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**PiXL Independence:**

**PE** – Student Booklet

KS4

Physical Training

**Contents:**

1. Quizzes – 10 credits each
2. Reading Task – 50 credits
3. Research Task – 30 credits
4. Website Task – 80 credits
5. Long Answer Questions – 100 credits
6. Videos – 50 credits
7. **Quizzes**

Complete the quizzes.

*10 credits.*

**Multiple Choice Quiz**

1. Which one of the following statements is false?
2. Cardiovascular endurance and stamina is the same thing.
3. The 12 minute cooper run measures cardiovascular endurance.
4. The multi stage fitness test is run over 18m.
5. Long distance swimmers need good cardiovascular endurance.
6. Which one of the following is a fitness test to measure strength?
7. One minute sit up test
8. One repetition maximum test
9. Sit and reach test
10. Vertical jump test
11. One component of fitness is reaction time. Reaction time is very important for a sprinter. Which other component of fitness is most important for a sprinter?
12. Power
13. Speed
14. Flexibility
15. Muscular Endurance
16. Which of the following statements is false?
17. A netballer needs agility.
18. A footballer needs flexibility.
19. A weightlifter needs cardiovascular endurance.
20. A basketballer needs power.
21. Which are the following statements is true?
22. There is only one fitness test to measure muscular endurance.
23. The wall throw test measures reaction time.
24. The speed test is completed over 100m.
25. The stork stand test measures balance.
26. Agility is:
27. How quickly you can run in a straight line.
28. How quickly you can change direction.
29. How quickly you move your legs.
30. How quickly you move your arms.
31. What is the most important component of fitness for boxer?
32. Flexibility
33. Power
34. Cardiovascular Endurance
35. Balance
36. Overload is:
37. Need to work the body harder than normal so that there is some stress and discomfort.
38. To work the body until injury occurs
39. Maintain the workload at the same rate
40. Maintaining the same amount of repetitions.
41. Which of the following is not a method of training?
42. Continuous
43. Fartlek
44. Interval
45. Progressive
46. A warm up must include 5 main components. Which of the following is not part of a warm up?
47. Stretching
48. Pulse raising
49. Skill rehearsal
50. Match play
51. Why do we need to perform a cool down? One of the following statements is false.
52. Gradually increase the heart rate
53. Gradually lower body temperature
54. Reduce blood pooling
55. Increase the removal of lactic acid
56. Circuit training is:
57. Running and maintaining the speed for a period of 20 minutes
58. Completing a variety of exercises for a short period of time
59. Completing a section of sprint work followed by a period of rest
60. Rapid and repeated stretching and contracting of muscles
61. What is the most important method of training for a marathon runner?
62. Fartlek training
63. Continuous training
64. Weight training
65. Plyometric training
66. What does the FITT principle stand for?
67. Frequency Intensity Type Tedium
68. Frequency Interval Time Type
69. Frequency Interval Tedium Time
70. Frequency Intensity Time Type
71. PPE stands for:
72. Personal Performance Equipment
73. Personal Protective Equipment
74. Protective Performance Equipment
75. Personal Performance Enhancement
76. What injury is the most common in rugby?
77. Sprain
78. Strain
79. Dislocation
80. Fracture
81. Which of the following statements is false?
82. Spinal injuries should be treated by an expert and the injured person should not be moved.
83. Fractured bones always break the surface of the skin.
84. Strain is a tear to a tendon or muscle.
85. Blisters are caused by friction.
86. A hazard is:
87. The chance that someone will be harmed
88. Something that has the potential to cause harm
89. The injury that occurs
90. An injury to a bone
91. A risk assessment must include which one of the following?
92. Use of chemicals
93. All previous injuries
94. At least 20 hazards
95. First aid instructions
96. Which of the following statements is false?
97. Lifting and carrying equipment safely can reduce the chance of back injuries
98. It is compulsory to complete a warm up before sport
99. All participants must be competing at an appropriate level to themselves.
100. It is advised you wear the correct clothing and footwear

**Fill in the Gap Quiz**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is measured using the press up test and the sit up test.
2. The sit and reach test is used to measure \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The ability of repeating a pattern or sequence of movements with fluency and accuracy is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. The most important component of fitness at the start of a 100m race is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. The most important component of fitness to a long distance swimmer is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Power is a combination of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. Strength is measured using the one repetition maximum test and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ test.
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is when performance deteriorates due to lack of training.
9. The number of training sessions completed per week is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. Interval training includes periods of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and periods of \_\_\_\_\_\_\_\_\_\_\_\_\_.
11. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ involves hopping, bounding and jumping to work the muscles concentrically and eccentrically.
12. Fartlek training is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in Swedish.
13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is part of a warm up and includes exercise that takes the joints through their full range of movement.
14. One of the benefits of the cool down is to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the heart rate.
15. When you are boxing, you are grouped based on weight. This is because it ensures there is an appropriate level of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
16. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a tear to the ligament.
17. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the chance that someone will be harmed by the hazard.
18. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the technique used to measure the chance of an accident happening.
19. An example of personal protective equipment is the use of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in football to prevent leg fractures.
20. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is caused by a blow to the joint.

**Open Ended Quiz**

1. Using a practical example, describe the term ‘flexibility’?
2. In the multistage fitness test David scored L6 S5. What component of fitness does the multistage fitness test measure? Describe another fitness test that measures this component of fitness.
3. Describe two fitness tests that measure power.
4. Using a sporting example, explain the term ‘co-ordination’?
5. In the handgrip dynamometer test Sarah scored 32kg. What component of fitness does the handgrip dynamometer test measure? Describe another fitness test that measures this component of fitness.
6. Describe two fitness tests that measure muscular endurance.
7. Using a practical example, describe the term ‘reaction time’?
8. Explain why an athlete would use weight training to improve their performance.
9. Describe interval training and state what this type of training aims to achieve.
10. Why is it important for a sports performer to carry out a warm up before a competitive activity?
11. Using a practical example, describe what is meant by the term ‘progression’?
12. Explain why an athlete would use circuit training to improve their performance.
13. Describe plyometrics training and state what this type of training aims to achieve.
14. Using a practical example, describe an effective warm up before performing a sports activity.
15. Describe three ways of minimising risks when exercising in a gym.
16. Identify a hazard in a swimming pool and explain how you would reduce the risks associated with that hazard.
17. Using a sporting example, explain how a concussion can occur and how it would be treated?
18. Explain how a risk assessment is important in sport?
19. Using a practical example, describe how a sprain can occur and how it can be treated?
20. Identify a hazard at a sports field and explain how you would reduce the risks associated with that hazard.
21. **Reading Task**

Read and summarise the key ideas within the article – ideally in ten points. Create 5 questions relating to both the article and your specification.

*50 credits.*

<http://www.deccanchronicle.com/sunday-chronicle/phyzzicality/221017/you-can-train-like-a-judoka.html>

<https://www.trainingzone.co.uk/community/blogs/markben/best-delivery-methods-for-adult-training>

<https://www.theguardian.com/sport/2017/oct/17/gordon-hayward-ankle-injury-celtics-cavaliers-nba>

1. **Research Task**

Research and find an article which supports or disclaims the ideas in the original article. Write a paragraph to summarise your findings. In this paragraph you must provide a sporting example to support your findings.

*30 credits.*

1. **Website Task**

Website task: Select a website and design a power point presentation you could give to a group of students just beginning the GCSE PE course. Include of each slide key notes you could discuss.

*80 credits*

1. <http://ezinearticles.com/?The-10-Components-of-Fitness&id=6673790>
2. <http://www.s-cool.co.uk/gcse/pe/training-for-sport/revise-it/the-principles-of-training>
3. <http://www.nhs.uk/conditions/Sports-injuries/Pages/Introduction.aspx>

1. **Long Answer Questions**

Choose a longer answer question from the question bank below. Write a response to the question. You must include a plan of what you are going to include, a key word board and your final written answer which is completed in full sentences and paragraphs.

*100 credits*

1. Using practical examples, explain how a gymnastics coach would use fitness testing to ensure the best performance by a gymnast at the Olympics.
2. Using practical examples, explain how a rugby coach might reduce the risk of injury to a participant when delivering a training session on a sports field. How could the general health, fitness and wellbeing of a participant influence their risk of injury?
3. Using practical examples, explain how a personal trainer would design a training program for a new member at the gym over a 6-week period.
4. Hannah is a 23-year-old who is maintaining her training to be selected for the sprint cycling squad for the Commonwealth Games. Explain, using examples, how Hannah could adapt her training to give her the best possible chance of selection.
5. Fred wants to pursue a career in boxing. Explain what components are the most important to train for a boxer and how his progress could be measured.
6. **Videos**

Produce a video that shows the use of the body in a practical way. The video must include key sporting examples and clear explanations of what is occurring within the video.

Try to include the whole unit topic in one video.

*50 credits per topic.*

* Components of fitness
* Fitness tests
* Principles of training
* Methods of training
* Minimising risk of injury

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