# Student Activity – Unit R181: Applying the principles of training: fitness and how it affects skill performance

**1.1 Relevance of components of fitness to different sports**

**Fitness component definitions**

# Instructions and answers for teachers

These instructions cover the Student Activity which can be found on pages 3 and 4.

This Student Activity supports the Cambridge National in Sport Science (J828).

**When distributing the activity section to the students either as a printed copy or as a Word file you will need to remove the teacher instructions section.**

## The Activity

This activity will give students the opportunity to look at the various fitness components and why they are important in specific sports.

### Associated materials

R181 Lesson Preparation Pack and Fitness component definitions Student Activity sheet.

### Suggested timings

**Task:**  30 minutes

## Task – Fitness component definitions

In the table students copy one of the definitions provided next to the relevant fitness component. Once they have done this students can complete column 3 to suggest three different sport/specific elements of sports that require participants to have high levels of that particular skill.

|  |  |  |
| --- | --- | --- |
| **Fitness component** | **Definition** | **Sport/specific element of a sport that requires this skill (x3)** |
| **Power** | The ability to use muscle strength at speed. |  |
| **Coordination** | Making different parts of the body work in harmony at the same time. |  |
| **Muscular endurance** | The ability of muscles to work for a sustained period of time without tiring. |  |
| **Speed** | Performing a movement or covering a distance in a short period of time. |  |
| **Strength** | The amount of pull or push that can be exerted at any one time by a muscle group. |  |
| **Reaction time** | How quickly an individual responds to a stimulus. |  |
| **Cardiovascular endurance** | The ability of the heart and blood vessels to work at an increased rate for a sustained period of time. |  |
| **Balance** | Being able to control the position of the body whilst standing still or moving. |  |
| **Agility** | The ability to stop, start and change direction at speed. |  |
| **Flexibility** | Moving a joint or group of joints through a wide range of movement. |  |

# Student Activity – Unit R181: Applying the principles of training: fitness and how it affects skill performance

**1.1 Relevance of components of fitness to different sports**

## Task – Fitness component definitions

In the table on the next page copy the correct definition from the list provided below next to the relevant fitness component. Once you have done this, complete column 3 to suggest three different sports/specific elements of sports that require participants to have high levels of that particular skill.

**Definitions**

* The amount of pull or push that can be exerted at any one time by a muscle group.
* The ability to use muscle strength at speed.
* The ability to stop, start and change direction at speed.
* Moving a joint or group of joints through a wide range of movement.
* The ability of muscles to work for a sustained period of time without tiring.
* The ability of the heart and blood vessels to work at an increased rate for a sustained period of time.
* Performing a movement or covering a distance in a short period of time.
* Making different parts of the body work in harmony at the same time.
* How quickly an individual responds to a stimulus.
* Being able to control the position of the body whilst standing still or moving.

## Task – Fitness component definitions

|  |  |  |
| --- | --- | --- |
| **Fitness component** | **Definition** | **Sport/specific element of a sport that requires this skill (x3)** |
| **Power** |  |  |
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| **Reaction time** |  |  |
| **Cardiovascular endurance** |  |  |
| **Balance** |  |  |
| **Agility** |  |  |
| **Flexibility** |  |  |

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