



Aspire Achieve Thrive

Autumn Term
Term 1
Sport
Year 11

Name: _____

Tutor: _____

Year 11 Homework Timetable

Monday	Science Task 1	Ebacc Option A Task 1	Option C Task 1
Tuesday	Sparx Science	Option B Task 1	Modern Britain Task 1
Wednesday	English Task 1	Science Task 2	Option C Task 2
Thursday	Ebacc Option A Task 2	Option B Task 2	Sparx Catch Up
Friday	Modern Britain Task 2	English Task 2	Sparx Maths

Sparx Science

- Complete 100% of their assigned homework each week

Sparx Maths

- Complete 100% of their assigned homework each week

Option A (EBACC)
French
Geography
History

Option B
Art
Business Studies
Catering
Childcare
Triple Science
Travel and Tourism
Music
Sport
IT

Option C
Business Studies
Catering
Computer Science
Drama
Health & Social Care
Media Studies
Photography
Sport
Sociology

Half Term 1 (8 weeks) - Year 11

Week / Date	Homework task 1 Cornell Notes	Homework task 2 Exam Question
Week 1 2nd September 2024	Revision Cards on: Components of Fitness	Question: Identify two physical components of fitness that are required for a midfielder in football or a centre in netball and explain how they benefit their performance in a match. (4)
Week 2 9th September 2024	Cornell Notes on: Components of Fitness	Question: Identify two skill components of fitness that are required for a basketballer and explain how they benefit their performance in a match. (4)
Week 3 16th September 2024	Revision Cards on: Principles of Training	Question: Identify a component of fitness that a marathon runner would require, and compare this to a component of fitness a 100m sprinter would require. (4)
Week 4 23rd September 2024	Cornell Notes on: Importance of fitness	Question: Identify and explain how an athlete might use each part of FITT to improve their running time. (4)
Week 5 30th September 2024	Revision Cards on: Exercise Intensity	Question: Jodie is 28 years old. Work out her maximum heart rate, then her upper and lower training thresholds. Show your workings out. (4)
Week 6 7th October 2024	Cornell Notes on: Exercise Intensity	Question: Identify and explain the four pre-test procedures required to complete before a fitness test. (8)
Week 7 14th October 2024	Revision Cards on: Importance of Fitness Testing	Question: Identify two physical components of fitness that are required for a midfielder in football or a centre in netball and explain how they benefit their performance in a match. (6)
Week 8 21st October 2024	Cornell Notes on: Importance of Fitness Testing	Question: Describe how a coach or a participant could use fitness testing to improve their performance. (6)

Half Term 2 (7 weeks) - Year 11

Week / Date	Homework task 1 Cornell Notes	Homework task 2 Exam Question
Week 9 4th November 2024	Revision Cards on: Physical fitness Tests	Question: Gymnasts require a wide range of movement for their events. Identify what flexibility fitness tests would be beneficial and the equipment required. (6)
Week 10 11th November 2024	Cornell Notes on: Fitness Testing Equipment	Question: Table tennis requires quick reactions for their games. Identify what reaction time fitness tests would be beneficial and the equipment required. (6)
Week 11 18th November 2024	Revision Cards on: Skill related fitness Tests	Question: Triathletes require high levels of aerobic endurance to be successful. Identify 3 aerobic endurance fitness tests that would be beneficial and the equipment required. (6)
Week 12 25th November 2024	Mock Exams	Mock Exams
Week 13 2nd December 2024	Mock Exams	Mock Exams
Week 14 9th December 2024	Cornell Notes on: Fitness training methods for physical components of fitness	Question: Boxers require muscular endurance to complete their event, identify and explain how they could complete circuit training to benefit their event. (6)
Week 15 16th December 2024	Cornell Notes on: Fitness training methods for skill-related components of fitness	Question: Long jumpers require power to complete their event, identify and explain how they could complete plyometric training to benefit their event. (6)

Week 1&2 - Components of Physical Fitness

Physical:

- Muscular Endurance: the ability of the muscular system to continue to contract at a light to moderate intensity to allow repetitive movements throughout a long event or game.
- Aerobic Endurance: the ability of the cardiorespiratory system to supply oxygen and nutrients to the muscles to sustain low to medium intensity work to delay fatigue.
- Muscular Strength: the maximum force that can be generated by a muscle or muscle group to improve forceful movements within an activity.
- Speed: distance divided by time to reduce time taken to move the body or a body part in an event or game.
- There are three types of speed:
 1. Accelerative speed – sprints up to 30 m
 2. Pure speed- sprints up to 60 m
 3. Speed endurance- sprints with a short recovery period (rest) in between.
- Body Composition: the relative ratio of fat mass to fat-free mass in the body allowing variation in body composition dependent on the sport.
- Flexibility: the range of motion possible at a joint to allow improvements in technique.

Week 1&2 - Components of Skill Related Fitness

Skill related:

- Coordination: The smooth flow of movement needed to perform a motor task efficiently (wasting as little energy as possible) and accurately (without going wrong).
- Agility: the time taken between a stimulus and the start of a response, useful in fast-paced sports to make quick decisions about what to do.
- Reaction time: The time that it takes for a sports performer to respond to a stimulus and initiate (start) their response.
- Balance: the ability to maintain centre of mass over a base of support, useful to maintain positions in performance sports (static balance) or when on the move in any other sporting situation (dynamic balance).
- Power: the product of speed and strength to allow for explosive movements in sport.

Week 3&4 - The importance of fitness for successful participation in sport

Week 3&4 - Principles of Training

Types of sports requiring specific components of fitness:

- Aerobic endurance – events/sports lasting more 30 minutes
- Muscular endurance – events/sports lasting more 30 minutes
- Muscular strength – activities requiring force, e.g. throwing events
- Speed – activities requiring fast movement, e.g. sprinting
- Flexibility – activities requiring a wide range of movement around a joint, e.g. gymnastics, martial arts
- Body composition – low body fat, e.g. gymnastics, high muscle mass, e.g. sprinters
- Power – activities requiring explosive movement e.g. gymnastics, basketball
- Agility – activities requiring quick changes of direction, e.g. dodging the opposition in a team game, freestyle skiing
- Reaction time – any activity where a quick decision or response to a stimulus is needed
- Balance – an activity requiring the control of the distribution of weight or to remain upright and steady
- Coordination – any activity requiring the movement of two or more body parts and can include the use of sporting

The basic principles of training (FITT):

- Frequency: the number of training sessions completed over a period of time, usually per week
- Intensity: how hard an individual will train
- Time: how long an individual will train for
- Type: how an individual will train by selecting a training method to improve a specific component of fitness.

Additional principles of training (SPORVAIR):

- Specificity definition: training should meet the needs of the sport, or physical/skill-related fitness goals to be developed
- Progressive overload definition: in order to progress, training needs to be demanding enough to cause the body to adapt, improving performance
- Reversibility definition: if training stops, or the intensity of training is lowered, fitness gains from training are lost
- Variation definition: altering types of training to avoid boredom and maintain motivation to train
- Adaptation definition: changes to the body due to increased training loads
- Individual differences/needs definition: training should meet the needs of an individual
- Rest and recovery definition: to allow the body to recover and adapt.

Week 5&6 - Exercise Intensity

Heart rate: The number of times the heart beats per minute (bpm)
Maximum heart rate – also called HR max

Equation: $HR\ max = 220 - age\ (years)$

e.g. the maximum heart rate of a 25 year old is 195 bpm

Heart rate training zones:

Aerobic training zone - 50%-80% of HR max

Anaerobic training zone - 80-90% of HR max

Working out target zones:

1. Calculate maximum heart rate (HR max) $HR\ max = 220 - age\ (years)$

2. Find upper training threshold = $HR\ max \times 0.8$

3. Find lower training threshold = $HR\ max \times 0.5$

e.g. $220 - 25\ (age) = 195\ bpm$

$195 \times 0.8 = 156\ bpm$ (upper training threshold)

$195 \times 0.60 = 97.5\ bpm$ (lower training threshold)

Target zone = 97.5 bpm – 156 bpm

The RPE BORG Scale

The numbers on the scale represent the different levels of exercise intensity.

Level 6 - level 20

The BORG can be used to estimate a person's heart rate $HR\ (bpm) = RPE \times 10$

e.g. a performer says they are working extremely hard and give a RPE scale rating of 19 their estimated heart rate is: $HR\ (bpm) = RPE \times 10$

You can also estimate a RPE scale/Borg scale rating from a heart rate (bpm):

$RPE\ scale = HR\ (bpm) \div 10$.

*RPE - rating of perceived exertion

Free weight training reps and load

- Muscular endurance - **low load / high rep** 50-60% 1RM / 20 reps
- Maximal strength - **high load / low rep** 90% 1RM - 6 reps

Week 7&8 - Importance of fitness testing and requirements for administration of each fitness test

Reasons for fitness testing:

- gives baseline data for monitoring/improving performance
- can design training programmes based on test results
- determine if training programmes are working
- results can give a performer something to aim for
- provide goal setting aims.

Pre-test procedures:

- calibration of equipment
- complete informed consent
- complete Physical Activity Readiness Questionnaire (PAR-Q)
- participant pre fitness test check e.g. prior exercise participation.

Reliability of test:

- consistency of results
- factors affecting reliability:
 - – calibration of equipment
 - – motivation of the participant
 - – conditions of the testing environment (inside versus outside conditions)
 - – experience of the person administering the test
 - – compliance with standardised test procedure.

Validity of results - this is affected by the administration and accuracy of the test by the testers.

Practicality:

- cost
- time taken to perform the test
- time taken to set up the test
- time taken to analyse data
- number of participants that can take part in the test at any time.

Week 9-11 - Fitness test methods for components of physical fitness

Aerobic endurance:

- Multi-stage fitness test, also known as the bleep test (20 metre distance)
 - Equipment - Tape measure, MSFT recording or app, speakers/CD player, cones.
- Yo-Yo test
 - Equipment - Tape measure, MSFT recording or app, speakers/CD player, cones.
- Harvard step test
 - Equipment - metronome, stopwatch, ruler/tape measure, bench.
- 12-minute Cooper run or swim.
 - Equipment - stopwatch, whistle, cones, tape measure.

Muscular endurance:

- One-minute press-up
- One-minute sit-up
- Timed plank test
 - Equipment - stopwatch and a mat

Flexibility:

- Sit and reach test
 - Equipment - Sit and reach box, ruler or tape measure, mat
- Calf muscle flexibility test
 - Equipment - Mat, wall
- Shoulder flexibility test.
 - Equipment - 2m rope, tape measure

Speed:

- 30 metre sprint test
- 30 metre flying sprint.
 - Equipment - Cones, tape measure, stopwatch

Muscular strength:

- Grip dynamometer
 - Equipment - handgrip dynamometer
- 1 Rep Max.
 - Equipment - fixed or free weights

Body composition:

- Body Mass Index (BMI)
 - Equipment - scales, tape measure/stadiometer, calculator
- Bioelectrical Impedance Analysis (BIA) -
 - Equipment - BIA machine
- Waist to hip ratio.
 - Equipment - tape measure

Week 9-11 - Fitness test methods for components of skill-related fitness

Agility:

- Illinois agility run test
 - Equipment - Tape measure, cones, stopwatch
- T Test
 - Equipment - Tape measure, cones, stopwatch

Balance:

- stork stand test
 - Equipment - Stopwatch, mat
- Y balance test
 - Tape measure/ruler, stopwatch, mat

Coordination:

- Alternate-Hand Wall-Toss test
 - Tennis ball, stopwatch, tape measure, wall
- Stick flip coordination test
 - 60cm long stick, 2cm in diameter with tape or paint at one end.

Power:

- Vertical jump test
 - Vertical test jump board or tape measure, chalk, wall
- Standing long/broad jump
 - Tape measure
- Margaria-Kalamen power test
 - Tape measure, scales, cone, stairs, stopwatch

Reaction time:

- Ruler drop test
 - Metre ruler
- Online reaction time test (reaction test timer)
 - App, smartphone/tablet

Week 14 - Fitness training methods for physical components of fitness	Week 15 - Fitness training methods for skill-related components of fitness
<p><u>Aerobic endurance:</u></p> <ul style="list-style-type: none"> • Continuous training – steady pace and moderate intensity for a minimum period of 30 minutes • Fartlek training – the intensity of training is varied by running at different speeds and/or over different terrain • Interval training – work period followed by a rest or recovery period <ul style="list-style-type: none"> ○ for aerobic endurance decrease the number/length of rest periods and decrease work intensity (compared to speed training) • Circuit training – use of a number of stations/exercises completed in succession with minimal rest periods in between to develop aerobic endurance. <p><u>Flexibility:</u></p> <ul style="list-style-type: none"> • Static active – the performer applies internal force to stretch and lengthen the muscle • Static passive – requires the help of another person or an object, e.g. wall to apply external force causing the muscle to stretch • Proprioceptive Neuromuscular Facilitation (PNF) technique – the technique involves the use of a partner or immovable object, isometric muscle contractions to inhibit the stretch reflex. <p><u>Muscular endurance:</u></p> <ul style="list-style-type: none"> • Free weights and fixed resistance machines – high repetitions and low loads • Circuit training – using body resistance exercises or weights with low loads and high repetitions. <p><u>Muscular strength training:</u></p> <ul style="list-style-type: none"> • Free weights and fixed resistance machines – high loads and low repetitions. <p><u>Speed:</u></p> <ul style="list-style-type: none"> • Acceleration sprints – pace is gradually increased from a standing or rolling start to jogging, then to striding, and then to a maximal sprint • Interval training – work period followed by a rest or recovery period. <ul style="list-style-type: none"> ○ For speed short, high intensity work periods, increasing the number of rest periods and increasing work intensity (compared to aerobic endurance training) • Resistance drills – hill runs, parachutes, sleds, bungee ropes, resistance bands. 	<p><u>Agility:</u></p> <ul style="list-style-type: none"> • Speed Agility and Quickness training (SAQ) – drills used to develop physical ability and motor skills. <p>SAQ training is a mixture of dynamic movements that aim to increase a performer's speed and agility, To train agility. you need to take part in sport-specific training which includes speed, agility and quickness (SAQ) training principles. Generally involves you sprinting and then changing direction over a set course. This could be dribbling the ball while sprinting around cones set up on the pitch or having teammates act as opponents and dribbling at speed around them while keeping control of the ball and keeping the ball away from them.</p> <p><u>Power:</u></p> <ul style="list-style-type: none"> • Plyometrics – lunging, bounding, incline press-ups, barrier hopping and jumping. • Eccentric muscle contraction is where the muscle lengthens when it contracts. • Concentric muscle contraction is where the muscle shortens when it contracts. <p>Think of your muscle as an elastic band - the elastic band will fire further if you stretch it further back before letting it go. Plyometric training takes the muscle through an eccentric muscle action that lengthens and stretches the muscle before a powerful concentric muscle action. The shorter the time between the stretching phase and shortening, the more power can be generated. Plyometric training is any exercise that enables a muscle to reach maximum force in the fastest possible time. Over time, this makes the body create a faster rate of contraction, which will improve power.</p> <p><u>Balance:</u></p> <ul style="list-style-type: none"> • Use of specific training exercises that require balancing on a reduced size base of support. <p><u>Coordination:</u></p> <ul style="list-style-type: none"> • Use of specific training exercises using two or more body parts together. <p><u>Reaction time:</u></p> <ul style="list-style-type: none"> • Use of specific training exercises to practise quick responses to an external stimulus.

STEP 2: CREATE CUES

What: Reduce your notes to just the essentials.

What: Immediately after class, discussion, or reading session.

How:

- Jot down key ideas, important words and phrases
- Create questions that might appear on an exam
- Reducing your notes to the most important ideas and concepts improves recall. Creating questions that may appear on an exam gets you thinking about how the information might be applied and improves your performance on the exam.

Why: Spend at least ten minutes every week reviewing all of your previous notes. Reflect on the material and ask yourself questions based on what you've recorded in the Cue area. Cover the note-taking area with a piece of paper. Can you answer them?

STEP 1: RECORD YOUR NOTES

What: Record all keywords, ideas, important dates, people, places, diagrams and formulas from the lesson. Create a new page for each topic discussed.

When: During class lecture, discussion, or reading session.

How:

- Use bullet points, abbreviated phrases, and pictures
- Avoid full sentences and paragraphs
- Leave space between points to add more information later

Why: Important ideas must be recorded in a way that is meaningful to you.

STEP 3: SUMMARISE & REVIEW

What: Summarise the main ideas from the lesson.

What: At the end of the class lecture, discussion, or reading session.

How: In complete sentences, write down the conclusions that can be made from the information in your notes.

Why: Summarising the information after it's learned improves long-term retention.

WEEK 2: Cornell Notes (Homework task 1)

Date: 9th September 2024	Topic: Components of Fitness	Revision guide page:
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links	Notes
Questions	

Summary

WEEK 4: Cornell Notes (Homework task 1)

Date: 23rd September 2024	Topic: Importance of Fitness	Revision guide page
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links	Notes
Questions	

Summary

WEEK 6: Cornell Notes (Homework task 1)

Date: 7th October 2024	Topic: Exercise Intensity	Revision guide page
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links	Notes
Questions	

Summary

WEEK 8: Cornell Notes (Homework task 1)

Date: 21st October 2024	Topic: Importance of Fitness Testing	Revision guide page
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links	Notes
Questions	

Summary

WEEK 10: Cornell Notes (Homework task 1)

Date: 1th November 2024	Topic: Fitness Testing Equipment	Revision guide page
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links	Notes
Questions	

Summary

WEEK 12: Assessment Week Revision (Homework task 1)

Date: 25th November 2024	Topic
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WEEK 12: Assessment Week Revision (Homework task 2)

Date: 25th November 2024	Topic
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WEEK 14: Cornell Notes (Homework task 1)

Date: 9th December 2024	Topic: Fitness training methods for physical components of fitness	Revision guide page
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links	Notes
Questions	

Summary

WEEK 15: Cornell Notes (Homework task 1)

Date: 15th December 2024	Topic: Fitness training methods for skill-related components of fitness	Revision guide page:
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links	Notes
Questions	

Summary

Week 1

**Revision Card on
Components of Fitness
Definitions:**

M

A

M

S

B

F

C

A

R

B

P

Answers

Week 3

Revision Card on Principles of Training Descriptions	Answers
F	
I	
T	
T	
S	
P	
O	
R	
V	
A	
I	
R	



Week 5

Revision Card on Exercise Intensity	Answers
Aerobic training zone	
Anaerobic training zone	
What levels are used on the BORG Scale?	
What is RPE	
Maximal strength load and rep description	
Strength endurance load and rep description	

Week 7

<p>Revision Card on the Importance of Fitness Testing</p> <p>Give 5 reasons for fitness testing</p> <p>Give 4 pre-test procedures</p> <p>Give 2 factors affecting reliability</p> <p>Give 2 practicality factors</p> <p>What is validity?</p>	<p>Answers</p>
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Week 9

<p>Revision Card on Physical Fitness Tests.</p> <p>What are the tests for:</p> <p>Muscular strength</p> <p>Aerobic endurance</p> <p>Muscular endurance</p> <p>Speed</p> <p>Body composition</p> <p>Flexibility</p>	<p>Answers</p>
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Week 11

Revision Card on Skill related fitness Tests	Answers
What are the tests for:	
Coordination	
Agility	
Reaction times	
Balance	
Power	

Aspire
ACHIEVE
Thrive

Develop your character

