillary refill.
   **TEST-TAKING HINT:** The HR is regular and very rapid for a child of any age. The child has been vomiting, which can result in dehydration.

22. 1. Birth is too early and often not reliable due to patient movement.
2. Age 3 years is the recommended age to establish a baseline BP in a normal healthy child.
3. Age 8 years is too late to detect early damage.
4. Age 13 years is too late to detect early damage.
   **TEST-TAKING HINT:** The test taker should choose the response that decreases the preload in this patient.

23. 1. Wilm tumor does not affect or cause this condition.
2. Because Wilm tumor sits on the kidney, it can be associated with secondary hypertension. It does not affect or cause the other conditions.
3. Wilm tumor does not affect or cause this condition.
4. Wilm tumor does not affect or cause this condition.
   **TEST-TAKING HINT:** Where is the Wilm tumor located?
24. 1. ACE inhibitors and angiotensin II receptor blockers can cause birth defects. The others are not teratogenic.
2. ACE inhibitors and angiotensin II receptor blockers can cause birth defects. The others are not teratogenic.
3. ACE inhibitors and angiotensin II receptor blockers can cause birth defects. The others are not teratogenic.
4. ACE inhibitors and angiotensin II receptors can cause birth defects. The others are not teratogenic.

**TEST-TAKING HINT:** The test taker needs to know which of these drugs are teratogenic.

25. 1. Beta blockers are used with caution in patients with hyperlipidemia, hyperglycemia and impotence.
2. Calcium channel blockers do not affect these blood levels.
3. ACE inhibitors do not affect these blood levels.
4. Diuretics do not affect these blood levels.

**TEST-TAKING HINT:** The test taker needs to know side effects of drugs.


**TEST-TAKING HINT:** The foramen ovale is the septal opening between the atria of the fetal heart. The test taker needs to know basic fetal circulation.

27. 1. The nurse should expect a decreased platelet count in an infant with a CHD of decreased pulmonary blood flow.
2. Polycythemia is the result of the body attempting to increase the oxygen supply in the presence of hypoxia by increasing the total number of red blood cells to carry the oxygen.
3. Ferritin measures the amount of iron stored in the body and not affected by decreased pulmonary blood flow.
4. “Shift to the left” refers to an increase in the number of immature white blood cells.

**TEST-TAKING HINT:** The test taker needs to know what laboratory values hypoxia can affect.

28. CHF.

**TEST-TAKING HINT:** All of these are signs of pump failure. The infant is likely to have diaphoresis only on the scalp. The signs are not unlike those of an adult with this condition.

29. 1, 3, 4, 5.
1. Infective endocarditis is an example of an acquired heart problem.
2. Hypoplastic left heart syndrome is a CHD.
3. RF is an acquired heart problem.
4. Cardiomyopathy is an acquired heart problem.
5. KD is an acquired heart problem.
6. Transposition of the great vessels is a CHD.

**TEST-TAKING HINT:** “Acquired” means occurring after birth and seen in an otherwise normal and healthy heart.

30. 1. The rubbing of the child’s eyes may mean that she is seeing halos around the lights, indicating digoxin toxicity. The HR, slow for her age, also indicates digoxin toxicity. A decrease in serum potassium because of the furosemide can increase the risk for digoxin toxicity.
2. Hypomagnesemia does not affect digoxin and is not related to the child rubbing her eyes.
3. Hypocalcemia does not affect digoxin and is not related to the child rubbing her eyes.
4. Hypophosphatemia does not affect digoxin and is not related to the child rubbing her eyes.

**TEST-TAKING HINT:** The test taker needs to know that furosemide causes the loss of potassium and can cause digoxin toxicity.

31. 1. The nurse would not need to restrict fluids, as the child likely would not be getting overloaded with oral fluids.
2. The infant likely will have sodium depletion because of the chronic diuretic use; the infant needs a normal source of sodium, so low-sodium formula would not be used.
3. The infant has a great deal of difficulty feeding with CHF, so even getting the maintenance fluids is a challenge.
4. Breast milk has slightly less sodium than formula, and the child needs a normal source of sodium because of the diuretic.

**TEST-TAKING HINT:** Infants are not able to concentrate urine well and may have sodium depletion, so they need a normal source of sodium.
32. 1. BPs would not need to be taken in both the upper and lower extremities in transposition of the great vessels. The aorta and pulmonary arteries are in opposite positions, which does not change the BP readings.
2. AS is a narrowing of the aortic valve, which does not affect the BP in the extremities.
3. With COA there is narrowing of the aorta, which increases pressure proximal to the defect (upper extremities) and decreases pressure distal to the defect (lower extremities). There will be high BP and strong pulses in the upper extremities and lower-than-expected BP and weak pulses in the lower extremities.
4. TOF is a congenital cardiac problem with four defects that do not affect the BP in the extremities.

**TEST-TAKING HINT:** The test taker must know the anatomy of the defects and what assessments are to be made in each one.

33. 1. Pain needs to be assessed post procedure but is not the priority.
2. Checking for pulses, especially in the canulated extremity, would assure perfusion to that extremity and is the priority post procedure.
3. Hemoglobin and hematocrit levels would be checked post procedure if the child had bled very much during or after the procedure.
4. The catheterization report would be of interest to know what was determined from the procedure. This would also be good to check on the patient post procedure.

**TEST-TAKING HINT:** The test taker would know that the priority is assessing the cannulated extremity checking for adequate perfusion.

34. 1. During the acute phase, limit any manipulation of the joint, and avoid heat or cold.
2. During the acute phase, limit any manipulation of the joint, and avoid heat or cold.
3. Aspirin is the drug of choice for treatment of RF.
4. During the acute phase, limit any manipulation of the joint, and avoid heat or cold.

**TEST-TAKING HINT:** The test taker should know that aspirin is the drug of choice and that manipulation of the joint should be limited during the acute phase.

35. 1. This could be true for a patient with a less severe form of RF.
2. This could be true for a patient with a less severe form of RF.
3. This could be true for a patient with a less severe form of RF.
4. Valvular involvement indicates significant damage, so antibiotics would be taken for the rest of her life.

**TEST-TAKING HINT:** The test taker would know that the severity of the damage to the heart valves determines how long prophylactic antibiotics will be administered.

36. 1. CHD is found often in children with Down syndrome.
2. This is not associated with Down syndrome.
3. This is not associated with Down syndrome.
4. This is not associated with Down syndrome.

**TEST-TAKING HINT:** A child with a syndrome, such as Down, is likely to have other abnormalities.

37. 1. Transposition of the great vessels requires different surgical procedures.
2. The Norwood procedure is specific to hypoplastic left heart syndrome.
3. TOF requires different surgical procedures.
4. PDA requires different surgical procedures.

**TEST-TAKING HINT:** Review surgical treatment of CHD.

38. 1. Calcium channel blockers decrease the force of cardiac contraction and slow the electrical conduction of the heart, resulting in slowing of the HR. The HR is normal in this child.
2. The beta blocker not only affects the heart and lungs but also blocks the beta sites in the liver, reducing the amount of glycogen available for use, causing hypoglycemia. The lower HR and BP also suggest ingestion of a cardiac medication.
3. ACE inhibitors block the conversion of a protein from its inactive to its active form. The protein causes constriction of small blood vessels, which raises BP. By blocking this protein, BP is lowered.
4. Angiotensin receptor blockers relax blood vessels, which lowers BP and makes it easier for the heart to pump blood.
TEST-TAKING HINT: Know the drug’s side effects. In this case, the glucose is blocked.

39. 1. Both chickenpox and influenza are viral in nature, so consider stopping the aspirin because of the danger of Reye syndrome.
2. E. coli and staphylococcus are not viral, so Reye syndrome is not a factor.
3. Mumps and streptococcus A mumps are caused by a virus; because streptococcus A is a bacterium, Reye syndrome is not a factor.
4. Streptococcus A and staphylococcus are not viral, so Reye syndrome is not a factor.

TEST-TAKING HINT: Consider Reye syndrome when the patient is taking aspirin and has a viral infection.

40. 1. KD does not result in this condition, called chorea or St. Vitus dance.
2. Chorea is often a manifestation of RF, especially in children, with a higher incidence in females.
3. Malignant hypertension does not result in this condition, called chorea or St. Vitus dance.
4. Atrial fibrillation is not an illness.

TEST-TAKING HINT: The test taker can eliminate answer 1 because KD can cause damage to coronary arteries.

41. 1. Ventricular tachycardia is uncommon in children.
2. Sinus bradycardia is uncommon in children.
3. Supraventricular tachycardia is most common in children.
4. First-degree heart block is uncommon in children.

TEST-TAKING HINT: Consider a tachycardiac rhythm.

42. 1. Formula can be supplemented with extra calories, either from a commercial supplement, such as Polycose, or from corn syrup. Calories in formula would increase from 20 kcal/oz to 30 kcal/oz or more.
2. The infant would get too tired while feeding, while increasing cardiac demand. Limit feeding to a half hour.
3. Smaller feedings more often, such as every 2 to 3 hours, would decrease cardiac demand.
4. Soft nipples that are easy for the infant to suck would make for less work getting nutrition.

TEST-TAKING HINT: Allow the child to get the most nutrition most effectively.

43. 1. Children with spina bifida (myelomeningocele) often have a latex allergy. It is best assumed that they do, unless proved otherwise. The catheter balloon is often made of latex, and all personnel caring for the patient should be made aware of the allergy.
2. Children with spina bifida (myelomeningocele) often have a latex allergy. It is best assumed that they do, unless proved otherwise. The catheter balloon is often made of latex, and all personnel caring for the patient should be made aware of the allergy.
3. Children with spina bifida (myelomeningocele) often have a latex allergy. It is best assumed that they do, unless proved otherwise. The catheter balloon is often made of latex, and all personnel caring for the patient should be made aware of the allergy.
4. Children with spina bifida (myelomeningocele) often have a latex allergy. It is best assumed that they do, unless proved otherwise. The catheter balloon is often made of latex, and all personnel caring for the patient should be made aware of the allergy.

TEST-TAKING HINT: Material that composes the balloon catheter is made of latex, which is a common allergy in a child with a myelomeningocele.

44. 1. This is incorrect because 0.5 cc/kg/hr is below the normal pediatric output.
2. Normal pediatric urine output is 1 cc/kg/hr.
3. This is incorrect because 30 cc/hr is above the normal pediatric output.
4. This is incorrect because 1 oz/hr is above the normal pediatric output.

TEST-TAKING HINT: The test taker needs to know that normal urine output for a child is 1 cc/kg/hr.

45. 1. The pressures in the left side of the heart are greater, causing the flow of blood to be from an area of higher pressure to lower pressure, or left to right, increasing the pulmonary blood flow with the extra blood.
2. The pressures in the left side of the heart are greater, causing the flow of blood to be from an area of higher pressure to lower pressure, or left to right, increasing the pulmonary blood flow with the extra blood.
3. The pressures in the left side of the heart are greater, causing the flow of blood to be from an area of higher pressure to lower pressure, or left to right, increasing the pulmonary blood flow with the extra blood.

4. The pressures in the left side of the heart are greater, causing the flow of blood to be from an area of higher pressure to lower pressure, or left to right, increasing the pulmonary blood flow with the extra blood.

**TEST-TAKING HINT:** The test taker should know that the classification for this defect is left to right.

46. 1. This is not a collegial response, and the nurse should explain to the parents why an operation is not necessary now.

2. *Usually a VSD will close on its own within the first year of life.*

3. It is not common for physicians to wait until respiratory distress develops because that puts the infant at greater risk for complications. The defect is small and will likely close on its own.

4. Small defects usually close on their own within the first year.

**TEST-TAKING HINT:** Know the various treatments depending on size of the defect. VSD is the most common CHD.

47. 1. The pressures in the left side of the heart are greater, causing the flow of blood to be from an area of higher pressure to lower pressure, or left to right, increasing the pulmonary blood flow with the extra blood.

2. The pressures in the left side of the heart are greater, causing the flow of blood to be from an area of higher pressure to lower pressure, or left to right, increasing the pulmonary blood flow with the extra blood.

3. The pressures in the left side of the heart are greater, causing the flow of blood to be from an area of higher pressure to lower pressure, or left to right, increasing the pulmonary blood flow with the extra blood.

4. The pressures in the left side of the heart are greater, causing the flow of blood to be from an area of higher pressure to lower pressure, or left to right, increasing the pulmonary blood flow with the extra blood.

**TEST-TAKING HINT:** What is the CHD classification of ASD?

48. 1. The blood flow generally is left to right.

2. There is blood flow between all the chambers.

3. The blood flow is dependent on the pulmonary and systemic circulations.

4. **The blood flow can be in any direction but generally is left to right.**

**TEST-TAKING HINT:** What is the CHD classification of AVC?

49. 1. Murmur and CHF are often found in infancy.

2. AS can progress, and the child can develop exercise intolerance that can be better when resting.

3. Mitral valve prolapse causes a murmur and palpitations, often in adulthood.

4. Tricuspid atresia causes hypoxemia in infancy.

**TEST-TAKING HINT:** What does each of the last words of the defects mean, and what do those cause?

50. 1. Transposition of the great vessels does not cause these symptoms.

2. In the older child, COA causes dizziness, headache, fainting, elevated blood pressure, and bounding radial pulses.

3. AS does not cause these symptoms.

4. PS does not cause these symptoms.

**TEST-TAKING HINT:** The test taker should recognize that the child’s BP is elevated and her pulses are bounding, which are symptoms of COA.

51. 1. Ibuprofen blocks prostaglandins, which would speed up the closing of the PDA.

2. Betamethasone blocks prostaglandins, which would speed up the closing of the PDA.

3. Prostaglandin E inhibits closing of the PDA, which connects the aorta and pulmonary artery.

4. Indocin is used to treat osteoarthritis and gout.

**TEST-TAKING HINT:** The test taker would know that children who have transposition of the great vessels also have another cardiac defect, and the common one is PDA.

52. 1. Do not use an antibiotic if the disease is not bacterial in origin. Some sore throats are viral.

2. RF is caused by group A beta-hemolytic streptococcus, and the drug of choice is penicillin. RF is a bacterial infection and is treated by antibiotic.
3. RF is caused by a streptococcus infection, not by staphylococcus.
4. RF is cause by a streptococcus infection, not by staphylococcus.

**TEST-TAKING HINT:** The test taker needs to know the cause of RF and how it is treated.

53. 1. A patient with KD in the acute phase does not need to be gavage-fed.
2. Transposition of the great vessels should be repaired before the toddler years, so that child would not need to be gavage-fed.
3. **The child may experience increased cardiac demand while feeding. Feedings by gavage eliminate that work and still provide high-calorie intake for growth.**
4. An RF patient with St. Vitus dance (chorea) does not need to be gavage-fed. Most of these children do not have CHF.

**TEST-TAKING HINT:** The test taker should consider how gavage feedings would affect the work of the heart. Hypoxemia stimulates erythropoietin, which causes the polycythemia. This is an attempt to increase oxygen by having more red blood cells to carry the oxygen. The clubbing of the fingers is a result of the polycythemia and hypoxemia.

54. 1. **The hypoxemia stimulates erythropoiesis, which causes polycythemia, in an attempt to increase oxygen by having more red blood cells carry oxygen. Clubbing of the fingers is a result of the polycythemia and hypoxemia.**
2. Anemia and barrel chest do not occur as a result of hypoxemia. Hypoxemia stimulates the production of erythropoietin to increase the number of red blood cells to carry more oxygen. The barrel chest is the result of air trapping.
3. Increased white blood cells occur as the result of an infection, not hypoxemia. Hypoxemia does not cause a decreased number of platelets.
4. An elevated erythrocyte sedimentation rate is the result of inflammation in the body. Peripheral edema can be caused by CHF.

**TEST-TAKING HINT:** The test taker could eliminate answers 2, 3, and 4 by knowing that they do not cause hypoxemia in CHF.

55. 1. Aspirin is not used to treat this condition. A PDA does not occur with RF.

2. **Joint inflammation is experienced in RF; aspirin therapy helps with inflammation and pain.**
3. Strawberry tongue is manifested in KD; aspirin is not used to treat this disease.
4. Aspirin is not used to treat this condition.

**TEST-TAKING HINT:** Know the manifestations of RF.

56. 1. Diphtheria, tetanus, and pertussis can be given following administration of gamma globulin. These are killed vaccines, and the only vaccines not administered would be live vaccines such as measles, mumps, rubella.
2. Hepatitis B can be administered following gamma globulin. Live vaccines are held for at least 11 months.
3. Inactivated polio virus can be given following gamma globulin administration. Live vaccines are held for 11 months.
4. **The body might not produce the appropriate number of antibodies following gamma globulin infusion. Also, delay the varicella vaccine for 11 months.**

**TEST-TAKING HINT:** The test taker needs to know which vaccines are killed and which are live.

57. 1. Current recommendations are for a lipid profile in children over 2 years with a first- or second-degree relative with stroke, myocardial infarction, angina, or sudden cardiac death. Also screen if parent, sibling, or grandparent has cholesterol of 240 mg/dL or greater.
2. Current recommendations are for a lipid profile in children over 2 years with a first- or second-degree relative with stroke, myocardial infarction, angina, or sudden cardiac death. Also screen if parent, sibling, or grandparent has cholesterol of 240 mg/dL or greater.
3. Current recommendations are for a lipid profile in children over 2 years with a first- or second-degree relative with stroke, myocardial infarction, angina, or sudden cardiac death. Also screen if parent, sibling, or grandparent has cholesterol of 240 mg/dL or greater.
4. Current recommendations are for a lipid profile in children over 2 years with a first- or second-degree relative with stroke, myocardial infarction, angina, or sudden cardiac death. Also screen if parent, sibling, or grandparent has cholesterol of 240 mg/dL or greater.

**TEST-TAKING HINT:** Think about the cause of the father’s MI.
58. 1. The toddler will naturally assume this position to decrease preload by occluding venous flow from the lower extremities and increasing afterload. Increasing SVR in this position increases pulmonary blood flow. This occurs with squatting.
   2. The toddler will naturally assume this position to decrease preload by occluding venous flow from the lower extremities and increasing afterload. Increasing SVR in this position increases pulmonary blood flow. This occurs with squatting.
   3. The toddler will naturally assume this position to decrease preload by occluding venous flow from the lower extremities and increasing afterload. Increasing SVR in this position increases pulmonary blood flow.
   4. The toddler will naturally assume this position to decrease preload by occluding venous flow from the lower extremities and increasing afterload. Increasing SVR in this position increases pulmonary blood flow.

**TEST-TAKING HINT:** The child self-assumes this position during the spell.

59. 1. Severe heart failure can be an indication if quality of life is decreased.
   2. Severe heart failure can be an indication if quality of life is decreased.
   3. Hypoplastic left heart syndrome is treated by allowing the child to die, which is controversial, the Norwood procedure, or heart transplant.
   4. Severe heart failure can be an indication if quality of life is decreased.

**TEST-TAKING HINT:** Consider severe heart failure and which complex of CHD.

60. 1. Arthritis in KD is always temporary.
   2. Peeling palms and feet are painless.
   3. Children can be irritable for 2 months after the symptoms of the disease start.
   4. Tylenol is never given in high doses due to liver failure, and it is not an anti-inflammatory. Aspirin is given in high doses for KD.

**TEST-TAKING HINT:** Look for specifics in the stem.

61. 1. HR of 56 beats per minute is likely due to digoxin toxicity.
   2. Elevated count of red blood cells indicate polycythemia secondary to hypoxemia.
   3. The 50th percentile height and weight for age shows good growth and development, indicating good nutrition and perfusion.
   4. Urine output of 0.5 cc/kg/hr indicate that furosemide is not being given as ordered; the output is too low.

**TEST-TAKING HINT:** The test taker should know the expected responses of medications used to treat CHF.
Hematological or Immunological Disorders

KEYWORDS

- Aplastic anemia
- Non-Hodgkin lymphoma
- Beta-thalassemia (Cooley anemia or thalassemia major)
- Osteosarcoma
- Central nervous system prophylaxis
- Pancytopenia
- Chelation therapy
- Polycythemia
- Factor VIII deficiency
- Polycythemia vera
- Hemarthrosis
- Purpura
- Hemophilia A
- Reed-Sternberg cells
- Neutropenia
- Sickle cell disease (sickle cell anemia)
- Vaso-occlusive crisis
- Hemophilia A
- Splenic sequestration
- Neuroblastoma
- Thrombocytopenia
- Polycythemia vera
- Vaso-occlusive crises
- Splenic sequestration
- Wilms tumor

ABBREVIATIONS

- Acute lymphoblastic leukemia (ALL)
- Severe combined immunodeficiency disease (SCID)
- Cytomegalovirus (CMV)
- Vanillylmandelic acid (VMA)
- Idiopathic thrombocytopenic purpura (ITP)
- Pneumocystis carinii pneumonia or Pneumocystic pneumonia (PCP)

QUESTIONS

1. The nurse is taking care of a child with sickle cell disease. The nurse is aware that which of the following problems is (are) associated with sickle cell disease? Select all that apply.
   1. Polycythemia.
   2. Hemarthrosis.
   3. Aplastic crisis.
   4. Thrombocytopenia.
   5. Splenic sequestration.