** Fitness Components & Training**

**Introduction**This task will guide you through a short exercise circuit with exercise instructions from Collingwood Magpies netball captain Madison Browne. Madison is into her 14th season of top level netball and has collected championships, two Commonwealth games medals and various player awards throughout her career. Madison has used her knowledge of the human anatomy, fitness components and training to ensure she is able to prepare herself for the sport of Netball.
**Instruction**

1. Watch the [**instructional video (Click here)**](http://media.biolab.vic.edu.au/media/VCEPE/Madi.mp4) of circuit exercises. Ensure to wear appropriate equipment (e.g. running shoes) and prepare any further equipment you feel will aid you with completing the exercises (e.g. floor mats, small weights & anything that can be used as ground markers).
2. Answer the questions using your knowledge of fitness components and training assessment and methods.



**Circuit Training**

Circuit training comprises of different exercises, targeting multiple fitness components.

Madison completed the following circuit as a part of her rehabilitation for the ruptured anterior cruciate ligament (ACL) in her knee.

**Your challenge**- Complete 45 seconds at each station and fill in the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Exercise** | **Fitness component** | **Health or Skill related fitness component?** | **Which fitness test could you use to test this component?**  | **Name a sport which would utilise this fitness component?** |
| Sit ups | Choose an item. | Choose an item. | Enter Text | Enter Text |
| Running (Easy) | Choose an item. | Choose an item. | Enter Text | Enter Text |
| Static stretch (Hamstring) | Choose an item. | Choose an item. | Enter Text | Enter Text |
| Full plank | Choose an item. | Choose an item. | Enter Text | Enter Text |
| Lateral jumps | Choose an item. | Choose an item. | Enter Text | Enter Text |
| Dynamic stretch (Lunging) | Choose an item. | Choose an item. | Enter Text | Enter Text |
| Dodging | Choose an item. | Choose an item. | Enter Text | Enter Text |
| Running (Hard) | Choose an item. | Choose an item. | Enter Text | Enter Text |
| V-Sit and shoulder press | Choose an item. | Choose an item. | Enter Text | Enter Text |
| 1-Foot balance with ball | Choose an item. | Choose an item. | Enter Text | Enter Text |

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**Apply your knowledge**

|  |
| --- |
| Enter Text |

1. **Explain the difference between health-related and skill-related fitness components.**

**2. a) Select a sport of your choice and list the fitness components required. Justify your responses with the aspect of the sport that relates to the listed component of fitness.**

|  |
| --- |
| **Sport:** Enter Text |
| **Fitness components:** Enter Text |

**3.** **Muscular strength is the maximal force that can be generated by a muscle or muscle group in one maximal effort. Muscles can produce force in three different actions.**

**Match the type of muscle contraction to the correct definition and then to the appropriate exercise example.**

|  |  |  |
| --- | --- | --- |
| **Contraction** | **Definition** | **Exercise** |
| **Isometric** | Choose an item. | Choose an item. |
| **Isokinetic** | Choose an item. | Choose an item. |
| **Isoinertial** | Choose an item. | Choose an item. |

 **4. a) Explain why marathon runners, cross country skiers and endurance swimmers all need great aerobic power?**

|  |
| --- |
| Enter Text |

|  |
| --- |
| Enter Text |

 **b) What are five factors that affect aerobic power?**

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