GCSE PE
KNOWLEDGE ORGANISERS
Component 1
Topics 1-3

Topic 4 runs through topics 1-3 and therefore does not have its own knowledge organiser.

PE COMPONENT 1 TOPIC 1 APPLIED ANATOMY AND PHYSIOLOGY

1.1 THE STRUCTURE AND FUNCTIONS OF THE MUSCULOSKELETAL SYSTEM

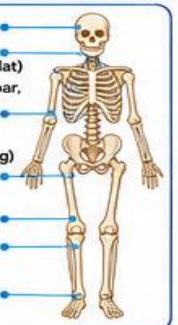
1.1.1 Functions of the Skeleton
- Protection of vital organs
- Muscle attachment
- Joints for movement
- Platelets, red and white blood cell production
- Storage of calcium and phosphorus



1.1.2 Classification of Bones
- **Long** – leverage
- **Short** – weight bearing
- **Flat** – protection, broad surface for muscle attachment
- **Irregular** – protection and muscle attachment



1.1.3 Structure of the Skeleton
Key bones (classification in brackets)
- Cranium (flat) • Clavicle (long) • Scapula (flat)
- Vertebral column – cervical, thoracic, lumbar, sacrum, coccyx (irregular)
- Ribs (flat) • Sternum (flat)
- Humerus (long) • Radius (long) • Ulna (long)
- Carpals (short) • Metacarpals (long)
- Phalanges – hand (long)
- Pelvis (irregular)
- Femur (long) • Patella (short)
- Tibia (long) • Fibula (long)
- Tarsals (short) • Metatarsals (long)
- Phalanges – foot (long)



1.1.4 Classification of Joints
- **Pivot** – neck (atlas and axis)
- **Hinge** – elbow, knee, ankle
- **Ball and socket** – hip, shoulder
- **Condyloid** – wrist

Impact on range of movement



1.1.5 Movements at Joints
Flexion, extension, adduction, abduction, rotation, circumduction, plantar-flexion, dorsi-flexion.
Used in many sporting skills and techniques.



1.1.6 Ligaments and Tendons
Ligaments – connect bone to bone. Provide joint stability.
Tendons – connect muscle to bone. Transmit force to create movement.



1.1.7 Types of Muscle
- **Skeletal** (voluntary) – produces movement
- **Cardiac** (involuntary) – forms the heart
- **Smooth** (involuntary) – in blood vessels and organs



1.1.8 Major Voluntary Muscles


Deltoid, biceps, triceps, pectoralis major, latissimus dorsi, external obliques, hip flexors, gluteus maximus, quadriceps, hamstrings, gastrocnemius and tibialis anterior.

1.1.9 Antagonistic Pairs
Agonist and antagonist work in opposition to create movement.
- **Ankle** – gastrocnemius ↔ tibialis anterior
- **Knee** – quadriceps ↔ hamstrings
- **Elbow** – biceps ↔ triceps
- **Hip** – hip flexors ↔ gluteus maximus

1.1.10 Muscle Fibre Types
- **Type I (slow twitch)** – fatigue resistant, aerobic activities
- **Type IIa (fast twitch oxidative)** – power + endurance activities
- **Type IIx (fast twitch glycolytic)** – short bursts of power



1.2 THE STRUCTURE AND FUNCTIONS OF THE CARDIORESPIRATORY SYSTEM

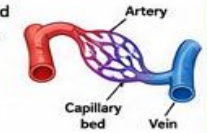
CARDIOVASCULAR SYSTEM

1.2.1 Functions
Transport oxygen, carbon dioxide and nutrients.
Clotting of open wounds.
Regulation of body temperature.

1.2.2 Structure of the Heart
Atria, ventricles, septum, tricuspid, bicuspid (mitral) and semi-lunar valves, aorta, vena cava, pulmonary artery, pulmonary vein.
Maintain blood circulation.



1.2.3 Blood Vessels
Arteries – thick walls, carry blood away from heart (high pressure).
Capillaries – tiny vessels for exchange of gases, nutrients and wastes.
Veins – thin walls, carry blood towards heart (low pressure).



1.2.4 Vasoconstriction, vasodilation and vascular shunting redistribute blood flow to where it is needed most.

1.2.5 **Blood Components** – red and white blood cells, platelets and plasma and their importance.

1.2.10 **Cardiovascular & Respiratory Systems** – work together to supply oxygen and remove carbon dioxide, allowing participation in physical activity and sport.

RESPIRATORY SYSTEM

1.2.6 Composition of Air
Inhaled air – more oxygen.
Exhaled air – less oxygen, more carbon dioxide.

INHALED	EXHALED
↑ O_2	O_2 ↑
↓ CO_2	CO_2 ↓

1.2.7 Vital Capacity & Tidal Volume
Tidal volume increases during exercise to meet higher oxygen demands and remove more CO_2.



1.2.8 Main Components & Roles
Lungs – site of gas exchange.
Bronchi – carry air to lungs.
Bronchioles – small airways.
Alveoli – tiny sacs for gas exchange.
Diaphragm – muscle used in breathing.



1.2.9 Alveoli & Gas Exchange
Alveoli have a large surface area and thin walls. Oxygen diffuses into blood; carbon dioxide diffuses out. Meets demands of aerobic and anaerobic exercise.



KEY LINKS
- ✓ Systems work together.
- ✓ Deliver oxygen and nutrients.
- ✓ Remove waste products.
- ✓ Allow movement, performance and recovery.

1.3 ANAEROBIC AND AEROBIC EXERCISE

1.3.1 Energy
Aerobic – glucose + oxygen → energy + carbon dioxide + water.
If insufficient oxygen → less energy.
Anaerobic – glucose without enough **oxygen** → energy + lactic acid.

Glucose + Oxygen → Energy + CO_2 + H_2O (Aerobic)
Glucose → Lactic Acid (Anaerobic)

1.3.2 Energy Sources
Fats – fuel source for aerobic activity (low intensity, long duration).
Carbohydrates – fuel source for both aerobic and anaerobic activity.



MOVEMENT POSSIBILITIES



1.4 THE SHORT- AND LONG-TERM EFFECTS OF EXERCISE

SHORT-TERM EFFECTS

1.4.1 Lactate Accumulation & Muscle Fatigue
Lactate builds up during intense activity → fatigue, reduced performance.



1.4.2 Heart, Stroke Volume & Cardiac Output
Heart rate ↑
Stroke volume ↑
Cardiac output ↑
More blood delivered to working muscles.



1.4.3 Breathing
Breathing rate and depth ↑ to increase oxygen intake and remove more CO_2.



1.4.4 Systems Working Together for Activity & Recovery
Oxygen in → lungs → blood → muscles.
Carbon dioxide out → blood → lungs → out.
Essential for performance and recovery.

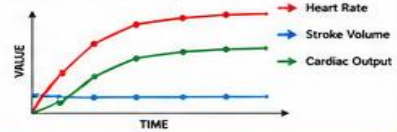


LONG-TERM EFFECTS

1.4.5 Long-Term Effects
Regular exercise improves:
- Cardiovascular fitness
- Respiratory efficiency
- Muscular strength
- Bone density (See 3.4.1–3.4.4)



1.4.6 Interpreting Graphs
Understand and interpret heart rate, stroke volume and cardiac output values at rest and during exercise.



PE COMPONENT 1 TOPIC 2 MOVEMENT ANALYSIS

2.1 LEVER SYSTEMS, EXAMPLES OF THEIR USE IN ACTIVITY AND THE MECHANICAL ADVANTAGE THEY PROVIDE IN MOVEMENT

2.1.1 First, Second and Third Class Levers

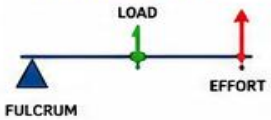
Levers are rigid bars that move around a fixed point called a fulcrum.

FIRST CLASS



Example: Nodding the head (atlanto-occipital joint)

SECOND CLASS



Example: Rising on to toes (ankle)

THIRD CLASS



Example: Bending the elbow (biceps)

2.1.2 Mechanical Advantage and Disadvantage

Mechanical advantage (MA) occurs when the load is moved more easily.

MORE MA = EASIER TO MOVE LOAD

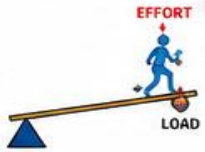
- ✓ Less effort needed
- ✓ Load close to fulcrum
- ✓ Smaller range of movement
- ✓ Greater force
- ✓ E.g. first class levers



Mechanical disadvantage (MD) occurs when a greater effort is needed to move the load, but through a greater range of movement.

MORE MD = GREATER RANGE, MORE SPEED

- ✓ More effort needed
- ✓ Load away from fulcrum
- ✓ Greater range of movement
- ✓ Faster movement
- ✓ E.g. third class levers



The choice of lever system affects performance: e.g. weightlifters use second class levers for power, sprinters use third class levers for speed and range.

2.2 PLANES AND AXES OF MOVEMENT

2.2.1 Movement Patterns Using Body Planes and Axes

Movement occurs in different planes around axes.

PLANE	AXIS (AROUND)	DESCRIPTION	EXAMPLE IN SPORT
SAGITTAL PLANE 	FRONTAL AXIS 	Divides the body into left and right sections. Movement forward and backward.	• Running • Kicking a ball • Front somersault
FRONTAL PLANE 	SAGITTAL AXIS 	Divides the body into front and back sections. Movement side to side.	• Cartwheel • Star jump • Side lunge
TRANSVERSE PLANE 	VERTICAL AXIS 	Divides the body into top and bottom sections. Movement rotational.	• Full twist jump • Golf swing • Tennis forehand

2.2.2 Movement in the Sagittal Plane about the Frontal Axis

Front and back tucked or piked somersaults

KEY POINTS

- ✓ Movement forwards and backwards
- ✓ Body moves in the sagittal plane
- ✓ Axis is side to side (frontal axis)



Examples: forward tucked somersault, back piked somersault

2.2.3 Movement in the Frontal Plane about the Sagittal Axis

Cartwheels

KEY POINTS

- ✓ Movement from side to side
- ✓ Body moves in the frontal plane
- ✓ Axis is front to back (sagittal axis)



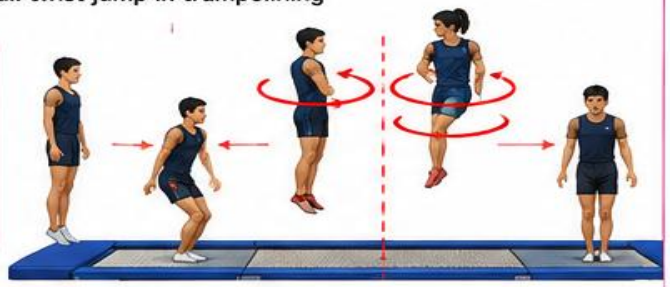
Example: cartwheel

2.2.4 Movement in the Transverse Plane about the Vertical Axis

Full twist jump in trampolining

KEY POINTS

- ✓ Rotational movement
- ✓ Body moves in the transverse plane
- ✓ Axis is vertical (top to bottom)



Example: full twist jump (360°) on trampoline

TOP TIP Understanding how levers, planes and axes work helps performers move efficiently, use the right technique and choose the best actions to improve performance in physical activity and sport.

MA = Mechanical Advantage
MD = Mechanical Disadvantage

PE COMPONENT 1 TOPIC 3 PHYSICAL TRAINING

3.1 THE RELATIONSHIP BETWEEN HEALTH AND FITNESS AND THE ROLE THAT EXERCISE PLAYS IN BOTH

3.1.1 Definitions and Relationship

Health – a state of complete physical, mental and social well-being, not just the absence of disease.

Fitness – the ability to meet the demands of the environment.

Exercise – planned, structured and repetitive physical activity aimed at improving fitness.

Performance – how well a task or activity is carried out.



Regular exercise improves fitness, which leads to better performance and a healthier lifestyle. Good health enables you to train consistently and perform at your best.

3.2 THE COMPONENTS OF FITNESS, BENEFITS FOR SPORT AND HOW FITNESS IS MEASURED AND IMPROVED

3.2.1 Components of Fitness

Component	Main Benefit for Sport	Example Ways to Improve
Cardiovascular Fitness (Aerobic Endurance)	Improves stamina, delays fatigue, supports recovery.	Running, cycling, swimming, circuit training
Strength	Helps produce force, overcome opponents, reduce injury risk.	Weights, resistance training, bodyweight exercises
Muscular Endurance	Sustain repeated contractions for longer, improves performance.	Circuit training, high-rep resistance, core exercises
Flexibility	Improves range of movement, posture and reduces injury.	Stretching, yoga, Pilates
Body Composition	Improves efficiency, speed and health.	Balanced diet, aerobic training, resistance training
Agility	Change direction quickly and efficiently.	Agility runs, shuttle runs, cone drills
Balance	Maintain control and stability in movement.	Balance exercises, gymnastics, core stability work
Coordination	Use body parts together smoothly and effectively.	Skill practice, ball games, patterned drills
Power	Combine strength and speed to produce explosive effort.	Plyometrics, Olympic lifts, sled pushes
Reaction Time	Respond quickly to a stimulus.	Reaction ball drills, partner reaction games
Speed	Move quickly from one point to another.	Sprints, interval training, speed drills

3.2.2–3.2.4 Fitness Tests

The value of fitness testing: identifies strengths and weaknesses, sets goals, monitors progress, motivates and helps plan training.

COMPONENT	TEST	PROTOCOL (SUMMARY)	WHAT IT MEASURES
Cardiovascular Fitness	Cooper 12-min Run	Run as far as possible in 12 minutes.	Distance covered (m)
	Harvard Step Test	Step up & down at set rate for 5 min.	Fitness index (better score = better fitness)
Agility	Illinois Agility Run Test	Sprint, weave through cones as per diagram.	Time (s)
Strength	Grip Dynamometer	Squeeze dynamometer as hard as possible.	Grip strength (kg)
Muscular Endurance	1-min Sit-Up	Maximum sit-ups in 60 seconds.	Reps completed
	1-min Press-Up	Maximum press-ups in 60 seconds.	Reps completed
Speed	30 m Sprint	Sprint 30 metres as fast as possible.	Time (s)
Power	Vertical Jump	Jump vertically and reach height.	Jump height (cm)
Flexibility	Sit and Reach	Reach forward from sitting position.	Distance reached (cm)

3.3 THE PRINCIPLES OF TRAINING AND THEIR APPLICATION TO PERSONAL EXERCISE / TRAINING PROGRAMMES

3.3.1 Principles of Training (FITT & more)

Individual Needs	Programmes should meet the needs of the individual.
Specificity	Training should be specific to the activity or sport.
Progressive Overload	Gradually increase the demands of training.
FITT	Frequency, Intensity, Time, Type.
Overtraining	Too much training without enough recovery leads to poor performance and injury.
Reversibility	Stop training and fitness gains are lost.

Thresholds of Training

Aerobic target zone: 60%–80% of MaxHR
Anaerobic target zone: 80%–90% of MaxHR

(220) – (your age) = MaxHR

(MaxHR) x (60% to 80%) = aerobic training zone

(MaxHR) x (80% to 90%) = anaerobic training zone

3.3.2 Factors to Consider

- ✓ Fitness / sport requirements
- ✓ Facilities available
- ✓ Current level of fitness



3.3.3 Training Methods

Methods used to develop specific components of fitness.

- **Continuous** – steady-state activity
- **Fartlek** – speed play
- **Circuit** – stations, minimal rest
- **Interval** – work / rest intervals
- **Plyometrics** – explosive jumps
- **Weight / Resistance** – overload training
- **Fitness Classes** – e.g. body pump, aerobics, Pilates, yoga, spinning

Advantages & Disadvantages

Methods vary in time, enjoyment, cost, specificity and risk of injury.

3.4 THE LONG-TERM EFFECTS OF EXERCISE

3.4.1–3.4.2 General Long-Term Effects

- ✓ Able to train for longer and more intensely.
- Improved performance and reduced fatigue.



3.4.3 Muscular–Skeletal System Benefits



- Increased bone density.
- Increased strength of ligaments and tendons.
- Muscle hypertrophy (increase in muscle size).
- Rest is essential for adaptations to take place.
- Allow time to recover before the next training session.



3.4.4 Cardio–Respiratory System Benefits





- Decreased resting heart rate.
- Faster recovery.
- Increased resting stroke volume and maximum cardiac output.
- Increased size and strength of heart.
- Increased capillarisation.
- Increased number of red blood cells.
- Lower resting blood pressure due to more elastic muscular wall of veins and arteries.
- Increased lung capacity / volume and vital capacity.
- Increased number of alveoli.
- Increased strength of diaphragm and external intercostal muscles.

3.5 HOW TO OPTIMISE TRAINING AND PREVENT INJURY

3.5.1 PARQ (Physical Activity Readiness Questionnaire)

Use a PARQ to assess personal readiness for training and adapt training based on results.



PARQ

3.5.2 Injury Prevention

- ✓ Apply principles of training to avoid overuse injuries.
- ✓ Follow rules of the activity.
- ✓ Use appropriate protective clothing and equipment.
- ✓ Check equipment and facilities before use.



3.5.3 Injuries That Can Occur



Concussion | Fracture | Dislocation | Sprain | Torn Cartilage | Soft Tissue Injury (strain, tennis elbow, golfers elbow, abrasions)

3.5.4 RICE

R Rest



I



C



E Elevation



3.5.5 Performance-Enhancing Drugs (PEDs)

Can have short-term gains but serious health risks and are against the rules.

Examples

- Anabolic steroids
- Beta blockers
- Diuretics
- Narcotic analgesics
- Peptide hormones (EPO, GH)
- Stimulants
- Blood doping



Negative Effects

- Damage to organs and hormones
- Increased risk of heart attack / stroke
- Mood changes
- Addiction
- Banned – can lead to disqualification and long-term harm

3.6 EFFECTIVE USE OF WARM UP AND COOL DOWN

3.6.1 Purpose and Importance

- ✓ Prepare the body for activity.
- ✓ Increase performance.
- ✓ Reduce risk of injury.
- ✓ Cool down helps remove waste products and aids recovery.



3.6.3 Activities Included



KEY
PEDs = Performamg Drugs

Warm-Up Activities

- Light cardio (jog / cycle)
- Dynamic stretches
- Mobility exercises
- Sport-specific drills



Cool-Down Activities

- Light activity (walk / easy jog)
- Static stretching
- Breathing exercises
- Rehydration



GCSE PE
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Component 2
Topics 1-3

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PE COMPONENT 2 TOPIC 1 HEALTH, FITNESS AND WELLBEING

1.1 PHYSICAL, EMOTIONAL AND SOCIAL HEALTH, FITNESS AND WELLBEING

1.1.1 Physical Health

Increasing physical ability by improving components of fitness improves health and reduces health risks. Benefits are achieved by:

- Stronger heart
- Better lung function
- Healthy weight
- Stronger bones & immune system
- Lower risk of disease (e.g. CHD, diabetes)

1.1.2 Emotional Health

Physical activity and sport can improve emotional/ psychological health. Benefits are achieved by:

- Improves mood
- Reduces stress and anxiety
- Boosts self-esteem and confidence
- Improves sleep quality
- Provides sense of achievement

1.1.3 Social Health

Physical activity and sport can improve social health. Benefits are achieved by:

- Meet new people
- Builds friendships and teamwork
- Improves communication
- Inclusion and belonging
- Respects others and fair play

1.1.4 Impact of Fitness on Wellbeing

POSITIVE EFFECTS

- ✓ More energy
- ✓ Better physical appearance
- ✓ Lower stress and anxiety
- ✓ Better quality of life
- ✓ Reduced risk of disease

NEGATIVE EFFECTS (low fitness)

- ✗ Fatigue
- ✗ Low self-esteem
- ✗ Poor sleep
- ✗ Higher risk of disease
- ✗ Reduced quality of life

1.1.5 Promote personal health by designing, developing, monitoring and evaluating a personal exercise programme to meet specific needs.

DESIGN	DEVELOP	MONITOR	EVALUATE
Set SMART goals & plan activities	Follow plan with correct training methods	Track progress (e.g. tests, diary, apps)	Analyse results & make improvements

1.1.6 Lifestyle choices

Key areas to consider:

- Diet
- Activity level
- Work/Rest/ Sleep balance
- Recreational drugs (alcohol, nicotine)

1.1.7 Positive and negative impact of lifestyle choices

POSITIVE CHOICES

- ✓ Balanced diet
- ✓ Regular physical activity
- ✓ Good rest and sleep
- ✓ Limited/No alcohol & nicotine

→ Better health, fitness and wellbeing

NEGATIVE CHOICES

- ✗ Poor diet (high fat, sugar, salt)
- ✗ Physical inactivity
- ✗ Poor sleep
- ✗ Alcohol misuse & smoking

→ Poor health, higher disease risk and lower wellbeing

⚠ Example: Smoking → bronchitis, lung cancer, heart disease, poor fitness.

1.2 THE CONSEQUENCES OF A SEDENTARY LIFESTYLE

1.2.1 A sedentary lifestyle and its consequences

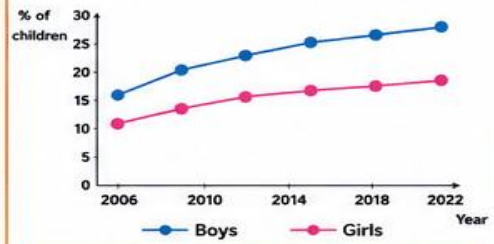
- Overweight
- Overfat
- Obese
- Coronary heart disease
- High blood pressure
- Diabetes
- Depression
- Increased risk of osteoporosis
- Loss of muscle tone
- Poor posture

Impact on components of fitness:

↓ Cardiovascular fitness, ↓ Strength, ↓ Muscular endurance, ↓ Flexibility, ↓ Agility, ↓ Balance, ↓ Coordination, ↓ Speed

1.2.2 Interpretation and analysis of data associated with trends in physical health issues

Example: Increase in obesity levels in 11–15 year olds (England)



Key points:

- Both boys and girls show an increasing trend.
- Sedentary lifestyles contribute to rising obesity.
- This increases long-term health risks.

1.3 ENERGY USE, DIET, NUTRITION AND HYDRATION

1.3.1 Balanced Diet

A balanced diet provides the right ratio of nutrients to maintain a healthy lifestyle and optimise performance.

1.3.2 Role and importance of macronutrients

NUTRIENT	ROLE	IMPORTANCE FOR PERFORMERS	EXAMPLES
Carbohydrates	Main source of energy	Fuel for training and performance; carbohydrate loading for endurance athletes	Bread, pasta, rice, potatoes, fruit
Proteins	Growth and repair of body tissues	Repair muscles; timing of protein intake important for power athletes (post-exercise)	Meat, fish, eggs, dairy, beans
Fats	Long-term energy store, insulation, protects organs	Supports hormones, joint health; needed in moderation for sustained energy	Oils, nuts, seeds, avocado

1.3.3 Role and importance of micronutrients, water and fibre

- **Vitamins** — Support body functions and immunity
- **Minerals** — Support bones, blood and nerve function
- **Water** — Regulates body temperature, transports nutrients
- **Fibre** — Aids digestion and helps prevent constipation

1.3.4 Factors affecting optimum weight

- Sex
- Height
- Bone structure
- Muscle girth

1.3.5 Variation in optimum weight by role

Optimum weight varies according to the role in a sport.

e.g. sprinters vs. distance runners, forwards vs. goalkeepers.

1.3.6 Correct energy balance

Energy IN (food & drink) = Energy OUT (activity)

Balanced IN = OUT maintains healthy weight

1.3.7 Hydration for physical activity and sport

- ✓ Essential for performance, thermoregulation and recovery.
- ✓ Drink before, during and after exercise.
- ✓ Replace fluids and electrolytes lost through sweating.

PE COMPONENT 2 TOPIC 2 SPORT PSYCHOLOGY

2.1 CLASSIFICATION OF SKILLS (BASIC/COMPLEX, OPEN/CLOSED)

2.1.1 Classification of a range of sports skills Using the continua

OPEN – CLOSED	BASIC (SIMPLE) – COMPLEX	LOW – HIGH ORGANISATION
Open skills are influenced by the environment. ⟷ Closed skills are not influenced by the environment.	Basic skills are simple to learn and have fewer components. Complex skills are difficult to learn and have many components.	Low organisation skills have a predictable pattern. High organisation skills have an unpredictable pattern.
EXAMPLES OF SKILLS		
Open: Football dribbling	Basic: Passing	Low organisation: 100 m sprint
Closed: Free throw in netball	Complex: Gymnastics floor routine	High organisation: Tennis singles match

2.1.2 Practice structures

Massed Practice	Distributed Practice	Fixed Practice	Variable Practice
Practising a skill repeatedly with no rest.	Practising a skill with rest/intervals between repetitions or sets.	Repetition of the same skill in a stable environment.	Varying the skill, conditions or environment.

2.1.3 Application of knowledge

Use your understanding of skill classification and practice structures to choose the most relevant practice to develop a range of skills.

2.2 THE USE OF GOAL SETTING AND SMART TARGETS TO IMPROVE AND/OR OPTIMISE PERFORMANCE

2.2.1 The use of goal setting

Goal setting helps performers to:

- ✓ Focus attention and effort
- ✓ Increase motivation
- ✓ Measure progress
- ✓ Build confidence
- ✓ Improve and/or optimise performance

2.2.2 SMART targets

Principles of SMART targets and the value of each.

S	**Specific** – clear and precise.	Provides focus
M	**Measureable** – you can track progress.	Shows progress
A	**Achievable** – realistic and attainable.	Builds confidence
R	**Realistic** – relevant and worthwhile.	Keeps it relevant
T	**Time-bound** – set a deadline.	Creates urgency

2.2.3 Setting and reviewing targets

1. **Set target** – Decide what you want to achieve.
2. **Plan** – Decide how you will achieve it.
3. **Monitor** – Check progress regularly.
4. **Review** – Evaluate and adjust if needed.

EXAMPLE

Specific:	Improve 100 m sprint time.
Measureable:	Reduce time to under 13.5 seconds.
Achievable:	With training and effort.
Realistic:	Suitable for my ability and resources.
Time-bound:	Achieve by 12 weeks from today.

2.3 GUIDANCE AND FEEDBACK ON PERFORMANCE

2.3.1 Types of guidance

Given before or during performance.

Visual	Demonstrations, diagrams, videos.
Verbal	Instructions or cues (e.g. "keep your head up").
Manual	Hands-on help from coach (e.g. guiding movement).
Mechanical	Use of equipment or technology (e.g. launch monitor).

2.3.2 Advantages and disadvantages

Appropriateness depends on the skill, context and performer's skill level.

GUIDANCE	ADVANTAGES	DISADVANTAGES
Visual	Easy to understand; can be replayed.	May not suit all learners.
Verbal	Quick; no equipment needed.	Can be misinterpreted; too much can confuse.
Manual	Very affective for early learners.	Physical contact may not be suitable.
Mechanical	Objective data; precise.	Expensive; may overcomplicate.

2.3.3 Types of feedback

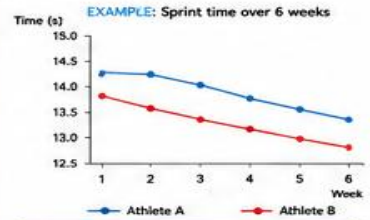
Given after or during performance.

Intrinsic	Internal feelings (e.g. how it felt).
Extrinsic	From an external source (e.g. coach, teammate).
Concurrent	Given during performance.
Terminal	Given after performance is complete.

2.3.4 Interpretation and analysis of feedback data

Use graphical representations to analyse performance.

EXAMPLE: Sprint time over 6 weeks



Analysis: Both athletes improved. Athlete A achieved a greater improvement.

2.4 MENTAL PREPARATION FOR PERFORMANCE

2.4.1 Mental preparation

Helps performers to be confident, focused and ready to perform.

- ✓ Reduces anxiety
- ✓ Improves focus
- ✓ Builds confidence
- ✓ Enhances motivation
- ✓ Prepares for success

Warm up

Mental and physical warm up gets the performer ready.

- Increase heart rate
- Loosen muscles
- Focus the mind
- Develop routine and confidence

Mental rehearsal

Imagining successful performance in the mind.

- Visualise the activity
- Imagine success
- Anticipate challenges
- Improves technique and confidence

KEY POINT

Understanding how skills are classified, how practice and feedback are used, how goals are set and how the mind is prepared can all help performers improve, perform better and enjoy sport more.

REMEMBER!

- ✓ Choose the right practice for the right skill.
- ✓ Set SMART targets and review them regularly.
- ✓ Use the right guidance and feedback at the right time.
- ✓ Prepare your mind as well as your body.

SMART

S Specific · M Measureable · A Achievable · R Realistic · T Time-bound

PE COMPONENT 2 TOPIC 3 SOCIO-CULTURAL INFLUENCES

3.1 ENGAGEMENT PATTERNS OF DIFFERENT SOCIAL GROUPS IN PHYSICAL ACTIVITY AND SPORT

3.1.1 Participation rates in physical activity and sports and the impact of personal factors

Gender — Males tend to participate more in sport. Females increasing in many activities.

Age — Participation highest in children and young adults. Declines with age, especially over 55.

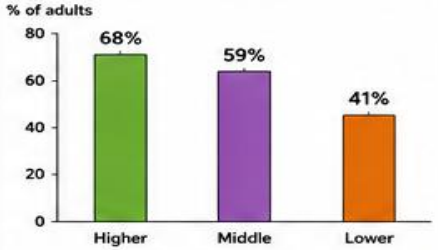
Socio-economic group — Higher socio-economic groups more likely to participate due to access, facilities and affordability.

Ethnicity — Participation varies between ethnic groups due to cultural background, access and barriers.

Disability — People with disabilities participate less due to physical, attitudinal, social and environmental barriers.

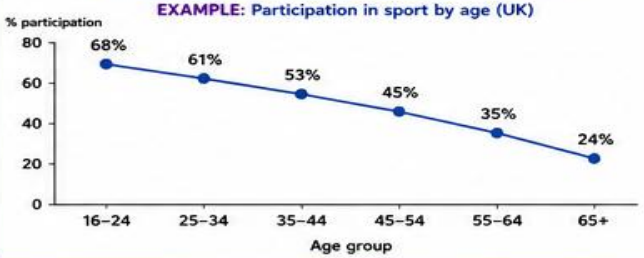
EXAMPLE DATA

Adults meeting physical activity guidelines (at least 150 mins per week) by socio-economic group (UK)



3.1.2 Interpretation and analysis of graphical representation of data associated with trends in participation rates

EXAMPLE: Participation in sport by age (UK)



Key points:
- ✓ Participation is highest in young people (16–24).
- ✓ It steadily decreases as age increases.
- ✓ Lowest participation in older adults (65+).
- ✓ Targeted initiatives can help increase participation in older age groups.

3.2 COMMERCIALISATION OF PHYSICAL ACTIVITY AND SPORT

3.2.1 The relationship between commercialisation, the media and physical activity and sport

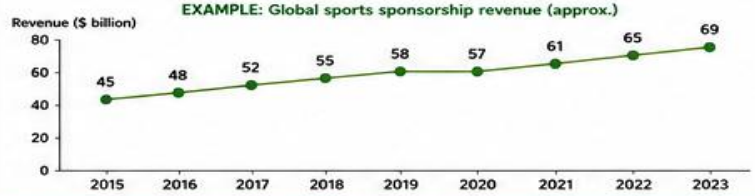
Commercialisation (sponsors, advertisers, merchandise, events) → The Media (TV, online, social media, apps) → Physical Activity and Sport → Increased exposure, participation and interest

3.2.2 Advantages and disadvantages of commercialisation and the media

GROUP	ADVANTAGES	DISADVANTAGES
Sponsor	Brand promotion, increased sales, positive publicity.	High costs, risk if the sport/player has negative publicity.
Sport	More funding, improved facilities, greater profile and growth.	Focus on profit over participation, loss of traditional values.
Player/Performer	Higher earnings, better facilities, greater exposure and opportunities.	Pressure to perform, loss of privacy, risk of burnout.
Spectator	Better quality broadcasts, more choice, entertainment and convenience.	Expensive tickets/TV packages, over-commercialised, less local focus.

3.2.3 Interpretation and analysis of graphical representation of data associated with trends in the commercialisation of physical activity and sport

EXAMPLE: Global sports sponsorship revenue (approx.)



Key points:
- ✓ Overall revenue shows a rising trend.
- ✓ Small dip in 2020 linked to the COVID-19 pandemic.
- ✓ Commercialisation of sport continues to grow strongly.

3.3 ETHICAL AND SOCIO-CULTURAL ISSUES IN PHYSICAL ACTIVITY AND SPORT

3.3.1 The different types of sporting behaviour: sportsmanship, gamesmanship, and the reasons for, and consequences of, deviance at elite level

SPORTSMANSHIP
- ✓ Respect rules, officials and opponents
- ✓ Fair play and ethical behaviour
- ✓ Promotes enjoyment and respect

Reasons: Values, ethics, respect for others, positive role models.

Consequences: Positive image, mutual respect, long-term success.

GAMESMANSHIP
- ✓ Trying to gain an unfair advantage within the rules
- ✓ Exploiting rules or the referee
- ✓ Against the spirit of the game

Reasons: Desire to win, pressure, perceived benefits.

Consequences: Damages reputation, risk of sanctions, loss of respect.

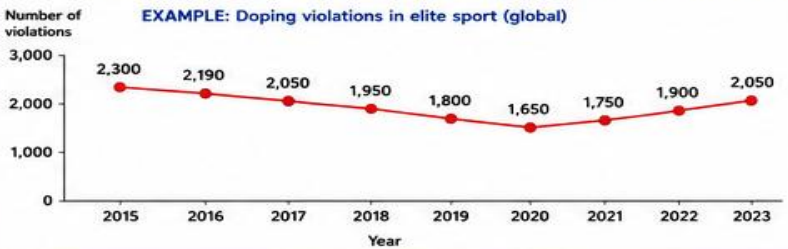
DEVIANCE AT ELITE LEVEL
- ✓ Breaking rules or laws in sport
- ✓ E.g. violence, cheating, doping, match-fixing
- ✓ Serious breaches of ethics

Reasons: Pressure to win, money, fame, poor role models.

Consequences: Bans, fines, damage to career, loss of public trust.

3.3.2 Interpretation and analysis of graphical representation of data associated with trends in ethical and socio-cultural issues in physical activity and sport

EXAMPLE: Doping violations in elite sport (global)



Key points:
- ✓ Overall decreasing trend from 2015–2020.
- ✓ Slight increase again since 2021.
- ✓ Greater awareness, testing and education may reduce violations.
- ✓ Shows the ongoing challenge of unethical behaviour in elite sport.

KEY MESSAGE Socio-cultural factors influence who participates in physical activity and sport, how sport is promoted and funded, and the behaviours that shape a positive and fair sporting environment for everyone.

Why it matters: Understanding these influences helps us promote inclusion, fairness, ethical behaviour and the positive impact of sport on society.

REMEMBER
- ✓ Consider the data and what it shows.
- ✓ Think about different perspectives (sponsors, players, spectators).
- ✓ Promote fairness, respect and inclusion in sport.