

KS4 Physical Education

Skill Related Fitness



These icons indicate that teacher's notes or useful web addresses are available in the Notes Page.



This icon indicates that the slide contains activities created in Flash. These activities are not editable.

For more detailed instructions, see the *Getting Started* presentation.

What we will learn in this presentation:

The definitions of:

- agility
- balance
- coordination
- power
- reaction time
- and speed.

How and why these elements of skill related fitness are important to different sports.



Agility is the ability of the performer to change the position of their body quickly, whilst keeping their entire body under control.

Agility is especially important in sports like fencing and squash that require quick and precise movements.



Balance is the ability of the performer to retain their centre of mass over their base of support.

Balance can be:

static – for example, standing on one leg

dynamic – for example, keeping your balance on a bike as it goes round a corner.



What type of balance does a surfer need?



Do these activities involve static or dynamic balance?

Static

Dynamic

Decide whether each activity requires static or dynamic balance.
Press **start** to begin.

start

Snowboarding



solve



Coordination is the ability of the performer to move two or more body parts accurately and smoothly in response to stimuli from the senses.

Coordination allows you to produce complex actions from a number of smaller movements.

For example, an effective tennis stroke requires coordinating footwork and arm action.



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Power is a combination of strength and speed – it is the ability to do strength performances quickly.

$$\text{power} = \text{strength} \times \text{speed}$$

Power is important in explosive events like throwing and sprinting.

Power is vital to getting a good start in short races.



Reaction time is the amount of time it takes for a performer to initiate movement after the presentation of a stimulus.

For example, how quickly a table tennis player reacts to a wide serve from their opponent.

The faster they react, the better their chance of making the return.



A **stimulus** could be anything from a starting gun to a sudden side-step by an opponent, or a shout from a teammate.



Speed is the rate at which a performer is able to perform a movement or cover a set distance.

It could be how fast a badminton player can move their racket to cover a drop shot, or how fast an athlete can run 1,500 m.



Speed is very important in many sports – it can often be the thing that separates a good performer from a great performer.

How important is speed in the following activities?

Rugby

Dancing

Lawn bowls

Skill related fitness

Agility

The rate at which a performer moves their body or covers a distance.

Balance

A performer's ability to keep their centre of mass over their base of support.

Coordination

position
way.

Power

and speed.

Reaction time

ive in
us.

Speed

The ability to accurately move two or more body parts to produce an action.

Can you match each component of skill related fitness to its definition?
Press **start** to begin.

start

solve



Consider the sports that you are offering for your GCSE.
Identify examples of when you might require:

Agility

Balance

Coordination

Power

Reaction Time

Speed



Decide on the most important components for each activity.

1

50 m butterfly
swimming
race



Agility

Coordination

Speed

Balance

Power

Reaction Time



Skill related fitness in specific sports



Complete this table on skill related fitness by dragging the correct label into each gap.

Component of fitness	Example activity	How performance is improved
	Gymnastics	Hold static balances for longer. Less likely to fall while performing dynamic movements.
	Athletics	Respond more quickly to



Power

Coordination

Reaction
time

Balance



hide words

solve



1. Explain briefly how **power** and **balance** are important to:
 - a) a rugby union player
 - b) a weightlifter.
2. Explain briefly how **coordination** and **speed** are important to:
 - a) a triple jumper
 - b) a cross-country skier.
3. Identify three sports where **reaction time** is important to performance and explain what might happen if a performer's reaction time was too slow.
4. What is meant by the term 'agility'?

