Youth Fitness Specialist Level2 - $2^{\text {nd }}$ Edition

- 103 Multiple Choice - TF
- 20 Essay Questions



Address



## Fax Number

## SECTION I. MULTIPLE CHOICE, TRUE/FALSE

Please read the questions and choices VERY carefully. Pick the BEST answer and write the letter of that answer into the box beside the question number.

## Coaching Strategies and Pedagogy

1. When giving feedback you should:

Choose one answer.
A. Only focus on the negative so the athlete learns what not to do.
B. Wait until practice is over before giving feedback regardless of when the skill took place.
C. Give the feedback as soon as possible so the image is still fresh in the mind of the athletes.
D. Only give it when something bad happens.
2. If you are introducing a new skill that must be taught but are unable to demonstrate the new skill personally you should: Choose one answer.
A. Skip the skill and move on.
B. Have an athlete that can do it correctly demonstrate it.
C. Do the best you can.
D. Practice for several weeks until you can do the skill correctly.
3. Skills become developed through the process of sensory-motor habits. The more this sensorymotor habit is developed the greater the skill is learned. Which statement describes the initial stage of the learning process through sensory-motor habits as described by Drabik?
Choose one answer.
A. Movement patterns become automatic and the need for conscious control is eliminated.
B. Athletes tend to focus on the general movement and become overly tense and make overcompensations within the movement pattern.
C. Movements become more relaxed and economical and the focus in now in detail of the technique
D. Athlete feels they no longer have to practice the skill to move on to the next skill
4. The Positive Coach Mental Model includes which of the following concepts: Choose one answer.
A. The coach honors the sport and the elements contained within it.
B. The coach knows every single thing about the sport.
C. Coaches give positive reinforcement.
D. Coaches teach kids how to win.
E. A\&D
F. A\&C
5. Which of the following are common results of distributed practice?

Choose one answer.
A. The children get stronger
B. The young athletes are able to compare techniques and retain the skill longer
C. The young athletes get frustrated
D. The young athletes ask too many questions
6. The ultimate goal of youth sports is to:

Choose one answer.
A. Teach kids how to win
B. Keep kids active and give them healthy alternatives to a sedentary lifestyle
C. Get kids to the next level
D. To teach kids how to follow orders
7. What should be involved in the beginning stage of learning in youth basketball? Choose one answer.
A. Improving scoring average
B. Learning a playbook so that it can be fresh in their minds for the first game
C. Physically learning the new movement patterns that make up the new skills
D. Refining the skill
8. Which is not a phase of the decision making process?

Choose one answer.
A. Learning
B. Perceiving
C. Acting
D. Deciding
9. The best way to plan for your under 12 youth soccer team practices is to:

Choose one answer.
A. Follow what you have done in the past
B. Understand the needs and special situations of your team and individuals first
C. Talk to the high school and college coaches and see what they do with their athletes before you plan for yours
D. Buy a book on planning for practices and follow it exactly so you make no mistakes.
10. I am a tennis coach. I am teaching a group of junior players how to serve. I first teach them how to toss the ball, then I teach them how to "scratch the back" with the racquet. I follow by teaching them how to extend the racquet to make good contact with the ball. What method of teaching am I using? Choose one answer.
A. Whole Method
B. Progressive-Part Method
C. Whole-Part-Whole Method
D. Whole Method
11. How can you tell if learning has taken place? Choose one answer.
A. An athlete accepts positive feedback
B. When the athlete does a skill correctly only one time
C. When the athlete's performance consistently shows improvement
D. When the athlete is proud of their performance
12. There is no doubt that youth athletics is in a growing state. More and more kids are getting involved. Which answers below should NOT be a primary focus when trying to encourage kids to be active and participate in sport: Choose one answer.
A. A great way to get exercise and improve health
B. Teach kids how to be apart of a team and deal with others
C. Try to get a scholarship or make the professional leagues
D. Help kids become more social

## Motor Development

13. You have a group of six year olds in your program. You see one of them that still has a toddlerlike walking pattern. You should?
Choose one answer.
A. Correct the child's walking pattern right away with some training on the treadmill.
B. Get more information from the parents, and ask them if they are aware of the issue.
C. Ignore it. The problem will likely correct itself.
D. Ask the child what her handicap is.
14. Observing a child's gait is one way to gain insight into any movement difficulties they may have. What is a common abnormality one might see with a child's gait? Choose one answer.
A. Knock knees

B. A tendency to skip and gallop
C. Heel to toe walking
D. The child doesn't look where he/she is going
15. Which of the following are features of dynamic balance? Choose one answer.
A. Open loop
B. Closed loop
C. Quick adjustments to changing position
D. $B \& C$
E. A \& C
16. Which of the following is irrelevant to the development of the early running pattern? Choose one answer.
A. Speed
B. Strength
C. Coordination
D. Sufficient range of motion at the knee
17. When a child first learns to run, which of the following is a characteristic of his running pattern?
Choose one answer.
A. Narrow base of support
B. Heel strike landing
C. Knee flexion at mid support
D. High guard arm position
18. During more proficient running, a greater stride length indicates:

Choose one answer.
A. Greater force
B. Increased speed
C. Increased balance
D. Increased coordination
19. What is more important for pre-adolescents (age 10-13) to engage in? Choose one answer.
A. Highly structured training
B. Free play
C. A combination of structured play and free play
20. Which of the following will influence the development of balance? Choose one answer.
A. Developmental age
B. Early experience
C. Opportunities to stay active
D. Nutrition
E. All of the above
21. During a weighted squat, the heels should be Choose one answer.
A. Really wide
B. Flat
C. Off the ground as high as possible to develop balance
D. Further apart than the toes
22. Cues for teaching pushing movements should include which of the following? Choose one answer.
A. "Relax the shoulders"
B. "C'mon, you can push harder than that"
C. "Tighten the stomach muscles"
D. All of the above

## Posture and Physical Development

23. Scoliosis is

Choose one answer.
A. A kyphosis
B. A decrease in the thoracic kyphosis (hypokyphosis)
C. An abnormal lateral curve in the spine
D. All the above
24. The transversus abdominis is part of the:

Choose one answer.
A. Global muscular postural system
B. Local muscular postural system
C. The abs
D. The varus muscular chain
25. The muscles that most likely will be short and tight from an posterior pelvic tilt and decreased lumbar lordosis include: Choose one answer.
A. The rectus abdominus and gluteus maximus
B. The external obliques and internal obliques
C. The lumbar erectors and rectus femoris
D. The psoas major and hamstrings
26. In neutral spine position, there should be a kyphosis in which of the following segments of the spine?
Choose one answer.
A. Cervical and thoracic segments

B. Thoracic and sacral segments
C. Cervical and lumbar segments
D. Cervical, thoracic and lumbar segments
27. You are a trainer, working with a local high school team. Several of your athletes have an obvious increased anterior pelvic tilt. You should Choose one answer.
A. Employ a combination of massage and manual therapy to solve the problem
B. Gather more information and possibly refer to a medical professional
C. Include exercises and stretches to begin to correct the problem, concentrating on balancing strength in potentially affected muscles.
D. $B \& C$
28. Weakness of the anterior abdominals and shortening of the hip flexors and lumbar erectors is a feature of which common syndrome?
Choose one answer.
A. Lower crossed syndrome
B. Inhibition / dominance syndrome
C. Scoliosis
D. Neck pain
29. Which one of the following is a force couple that could create an anterior tilt of the pelvis? Choose one answer.
A. External obliques / lumbar erector spinae
B. Gluteus maximus / hamstring complex
C. Lumbar erector spinae / quadriceps
D. Rectus abdominus / gluteus maximus

## Development and Flexibility

30. Internal factors affecting range of motion include:

Choose one answer.
A. Training history
B. Tissue composition
C. Types of movement
D. System Configuration
31. Which of the following does not limit muscular extensibility:

Choose one answer.
A. Creep
B. Collagen
C. Deep Fascia
D. Cross Sectional Area
32. Creep occurs when:

Choose one answer.
A. Connective tissue is shortened and then lengthened quickly
B. When a long duration static stretch is placed on the tissue
C. When a long duration dynamic stretch is placed on the tissue
D. When all the molecules in the collagen reorganize.
33. Which mechanoreceptor is reading the following information:"My muscle just stretched really fast"
Choose one answer.
A. Golgi Tendon Organ
B. Muscle Spindle
C. Tendon Spindle
D. Articular receptors
34. What type of connective tissue provides the greatest resistance to passive stretching? Choose one answer.
A. Tendons
B. Deep Fascia
C. Ligaments and capsules
D. Cartilage
35. Which of the following are causes of joint stiffness?

Choose one answer.
A. Weight lifting
B. Inactivity
C. Injury
D. Chronic Disease
E. All of the above
F. B, C, D
36. Which of the following is NOT true of the Golgi Tendon Organs:

Choose one answer.
A. They can signal small and rapid changes in contractile forces
B. They are most sensitive to tension created during a passive stretch
C. They monitor all degrees of muscular tension
D. They are lay directly in the path of force from the muscle to the bone

## Strength Development

37. Of the following strength and power training methods, which is least beneficial in the training program design for younger athletes Choose one answer.
A. Weightlifting
B. Bodybuilding
C. Strength Training
D. Plyometrics
38. Children are more likely to be able to fully activate neuromuscular connections than adults Answer:

$\square$| True |
| :--- |
| False |

39. Pre-adolescent children will likely have less of an ability to produce strong eccentric contractions than adults. This will specifically result in which of the following? Choose one answer.
A. Less linear speed
B. Less of an ability to stop and start
C. Less of an ability to control an external load (like a barbell)
D. Lesser decision making skills
E. A and B
F. B and C
40. Significant increases in muscle mass typically occur in prepubescent athletes who regularly perform a strength training program
Answer:

41. Which of the following is NOT a listed general guideline for strength training in young athletes Choose one answer.
A. Improvements should occur over weeks, not days
B. Use body weight before adding external loads
C. Initial stages should be general, using a variety of activities
D. Provide sufficient rest and recovery
42. Young athletes can gain strength by practicing yoga

Answer:
$\square$ True $\quad$ False
43. Which of the following body types are generally more likely to perform well in jumping and reaction time?
Choose one answer.
A. Mesomorph
B. Endomorph
C. Ectomorph
D. Endotheliomorphs
44. Girls are incapable of improving their strength or speed after puberty

Answer:

$\square$| True |
| :--- |
| False |

45. Development of neuromuscular traits such as motor skills and flexibility should be avoided until a young athlete reaches puberty Answer:

46. Which of the following are not among suggested activities for pre-adolescent strength training? Choose one answer.
A. Jumping
B. Climbing
C. 1 rep maximum squats
D. Calisthenics like squats and pushups
47. Multi-joint exercises like squats, presses and weightlifting movements may be taught to prepubescent athletes who demonstrate proficiency of technique
Answer:

$\square$| True |
| :--- |
| False |

48. Which of the following are athletic benefits of strength and power training in adolescents? Choose one answer.
A. Improvement of 1 rep maximum
B. Injury prevention
C. Growth plate closure
D. Improved speed and strength
E. B \& D
F. $A \& B$
49. Which of the following are benefits of strength training using machines? Choose one answer.
A. Improved body awareness
B. Increased joint stabilization
C. Increased muscular strength
D. More efficient training programs
50. What component of the training program should predominate in the early adolescent training period?
Choose one answer.
A. Specialized strength training
B. Speed-strength training
C. General Physical Preparation
D. Shoulder flexibility
51. Outstanding junior high school athletes would likely tend to be more Choose one answer.
A. Endomorphic
B. Mesomorphic
C. Ectomorphic
D. Ecto-endomorphic

## Speed Development

52. You are working with an 11 year old girl. She is tall and lanky, and trips over her feet sometimes when she runs. It seems that her toes are dragging a little on the ground. She seems to move well otherwise. What is the most likely problem?
Choose one answer.
A. "Clumsy" disorder
B. Lack of strength in the tibialis anterior
C. Lack of strength in the soleus
D. She just needs to learn how to run
53. Which of the following leg cycle phases is responsible for complete hip and knee extension and ankle plantar flexion? Choose one answer.
A. Non-support phase
B. Anterior support phase
C. Middle support Phase
D. Rear support phase
54. You are working with a group of 14 year old JV basketball players. When you do reaction drills, many of them seem to skid to a stop and look as if they are about to fall over. What are the most likely things you should concentrate on more in your training program?
Choose one answer.
A. They just need better shoes
B. Core strength
C. Leg strength
D. Reaction time
E. B\&C
F. All of the above
55. Which of the following did Drabik NOT include in his list of factors important for coordination in young athletes?
Choose one answer.
A. Training
B. Speed of learning
C. Physiological development
D. Sport specific training
56. An athlete's leg should not move backward when they are trying to sprint forward. This is called a false step.
Answer:

57. An athlete can properly improve his or her stride length by: Choose one answer.
A. Reaching out with the lead leg
B. Lifting the body off the ground higher to travel further in the air
C. Increasing the force production into the ground
D. None of the above
58. Although stride frequency is largely determined by genetics and the muscle composition, what other factor can possibly improve stride frequency and speed:
Choose one answer.
A. Stretch less
B. Taking shorter quicker steps
C. Increasing the arm action speed
D. Opening the hands forcefully to increase power
59. What form of speed would it be most efficient to concentrate on training for a basketball player:
Choose one answer.
A. Linear speed
B. Lateral speed
C. Back pedal speed
D. Multi-directional speed
60. When dealing with pre-adolescents it is wise to:

Choose one answer.
A. Keep training or practice sessions over 2 hours so they learn more
B. Teach them to stand in lines waiting for their turn so they get discipline
C. Allow for lots of movement and a variety of activities
D. Not allow them to express their excitability for play because it will break concentration
61. An athlete in a defensive mode must have good $\qquad$ when a stimulus presents itself so they can move to the ball or with an opponent: Choose one answer.
A. Mental toughness
B. Reaction time
C. Understanding of the rules
D. Arm strength

## Bioenergetics and Youth Athletes

62. Three principal features of the oxidative metabolic process include:

Choose one answer.
A. Use of oxygen, low energy yield, slow rate of ATP production
B. Use of oxygen, high, steady energy yield, slow rate of ATP production
C. High, steady energy yield, absence of oxygen, high rate of ATP production
D. None of the above
63. The major limiting factor during low intensity steady state oxidative metabolism is:

Choose one answer.
A. Pyruvate
B. Availability of energy source
C. Commitment to task
D. ATP
64. What substance inhibits the electron transport chain through negative feedback? Choose one answer.
A. NADP
B. Oxaloacetobutyl acid
C. ATP
D. Electrons
65. What is the major energy source during oxidative metabolism in children? Choose one answer.
A. Amino acid
B. Glycerol
C. Fatty acids
D. Carbohydrates
66. Rowland reported a difference in the production of lactic acid in children vs. adults. What was that difference, approximately?
Choose one answer.
A. $50 \%$ increase
B. $20 \%$ decrease
C. $50 \%$ decrease
D. $15 \%$ increase
67. Lactic acid is the major factor in fatigue in prepubertal children:

Answer:

68. Creatine phosphate levels are lower in pre-adolescent children than in adults:

Answer:

69. What is the primary way that Glycolysis is controlled? Choose one answer.
A. Phosphorylation of hexokinase
B. Phosphorylation of fructose
C. Phosphorylation of glucose
D. Phosphorylation of glycogen
70. Children switch to anaerobic systems at a lower relative exercise intensity than adults:

Answer:

$\square$| True |
| :--- |
| False |

## The Endocrine System and Athletic Development

71. Which of the following hormones follows a circadian pattern Choose one answer.
A. Thyroid hormone
B. Parathyroid hormone
C. Estrogen
D. Insulin
E. Cortisol
72. Which of the following hormones affects the body's concentration of sodium Choose one answer.
A. Testosterone
B. Aldosterone
C. Growth hormone
D. Thyroid hormone
E. Parathyroid hormone
73. Growth hormone exerts the majority of its actions on muscle and bone by stimulating production of which of the following? Choose one answer.
A. Testosterone
B. Estrogen
C. Insulin-like growth factor
D. Thyroid hormone
E. Cortisol
74. How does growth hormone stimulate improvements in anaerobic capacity? Choose ALL answers that apply.
$\square \quad$ A. By increasing muscle size
$\square$ B. By increasing muscle strength
$\square \quad$ C. By increasing muscle metabolic efficiency
$\square \quad$ D. By increasing red blood cell mass
$\square \quad$ E. By decreasing fatigue
75. Exercise triggers release of which of the following hormones Choose one answer.
A. Estrogen
B. Progesterone
C. Insulin
D. Growth hormone
E. Parathyroid hormone
76. Exercise inhibits release of which of the following hormones Choose one answer.
A. Catecholamines
B. Cortisol
C. Testosterone
D. Insulin
E. Glucagon
77. Which of the following is an action of insulin Choose ALL answers that apply.
$\square \quad$ A. Mobilizes fatty acids from adipose tissue
$\square$ B. Stimulates protein synthesis in muscle
$\square$ C. Regulates growth hormone
$\square$ D. Mobilizes amino acids from muscle
$\square \quad$ E. Stimulates release of glucose from the liver
78. In which gland is calcitonin produced?

Choose one answer.
A. Pituitary
B. Thyroid
C. Pancreas
D. Adrenal
E. Parathyroid
79. For which of the following hormones is stress the main trigger for release? Choose one answer.
A. Aldosterone
B. Epinephrine
C. Thyroid hormone
D. DHEA-S

## Nutrition and Youth Athletics

80. The following are important parts of designing a young athlete's nutrition program: Choose ALL answers that apply.
$\square \quad$ A. Eating for optimal health
$\square \quad$ B. Eating for weight loss
$\square \quad$ C. Eating for optimal body composition
$\square$ D. Eating for optimal performance
81. When discussing energy balance, it's important to understand that if an athlete wants to lose weight:
Choose one answer.
A. They should always decrease their energy intake to get into a negative energy balance
B. They should begin fat loss supplements to speed up their sluggish metabolisms
C. They should increase their exercise expenditure by working out more
D. They should focus on replacing foods with low macronutrient densities with foods with high macronutrient densities
82. In order to optimize performance and body composition it is recommended that a young athlete should ingest:
Choose one answer.
A. $0.8 \mathrm{~g} / \mathrm{kg}$ protein
B. More protein than sedentary young people
C. At least $1 \mathrm{~g} / \mathrm{kg}$ protein
D. An individualized protein intake based on performance and body composition
83. In order to optimize daily carbohydrate intake, young athletes should: Choose ALL answers that apply.
$\square \quad$ A. Eat $70 \%$ of their diet as carbohydrate
$\square \quad$ B. Focus on eating higher glycemic index carbohydrates during and after exercise
$\square \quad$ C. Focus on high fiber, micronutrient dense, low glycemic index carbohydrates during most of the day
$\square \quad$ D. Eat high carbohydrate starches like whole grain breads, cereals, and pastas
84. The most important component of a well-developed diet for a young athlete is:

Choose one answer.

A. Carbohydrate intake
B. Protein Intake
C. Fat Intake
D. Energy Intake
85. High-protein, low carbohydrate diets are recommended for young athletes because:

Choose one answer.

A. They meet the increased protein needs of young athletes
B. Extra carbohydrates increase body fat in young athletes
C. Protein is the most important macronutrient for young athletes
D. Eating a diet with adequate fat and moderate in carbohydrates is ill advised
86. Carbohydrates are a necessary component of any young athlete's diet because: Choose ALL answers that apply.
$\square \quad$ A. Carbohydrates delay fatigue during longer exercise bouts and interval exercise
$\square \quad$ B. Carbohydrates can enhance post-exercise muscle protein synthesis
$\square \quad$ C. Carbohydrates are the body's primary source of energy
$\square \quad$ D. Carbohydrates increase muscle mass
87. The USDA Food Guide Pyramid is a model that is not recommended for young athletes because:
Choose ALL answers that apply.
$\square \quad$ A. The protein requirements are too low
$\square$ B. It places fat in the "use sparingly" category, when specific types of dietary fats are beneficial for athletes and health in general
$\square \quad$ C. All carbohydrates are not created equal and athletes should concentrate their focus on unprocessed, fibrous carbohydrates rather than refined carbohydrates
$\square \quad$ D. The Food Guide Pyramid is the optimal diet for athletes.
88. Post-exercise supplementation of $\qquad$ is an effective means of expediting recovery and promoting gains in lean body mass:
Choose one answer.

A. $100 \%$ carbohydrate
B. $100 \%$ fat
C. A combination of carbohydrate and protein
D. It is best that you not eat post-exercise
89. Young athletes:

Choose one answer.

A. Need more total protein than most full grown adults
B. Need less total protein than most full grown adults
C. Need more protein relative to body size vs. most full grown adults
D. Need less protein relative to body size vs. most full grown adults
90. Heat stress:

Choose ALL answers that apply.
A. Can lead to a reduction of performance if more than 1-2 Ibs of water are lost through dehydration
$\square \quad$ B. Can be minimized if the right rehydration drink is ingested
$\square$ C. Is a greater risk in young athletes due to an increased sweat rate
$\square$ D. Is a greater risk in young athletes due to an smaller body surface area to body mass ratio
91. To best reduce the risk of dehydration in young athletes; Choose ALL answers that apply.
$\square \quad$ A. Young athletes should drink lots of water during all athletic events
$\square$ B. Young athletes should drink a carbohydrate/electrolyte drink every 15-20 minutes during activity
$\square \quad$ C. In hot climates, young athletes should drink rehydration drinks even if they're not thirsty
$\square$ D. Young athletes should ingest energy gels during training and competition
92. Feeding every $2-3$ hours will likely:

Choose ALL answers that apply.
$\square \quad$ A. Allow young athletes to effectively increase energy intake
$\square$ B. Cause large increases in body fat
$\square$ C. Improve blood sugar regulation
$\square$ D. Stimulate metabolic rate
93. The pre-game meal:

Choose ALL answers that apply.
$\square \quad$ A. Is the most important time to get your nutrition right
$\square \quad$ B. Should provide easy to digest foods
$\square \quad$ C. Should be comprised of foods athletes eat every day
$\square$ D. Can cause a tremendous boost in performance
94. The best during and post-exercise drinks contain:

Choose one answer.
A. Water only
B. Carbohydrate only
C. Caffeine
D. Carbohydrate and fast-digesting protein

## Talent Identification and Physical Development

95. Which Phase of Talent Identification occurs between 3-10 years of age? Choose one answer.
A. The Primary Phase of Talent Identification
B. The Secondary Phase of Talent Identification
C. The Third Phase of Talent Identification
D. None of the above
96. Which Phase of Talent Identification assesses young athletes who have already encountered organized training?
Choose one answer.
A. The Primary Phase of Talent Identification
B. The Secondary Phase of Talent Identification
C. The Third Phase of Talent Identification
D. None of the Above
97. For individuals with biological or physiological limitations and/or a lack of sporting ability, the correct course of action is Choose one answer.
A. Exclusion from sporting programs
B. A more focuses academic path
C. Personalized, intensive training to overcome said limitations
D. Inclusion in general athletic development and recreational sporting activities.
98. Which of the following is a risk of having under-qualified coaches work with young beginner athletes?
Choose one answer.
A. Placing the emphasis on winning rather than the development process
B. Overuse and acute injuries due to early specialization and inappropriate training
C. Less attention on and therefore alienation of the less talented young athletes
D. All of the above
99. The screening process for Australia's Talent Search Program becomes more sport specific in which phase?
Choose one answer.
A. Phase One
B. Phase Two
C. Phase Three
D. It does not become at all sport specific
100. The former Soviet Union initially identified talented athletes through Choose one answer.
A. School athletic programs
B. Regional sport competitions
C. Private athletic associations
D. None of the above.
101. $\qquad$ would set out to compare one single variable between elite athletes and nonathletes I a single sport setting. Choose one answer.
A. Multidisciplinary multivariate studies
B. Single disciplinary multivariate studies
C. Univariate studies
D. None of the above
102. $\qquad$ investigate the influence of a number of variables on performance in one discipline ... while taking into account the relationship between the variables in that particular discipline Choose one answer.
A. Multidisciplinary multivariate studies
B. Single disciplinary multivariate studies
C. Univariate studies
D. None of the above
103. Within the former Soviet Union, talent identification involved $\qquad$ stages.
Choose one answer.
A. General
B. Sport specific
C. Both A and B
D. None of the above

## Coaching Strategies and Pedagogy

1. 

If you only had 20 minutes to work with a large group of 50, 10-year-old athletes in a small elementary sized gym, what would you do? Keep in mind that you want to optimize the active movement and minimize standing and listening time. You have no equipment other than cones.
$\square$
2.

How would you approach a practice when you have to teach a new skill and you know that not all of your athletes will learn the skill the same way? How would you address this issue by making sure each athlete has the same opportunity to learn his or her way?
$\square$

## 3.

You are teaching a basic, bilateral squat to a 14-year-old for the first time. Describe which teaching method you would use and how the progressions would look.

## Motor Development

4. 

Imagine someone who has injured their leg to the point where it affects their walking pattern. Describe what compensations must be made for the injury. How does this affect their gait? .
$\square$

5
Why might there be such a wide variety of jumping patterns in developing children? Please list at least 3 reasons. Consider all factors.
Answer:
$\square$

## Posture and Physical Development

## 6

Describe how weakness of the core will affect performance of your athlete.
Be sure to discuss the differences between local and global systems of the core.

## 7

Describe how weakness and lack of flexibility in the hamstrings would affect the execution of the following movements: forward lunge, 2-foot vertical leap. Include 2 aspects of how each movement would be altered to compensate for the tightness/weakness of the hamstrings.
$\square$

## 8

Discuss at least 3 injuries that could arise in an athlete that has hyperflexible knees and spine without sufficient motor control. Integrate information from our Postural Development Chapter as well.
$\square$

## Strength Development

9
Explain at least two reasons how and why a late adolescent's training program will differ in comparison to an early' adolescent's training program.
.
$\square$

10
Provide an outline of activities for a single strength training session for a $10-y e a r-o l d$ athlete. Include exercises by name/description. Explain the factors that went into selecting the exercises and set/rep ratios. Explain why you chose the set/rep ratios.
$\square$
11
Explain at least 2 reasons why it is important to understand the influence of body types on performance. Convince him otherwise.
$\square$

## Speed Development

12
What types of exercises would you use to teach a pre-adolescent athlete who is struggling with proper linear running form? Explain how the exercises will help.
$\square$

13
If you are working with a high school aged soccer player who continually gets out of control when having to quickly change direction, what types of faults would you be looking for that may be causing the athlete to lose control and how would you try and correct the problem?
$\square$

14
Describe how you would teach a pre-adolescent athlete to skip for the first time. Explain the progression you would use. Do the same for teaching the crossover run to an uncoordinated 13 year old. Describe postural concerns which may arise.
$\square$

## Bioenergetics and Youth Athletes

## 15

Discuss at least 2 pros and cons of long slow distance training (LSD) in developing athletes.

16
Discuss the validity of this statement: The best way to improve an aerobic base in adolescents (as opposed to adults) is to engage in steady state training.
$\square$

The Endocrine System and Athletic Development
(none)

## Nutrition and Youth Athletics

## 17

What are the three most important goals young athletes should try to accomplish with a good nutrition program? Discuss how focusing on one of these goals independent of the others can lead to sub-optimal results.
$\square$
18
If you're working with a young athlete who needs to lose body fat yet appears to be under eating, what strategy might you recommend and why? Include a discussion of energy intake, protein intake, carbohydrate intake and fat intake.
$\square$

## Talent Identification and Physical Development

19
Explain five of the seven key issues to implementing a successful nationwide athletic development program.
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20
There are two methods of Talent Identification: natural selection and scientific selection. Please define and explain positive and negative aspects of each method.
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