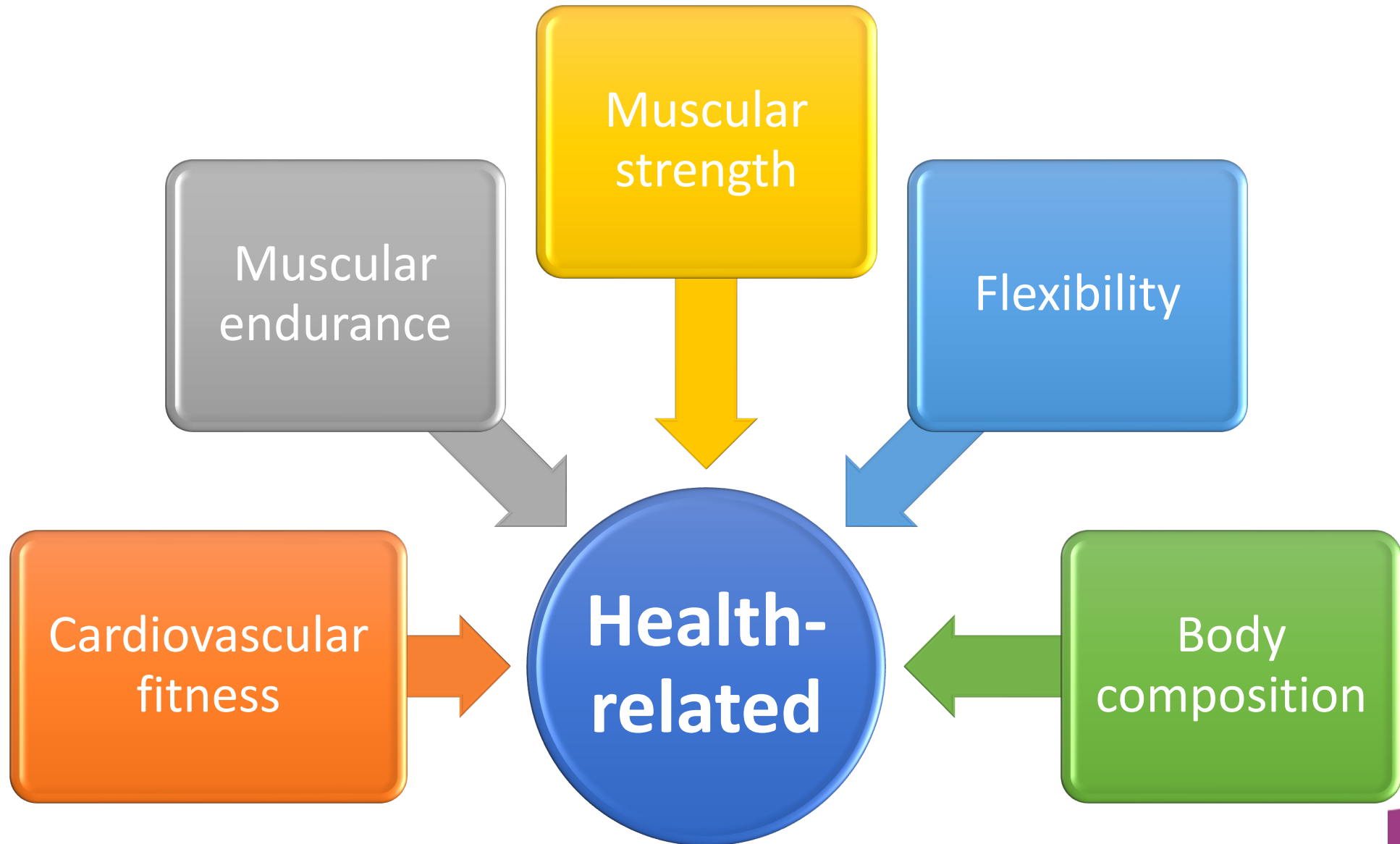




Day 1

Components of physical fitness (health-related)



Cardiovascular fitness



The ability of the heart and lungs to take in, transport and utilise oxygen during exercise.

Muscular strength and endurance

Muscular endurance

The ability of the muscles to work continuously under low-to-moderate resistance.



Muscular strength

The ability of the muscles to exert maximal force against a high resistance.



Active iQ

Flexibility

The range of motion about a joint or series of joints.



Active iQ

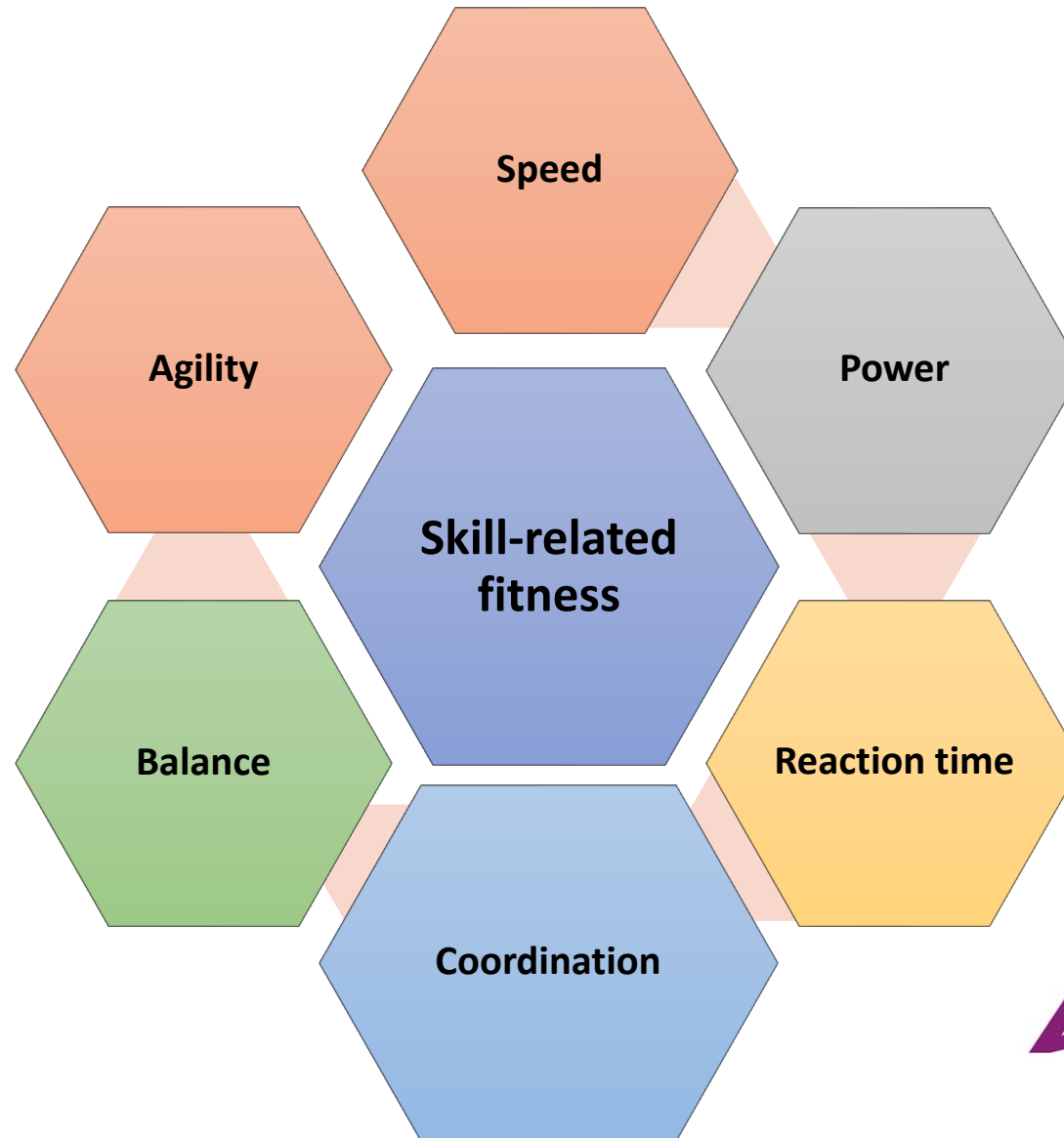
Body composition

The proportion of fat and fat-free mass.



Components of physical fitness (skill-related)

fitness



Active iQ

Speed

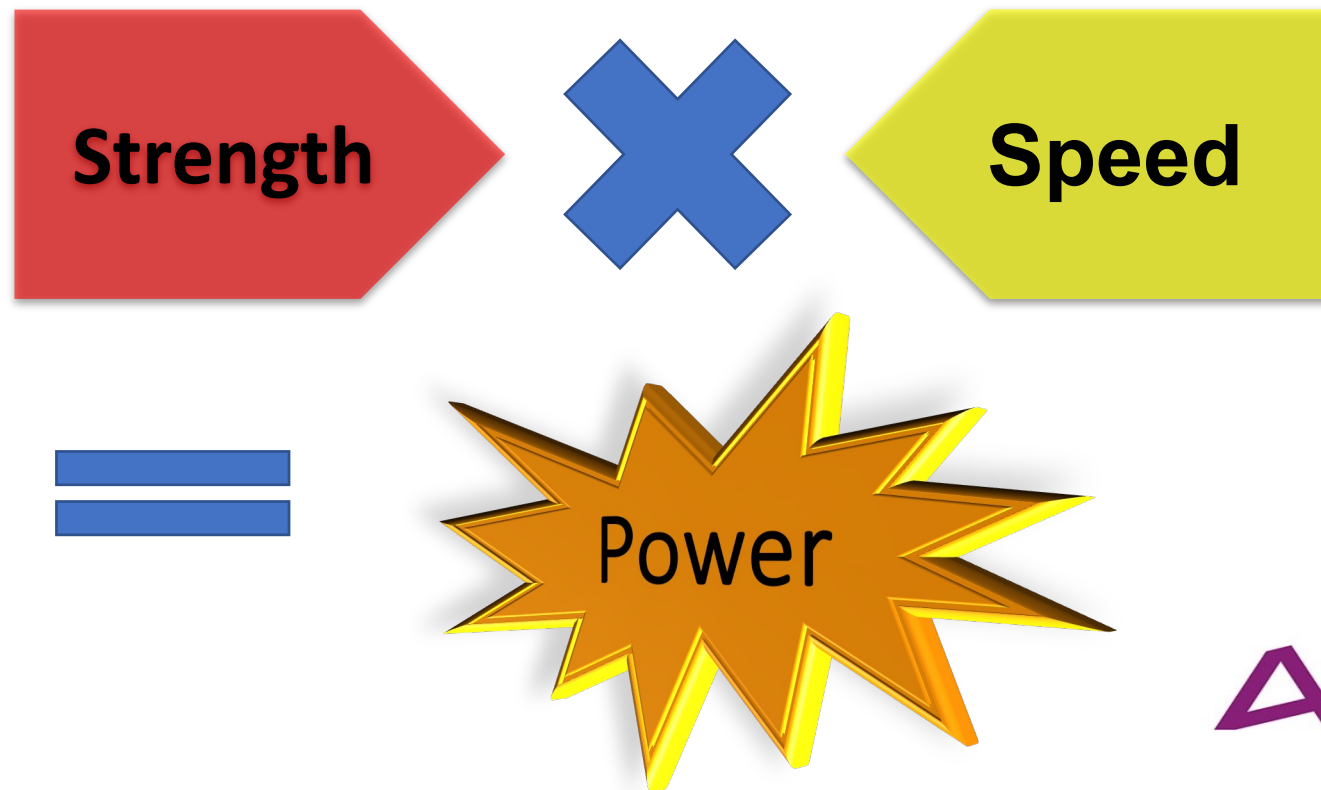
How quickly a movement can be performed in a short space of time.



Active iQ

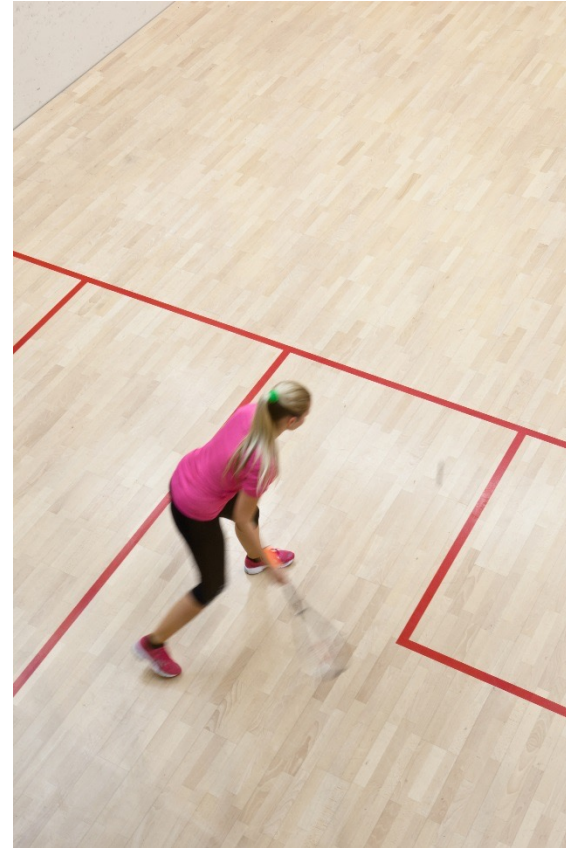
Power

The ability to exert maximum muscular contraction instantly in an explosive burst of movement (within a short time frame).



Reaction time

The ability to respond quickly to a stimulus.



Active iQ

Coordination

The ability to move two or more body parts smoothly, efficiently and under control.



Balance

The ability to control the body's centre of gravity when:

Stationary



Moving



Active iQ

Agility

Changing the position of the body and moving in different directions quickly.



Active iQ

Principles of training



Active iQ

Principles of training

Principle	Description
Specificity	Any change or adaptation in the body's muscles, organs and systems will be very specific to the type of training (stress or stimulus) undertaken.
Progressive overload	To bring about any adaptation, the body will have to work a little bit harder than it is used to.
Reversibility	If training (the exercise stimulus) stops, or is reduced, the benefits experienced will gradually decline.
Adaptability	The body reacts and adapts in accordance with the type of challenge and overload to which it is subjected.
Recovery and rest	Refers to rest between exercises and recovery between sessions – both of which are vital for adaptations to occur.
Individuality	All individual factors should be considered when designing a programme for a client.

Body types (somatotypes)

Ectomorph	Mesomorph	Endomorph
Tall and thin. Low body fat. Low muscle tissue. Find it difficult to gain weight. Typical distance-runner physique.	Lean and muscular. Low body fat. Naturally athletic. Typical sprinter physique.	Apple- or pear-shaped. High body fat. Low muscle tissue. Typical shot-putter physique.

