

GCSE PE CHECKLIST

EXAM 1

ANATOMY & PHYSIOLOGY AND TRAINING

TOPIC	PAGE	DONE
Bones and Joints:		
1. Skeletal System	1 - 8	
2. Joint Structure & Movement	9 - 12	
3. Muscular System	13 - 18	
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Heart and Lungs:		
5. Respiratory System	23 - 24	
6. Cardiovascular System	25 - 26	
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7. Short Term Effects of Exercise	27 - 28	
8. Long Term Training Effects of Exercise	29 - 32	
9. Components of Fitness	33 - 40	
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11. Warm Up & Cool Down	47 - 50	
12. Prevention of Injury	51 - 54	

Name:

THE SKELETAL SYSTEM (1/4)

TOTAL Score 1

/16

TASK 1 Using the names at the bottom, identify bones 1-14

Score

/14

1			8														
2			9														
3			10														
4			11														
5			12														
6			13														
7			14														
	<table border="1"> <tr> <td>FEMUR</td> <td>CLAVICLE</td> </tr> <tr> <td>VERTEBRAE</td> <td>PATELLA</td> </tr> <tr> <td>TIBIA</td> <td>SCAPULA</td> </tr> <tr> <td>FIBULA</td> <td>ULNA</td> </tr> </table>	FEMUR	CLAVICLE	VERTEBRAE	PATELLA	TIBIA	SCAPULA	FIBULA	ULNA		<table border="1"> <tr> <td>STERNUM</td> <td>PELVIS</td> </tr> <tr> <td>HUMERUS</td> <td>RADIUS</td> </tr> <tr> <td>RIBS</td> <td>CRANIUM</td> </tr> </table>	STERNUM	PELVIS	HUMERUS	RADIUS	RIBS	CRANIUM
FEMUR	CLAVICLE																
VERTEBRAE	PATELLA																
TIBIA	SCAPULA																
FIBULA	ULNA																
STERNUM	PELVIS																
HUMERUS	RADIUS																
RIBS	CRANIUM																

TASK 2 Identify the skeleton outlined in the image on the right (15) and the other skeleton (16)

Score

/2

15		16	
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THE SKELETAL SYSTEM (1/4)

ANSWERS

TASK 1 Using the names at the bottom, identify bones 1-14

1	CRANIUM		8	CLAVICLE
2	SCAPULA		9	STERNUM
3	RIBS		10	HUMERUS
4	VERTEBRAE		11	RADIUS
5	PELVIS		12	ULNA
6	FEMUR1		13	PATELLA
7	FIBULA		14	TIBIA
	FEMUR		STERNUM	PELVIS
	VERTEBRAE		HUMERUS	RADIUS
	TIBIA		RIBS	CRANIUM
	FIBULA			

TASK 2 Identify the skeleton outlined in the image on the right (15) and the other skeleton (16)



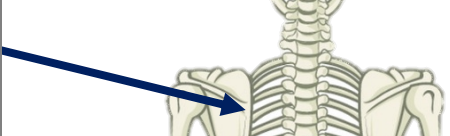

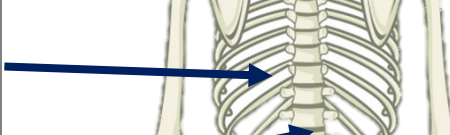

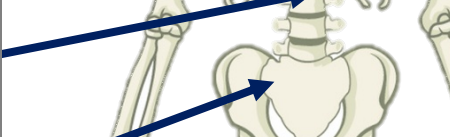



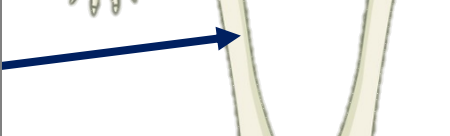

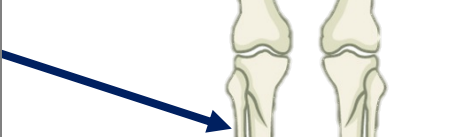
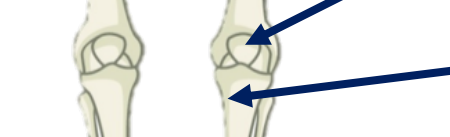






15	AXIAL SKELETON	16	APPENDICULAR SKELETON
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THE SKELETAL SYSTEM (2/4)

TOTAL Score 2

/20

TASK 3 Identify bones 1-20

1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

THE SKELETAL SYSTEM (2/4)

ANSWERS

TASK 3 Identify bones 1-20

1	CRANIUM		11	CLAVICLE
2	SCAPULA		12	STERNUM
3	RIBS		13	HUMERUS
4	VERTEBRAE		14	RADIUS
5	PELVIS		15	ULNA
6	FEMUR		16	PATELLA
7	FIBULA		17	TIBIA
8	TARSALS		18	CARPALS
9	METATARSALS		19	METACARPALS
10	PHALANGES		20	PHALANGES

THE SKELETAL SYSTEM (3/4)				TOTAL Score 3		/12			
TASK 4		Identify the functions of the skeleton (1-6)				Score		/6	
1		Bones provide an area for muscles to be attached (tendon), creating levers for movement	4		The larger bones produce red blood cells, white blood cells and platelets				
2		Bones protect vital organs and other parts of the body that would otherwise be easily damaged	5		The bones help ensure there is less stress placed on muscles and joints by aligning the body correctly				
3		The skeleton gives the body its shape and it also holds vital organs in place	6		The bones act as a store for vital minerals including Calcium, Iron, and Potassium				

FOLD ALONG THIS LINE

TASK 5		Describe the functions of the skeleton (7-12)				Score		/6	
POSTURE	7		MOVEMENT	10					
PRODUCTION	8		MINERAL STORE	11					
PROTECTION	9		SUPPORT	12					

**PLEASE TURN OVER
FOR ANSWERS**

THE SKELETAL SYSTEM (4/4)				TOTAL Score 4		/23	
TASK 6		Identify (1-6) and describe (7-12) the functions of the skeleton				Score	/12
1		7		4	10		
2		8		5	11		
3		9		6	12		

FOLD ALONG THIS LINE

TASK 7		Identify (13-18) and give an example (19-23) for each of the functions of the skeleton				Score	/11
13				16	21		
14		19		17	22		
15		20		18	23		

THE SKELETAL SYSTEM (ALL)**ANSWERS**

TASKS 4-6		Identify and describe the functions of the skeleton			
POSTURE	The bones help ensure there is less stress placed on muscles and joints by aligning the body correctly	MOVEMENT	Bones provide an area for muscles to be attached (tendon), creating levers for movement		
PRODUCTION	The larger bones produce red blood cells, white blood cells and platelets	MINERAL STORE	The bones act as a store for vital minerals		
PROTECTION	Bones protect vital organs and other parts of the body that would otherwise be easily damaged	SUPPORT	The skeleton gives the body its shape and it also holds vital organs in place		

FOLD ALONG THIS LINE

TASK 7		Identify (13-18) and give an example (19-23) for each of the functions of the skeleton					
13	POSTURE			16	MOVEMENT	21	The biceps attach to the radius to produce movement at the elbow
14	PRODUCTION	19	Larger bones like the femur help produce red blood cells, white blood cells and platelets	17	MINERAL STORE	22	Calcium, Iron, and Potassium
15	PROTECTION	20	When heading a ball in football the cranium protects the brain	18	SUPPORT	23	Cranium holds the brain in place

JOINT STRUCTURE AND MOVEMENT (1/2)					TOTAL Score 1		/27				
TASK 1		Identify the two different types of synovial joint below (1-2)					Score		/2		
1	H JOINT			2	B & S JOINT						
TASK 2		Identify the four different joints below (3-6)					Score		/4		
3	E JOINT		4	K JOINT		5	S JOINT		6	H JOINT	
TASK 3		Using the terms below identify (7-15) the articulating bones for the 4 joints (Task 2)					Score		/9		
7			10			12			14		
8			11			13			15		
9	FEMUR / HUMERUS / ULNA / TIBIA / RADIUS / SCAPULA / FEMUR / HUMERUS / PELVIS										
TASK 4		Using the terms below identify (16-23) the movement types for each joint type (Task 1)					Score		/8		
16				18				21			
17				19				22			
EXTENSION // ABDUCTION // EXTENSION // ADDUCTION // ROTATION // FLEXION // CIRCUMDUCTION // FLEXION				20				23			
TASK 5		Identify the 4 terms associated with joints using the definitions below (24-27)					Score		/4		
24	Attach muscles to bone and are both strong and a little flexible										
25	Attach bone to bone and are tough, resilient bands of connective tissue										
26	Soft connective tissue that has no blood supply, it is a shock absorber										
27	Fluid that lubricates joints to help with movement. It helps protect the joint, nourish the cartilage										

JOINT STRUCTURE AND MOVEMENT (1/2)					ANSWERS		
TASK 1 Identify the two different types of synovial joint below (1-2)							
1	HINGE JOINT			2	BALL & SOCKET JOINT		
TASK 2 Identify the four different joints below (3-6)							
3	ELBOW JOINT	4	KNEE JOINT	5	SHOULDER JOINT	6	HIP JOINT
TASK 3 Using the terms below identify (7-15) the articulating bones for the 4 joints (Task 2)							
7	HUMERUS	10	FEMUR	12	HUMERUS	14	FEMUR
8	RADIUS	11	TIBIA	13	SCAPULA	15	PELVIS
9	ULNA						
TASK 4 Using the terms below identify (16-23) the movement types for each joint type (Task 1)							
16	FLEXION			18	FLEXION	21	EXTENSION
17	EXTENSION			19	ABDUCTION	22	ADDUCTION
				20	ROTATION	23	CIRCUMDUCTION
TASK 5 Identify the 4 terms associated with joints using the definitions below (24-27)							
24	TENDON	Attach muscles to bone and are both strong and a little flexible					
25	LIGAMENT	Attach bone to bone and are tough, resilient bands of connective tissue					
26	CARTILAGE	Soft connective tissue that has no blood supply, it is a shock absorber					
27	SYNOVIAL FLUID	Fluid that lubricates joints to help with movement. It helps protect the joint, nourish the cartilage					

JOINT STRUCTURE AND MOVEMENT (2/2)				TOTAL Score 2		/25		
HINGE JOINT			BALL & SOCKET JOINT					
TASK 6		Identify two different hinge joints (1-2) and two ball and socket joints (3-4)					Score	/4
1		2		3		4		
TASK 7		Identify the articulating bones for the four different joints above (5-13)					Score	/9
5		8		10		12		
6		9		11		13		
7								
TASK 8		Identify (14-21) the different movement types for each joint type (Task 1)					Score	/8
14				16		19		
15				17		20		
				18		21		
TASK 9		Describe each of term below, associated with joints, using the definitions (22-25)					Score	/4
22	TENDON							
23	LIGAMENT							
24	CARTILAGE							
25	SYNOVIAL FLUID							

JOINT STRUCTURE AND MOVEMENT (2/2)					ANSWERS		
HINGE JOINT			BALL & SOCKET JOINT				
TASK 6 Identify two different hinge joints (1-2) and two ball and socket joints (3-4)							
1	ELBOW JOINT	2	KNEE JOINT	3	SHOULDER JOINT	4	HIP JOINT
TASK 7 Identify the articulating bones for the four different joints above (5-13)							
5	HUMERUS	8	FEMUR	10	HUMERUS	12	FEMUR
6	RADIUS	9	TIBIA	11	SCAPULA	13	PELVIS
7	ULNA						
TASK 8 Identify (14-21) the different movement types for each joint type (Task 1)							
14	FLEXION			16	FLEXION	19	EXTENSION
15	EXTENSION			17	ABDUCTION	20	ADDUCTION
				18	ROTATION	21	CIRCUMDUCTION
TASK 9 Describe each of term below, associated with joints, using the definitions (22-25)							
22	TENDON	Attach muscles to bone and are both strong and a little flexible					
23	LIGAMENT	Attach bone to bone and are tough, resilient bands of connective tissue					
24	CARTILAGE	Soft connective tissue that has no blood supply, it is a shock absorber					
25	SYNOVIAL FLUID	Fluid that lubricates joints to help with movement. It helps protect the joint, nourish the cartilage					

THE MUSCULAR SYSTEM (1/3)	TOTAL Score 1	/15
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TASK 1	Using the names in the box below identify muscles 1-11	Score	/11
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1		6	
2		7	
3		8	
4		9	
5		10	
LATISSIMUS DORSI // TRICEP // TRAPEZIUS // BICEP // DELTOID // QUADRICEPS // HAMSTRINGS // GASTROCNEMIUS // PECTORALS // GLUTEALS // ABDOMINALS		11	

TASK 2	Identify the terms associated with muscular movement, using the definitions below (12-15)	/4
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12	The muscle that contracts and shortens to produce movement
13	The muscle that relaxes and lengthens during the movement
14	The muscle(s) that stabilise one part of the body while another part of the body moves
15	Pairs of muscles working together to produce movement

THE MUSCULAR SYSTEM (1/3)

ANSWERS

TASK 1 Using the names below identify muscles 1-11

1	DELTOID		6	TRAPEZIUS
2	PECTORALS		7	TRICEP
3	BICEP		8	LATISSIMUS DORSI
4	ABDOMINALS		9	GLUTEALS
5	QUADRICEPS		10	HAMSTRINGS
LATISSIMUS DORSI // TRICEP // TRAZPEZIUS // BICEP // DELTOID // QUADRICEPS // HAMSTRINGS // GASTROCNEMIUS // PECTORALS // GLUTEALS // ABDOMINALS			11	GASTROCNEMIUS

TASK 2 Identify the terms associated with muscular movement, using the definitions below (12-15)

12	AGONIST	The muscle that contracts and shortens to produce movement
13	ANTAGONIST	The muscle that relaxes and lengthens during the movement
14	FIXATOR	The muscle(s) that stabilises one part of the body while another part of the body moves
15	ANTAGONISTIC MUSCLE PAIR	Pairs of muscles working together to produce movement

THE MUSCULAR SYSTEM (2/3)

TOTAL Score 2

/15

TASK 3 Identify muscles 1-11

Score

/11

1		6	
2		7	
3		8	
4		9	
5		10	
		11	

TASK 4 Describe each term associated with muscular movement below (12-15)

Score

/4

12	AGONIST	
13	ANTAGONIST	
14	FIXATOR	
15	ANTAGONISTIC MUSCLE PAIR	

THE MUSCULAR SYSTEM (2/3)

ANSWERS

TASK 3 Identify muscles 1-11

1	DELTOID		6	TRAPEZIUS
2	PECTORALS		7	TRICEP
3	BICEP		8	LATISSIMUS DORSI
4	ABDOMINALS		9	GLUTEALS
5	QUADRICEPS		10	HAMSTRINGS
			11	GASTROCNEMIUS

TASK 4 Describe each term associated with muscular movement below (12-15)

12	AGONIST	The muscle that contracts and shortens to produce movement
13	ANTAGONIST	The muscle that relaxes and lengthens during the movement
14	FIXATOR	The muscle(s) that stabilise one part of the body while another part of the body moves
15	ANTAGONISTIC MUSCLE PAIR	Pairs of muscles working together to produce movement

THE MUSCULAR SYSTEM (3/3)	TOTAL Score 3	/28
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TASK 5	Identify (1-4) and describe (5-8) four key terms associated with muscular movement	Score	/8
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1		5	
2		6	
3		7	
4		8	

TASK 6	Identify the name of the muscle that has taken on each role below (9-16)	Score	/8
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FLEXION	ELBOW	AGONIST	9		EXTENSION	ELBOW	AGONIST	13	
		ANTAGONIST	10				ANTAGONIST	14	
	KNEE	AGONIST	11			KNEE	AGONIST	15	
		ANTAGONIST	12				ANTAGONIST	16	

TASK 7	Describe each term below (17-22)	Give an example for each movement (23-28)	/12
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FLEXION	17		23	
EXTENSION	18		24	
ABDUCTION	19		25	
ADDUCTION	20		26	
CIRCUMDUCTION	21		27	
ROTATION	22		28	

THE MUSCULAR SYSTEM (3/3)

ANSWERS

TASK 5 Identify (1-4) and describe (5-8) four key terms associated with muscular movement									
1	AGONIST	5	The muscle that contracts and shortens to produce movement						
2	ANTAGONIST	6	The muscle that relaxes and lengthens during the movement						
3	FIXATOR	7	The muscle(s) that stabilise one part of the body while another part of the body moves						
4	ANTAGANISTIC MUSCLE PAIR	8	Pairs of muscles working together to produce movement						
TASK 6 Identify the name of the muscle that has taken on each role below (9-16)									
FLEXION	ELBOW	AGONIST	9	Biceps	EXTENSION	ELBOW	AGONIST	13	Triceps
		ANTAGONIST	10	Triceps			ANTAGONIST	14	Biceps
	KNEE	AGONIST	11	Hamstrings		KNEE	AGONIST	15	Quadriceps
		ANTAGONIST	12	Quadriceps			ANTAGONIST	16	Hamstrings
TASK 7 Describe each term below (17-22)					Give an example of each movement (23-28)				
FLEXION	17	A decrease in the angle at a joint			23	Bicep Curl (Upward phase)			
EXTENSION	18	The angle of the bones that are moving (Articulating Bones) is increased			24	Bicep Curl (Downward phase)			
ABDUCTION	19	The movement away from the midline			25	Leg Raise (Upward phase)			
ADDUCTION	20	The movement towards the midline			26	Leg Raise (Downward phase)			
CIRCUMDUCTION	21	Circular motion			27	Topspin shot in table tennis / side foot pass (Football)			
ROTATION	22	Bone turns around it's longitudinal axis			28	Bowling a ball in cricket			

MOVEMENT ANALYSIS (1/2)				TOTAL Score 1		/22			
TASK 1		Identify the terms associated with muscular movement, using the definitions (1-4)				Score		/4	
1		The bone that is moving at a joint							
2		The point (Pivot) around which the lever rotates							
3		The resistance (Force) that is being applied							
4		Muscles working to cause the action							
TASK 2		Using the description, identify the lever being described (5-7)				Score		/3	
5		6		7					
The FULCRUM is in the middle.		The EFFORT is in the middle.			The LOAD is in the middle.				
TASK 3		Using the e.g. identify each plane below (8-10)			Using the e.g. identify each axis below (11-13)			/6	
Tennis split step	8				Cartwheel	11			
Chest Pass	9				Pirouette	12			
Golf swing	10				Somersault	13			

FOLD ALONG THIS LINE

TASK 4		Describe a 1 st , 2 nd and 3 rd class lever below (14-16)				Score		/3	
1 st	14	2 nd	15	3 rd	16				
TASK 5		Give an example for each plane (17-19)			Give an example for each axis (20-22)			/6	
SAGITTAL	17				LONGITUDINAL	20			
TRANSVERSE	18				TRANSVERSE	21			
FRONTAL	19				FRONTAL	22			

MOVEMENT ANALYSIS (1/2)	ANSWERS
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TASK 1	Identify the terms associated with muscular movement, using the definition (1-4)
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1	LEVERS	The bone that is moving at a joint
2	FULCRUM	The point (Pivot) around which the lever rotates
3	LOAD	The resistance (Force) that is being applied
4	EFFORT	Muscles working to cause the action

TASK 2	Using the description, identify the lever being described (5-7)
---------------	-----------------------------------------------------------------

5	1st CLASS LEVER	6	3rd CLASS LEVER	7	2nd CLASS LEVER
The FULCRUM is in the middle.		The EFFORT is in the middle.		The LOAD is in the middle.	

TASK 3	Using the e.g. identify each plane below (8-10)	Using the e.g. identify each axis below (11-13)
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Tennis split step	8	FRONTAL	Cartwheel	11	FRONTAL
Chest Pass	9	SAGITTAL	Pirouette	12	LONGITUDINAL
Golf swing	10	TRANSVERSE	Somersault	13	TRANSVERSE


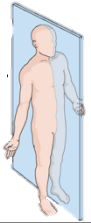
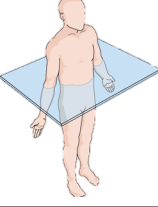


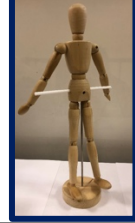
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TASK 4	Describe a 1 st , 2 nd and 3 rd class lever below (14-16)
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1st	14	The FULCRUM is in the middle. They increase effort and speed of a body	2nd	15	The LOAD is in the middle. They increase the effect of a force only	3rd	16	The EFFORT is in the middle. Most common lever, ↑ the speed of a body
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TASK 5	Give an example for each plane (17-19)	Give an example for each axis (20-22)
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SAGITTAL	17	Netball Chest Pass	LONGITUDINAL	20	Pirouette
TRANSVERSE	18	Hip rotation in a golf swing	TRANSVERSE	21	Somersault
FRONTAL	19	Tennis split step	FRONTAL	22	Cartwheel

MOVEMENT ANALYSIS (2/2)				TOTAL Score 2		/37			
TASK 6		Identify (1-3) and describe (4-6) the 3 components of a lever system				Score		/6	
1		4							
2		5							
3		6							
TASK 7		Identify (7-9), describe (10-12) and give examples (13-15) of 3 different classes of lever				Score		/9	
7		10		13					
8		11		14					
9		12		15					
TASK 8		Identify (17-19), give movement types (20-22) and e.g. (23-25) for 3 planes of movement				Score		/10	
16		Planes of movement are...							
	17			18			19		
	20			21			22		
	23			24			25		
TASK 9		Identify (27-29), describe (30-32) and give e.g. (33-35) for 3 axes of rotation				Score		/10	
26		An axis of rotation is...							
	27			28			29		
	30			31			32		
	33			34			35		
TASK 10		Describe what is meant by mechanical advantage (36-37)				Score		/2	
36									
37									

MOVEMENT ANALYSIS (2/2)**ANSWERS****TASK 6** Identify (1-3) and describe (4-6) the 3 components of a lever system


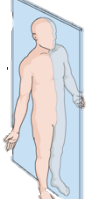
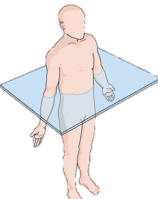
1	FULCRUM	4	The point (Pivot) around which the lever rotates
2	LOAD	5	The resistance (Force) that is being applied
3	EFFORT	6	Muscles working to cause the action

TASK 7 Identify (7-9), describe (10-12) and give examples (13-15) of 3 different classes of lever

7	1st CLASS LEVER	10	The FULCRUM is in the middle.	13	NECK: Heading a ball in Football.
8	2nd CLASS LEVER	11	The LOAD is in the middle.	14	ANKLE: on tip toes when reaching for a smash
9	3rd CLASS LEVER	12	The EFFORT is in the middle.	15	ELBOW: Upwards phase of a bicep curl.



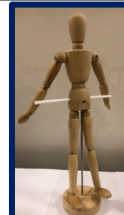
TASK 8 Identify (17-19), give movement types (20-22) and e.g. (23-25) for 3 planes of movement

16 Planes of movement are... Imaginary lines that help explain how the body moves

	17	FRONTAL		18	SAGITTAL		19	TRANSVERSE
	20	ABDUCTION / ADDUCTION		21	FLEXION / EXTENSION		22	ROTATION
	23	Tennis split step		24	Chest Pass		25	Golf Swing

TASK 9 Identify (27-29), describe (30-32) and give e.g. (33-35) for 3 axes of rotation

26 An axis of rotation is... a straight line around which an object rotates.

	27	FRONTAL		28	LONGITUDINAL		29	TRANSVERSE
	30	Front to back		31	Top to bottom		32	Side to side
	33	Cartwheel		34	Pirouette		35	Somersault

TASK 10 Describe what is meant by mechanical advantage (36-37)

36 When levers allow you to move a large output load with a smaller effort.

37 $(LOAD (N) / EFFORT (N))$

RESPIRATORY SYSTEM (1/1)

TOTAL Score 1

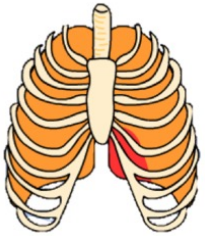
/27

TASK 1 Describe the process of inhalation (1-4)

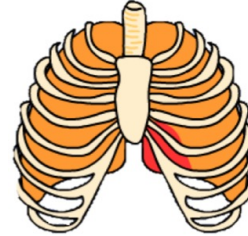
Describe exhalation (5-8)

Score

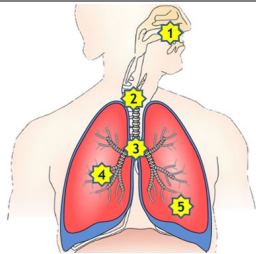
/8



- 1 Intercostal muscles...
- 2 Diaphragm...
- 3 Lungs...
- 4 Air...



- 5 I
- 6 D
- 7 L
- 8 A



TASK 2 Identify the labels in the diagram (1-5)

Score

/5

1 Nose / mouth

4

2

5

3

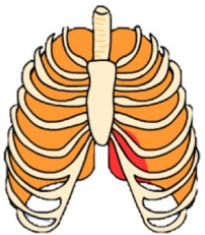
FOLD ALONG THIS LINE

TASK 3 Describe the process of inhalation (14-17)

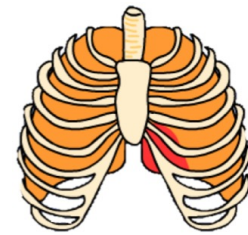
Describe exhalation (18-21)

Score

/8



- 14
- 15
- 16
- 17



- 18
- 19
- 20
- 21

TASK 4 Describe each term below (22-23)

Give 2 examples for each (24-27)

Score

/6

AEROBIC EXERCISE

22

24

25

ANAEROBIC EXERCISE

23

26

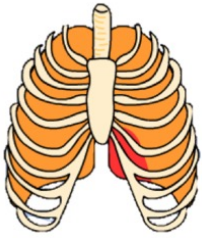
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RESPIRATORY SYSTEM (1/1)

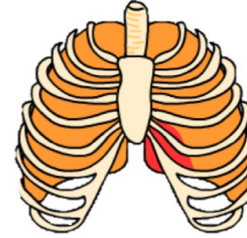
ANSWERS

TASK 1 Describe the process of inhalation (1-4)

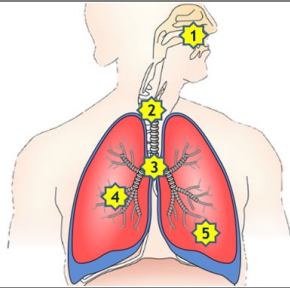
Describe exhalation (5-8)



- 1 Intercostal muscles **contract**
- 2 Diaphragm **contracts** and **flattens**
- 3 Lungs **expand**
- 4 Air **enters** (High (**Out**) to low (**Lungs**))



- 5 Intercostal muscles **relax**
- 6 Diaphragm **relax**
- 7 Lungs **get smaller**
- 8 Air **leaves** (High (**Lungs**) to low (**Out**))



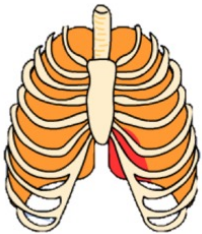
TASK 2 Identify the labels in the diagram (1-5)

- | | | | |
|----|--------------|----|------------|
| 10 | Nose / mouth | 13 | Bronchiole |
| 11 | Trachea | 14 | Alveoli |
| 12 | Bronchi | | |

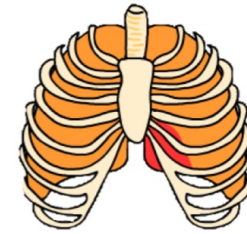
FOLD ALONG THIS LINE

TASK 3 Describe the process of inhalation (14-17)

Describe exhalation (18-21)



- 14 Intercostal muscles **contract**
- 15 Diaphragm **contracts** and **flattens**
- 16 Lungs **expand**
- 17 Air **enters** (High (**Out**) to low (**Lungs**))



- 18 Intercostal muscles **relax**
- 19 Diaphragm **relax**
- 20 Lungs **get smaller**
- 21 Air **leaves** (High (**Lungs**) to low (**Out**))

TASK 4 Describe each term below (22-23)

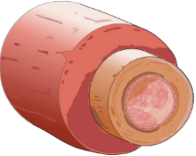
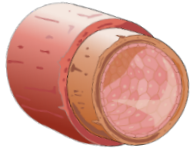

Give 2 examples for each (24-27)

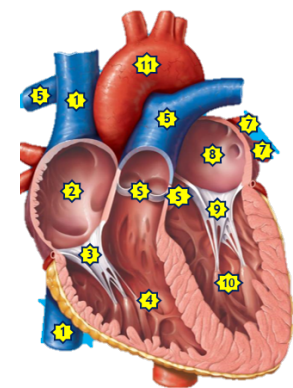
AEROBIC EXERCISE	22	A process taking place in the presence of O ₂	24	Long distance: running, swimming, cycling, rowing etc.
			25	
ANAEROBIC EXERCISE	23	Exercise lasting less than 3mins and doesn't require O ₂ . Lactic Acid will be produced if exercise continues	26	Powerlifting, 100m, Discus, Shot and Javelin
			27	

CIRCULATORY SYSTEM (1/1)

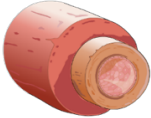
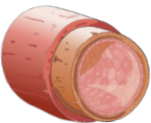
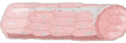
TOTAL Score 1

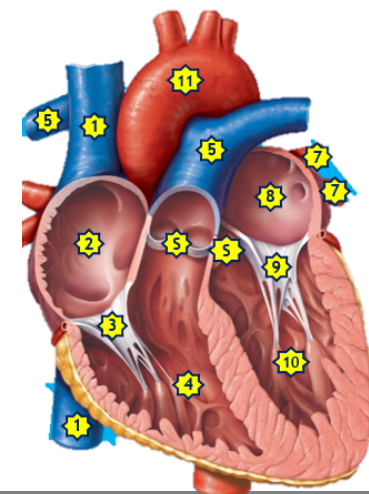
/42

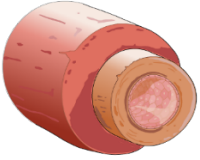
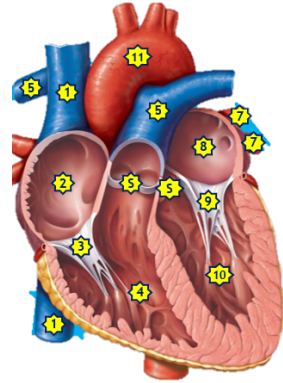
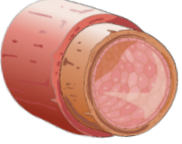

TASK 1	Identify (1-3) vessels, ✓ description (4-12)	/8	TASK 2	Identify 1-11 in the diagram below	/11
	1	4	HIGH PRESSURE	1	VC
		5	THICK WALLS	2	RA
		6	BACK TO	3	TV
	2	7	LOW PRESSURE	4	RV
		8	THICK WALLS	5	PA
		9	AWAY	6	L
	3	10	ONE CELL THICK	7	PV
		11	AWAY	8	LA
		12	GAS EXCHANGE	9	BV
				10	LV
				11	A



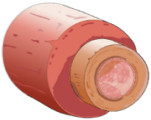
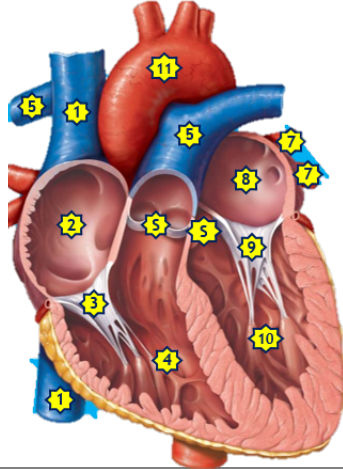
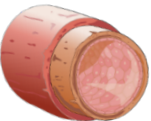
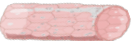
FOLD ALONG THIS LINE

TASK 3	Identify (13-15) vessels and describe (16-24)	/12	TASK 4	Identify 1-11 in the diagram	/11
13		16	H	1	
		17	A	2	
		18	T	3	
14		19		4	
		20		5	
		21		6	
		22		7	
15		23		8	10
		24		9	11



CIRCULATORY SYSTEM (1/1)						ANSWERS					
TASK 1			Identify (1-3) vessels, ✓ description (4-12)			TASK 2		Identify 1-11 in the diagram below			
	1	ARTERY	4	✓	HIGH PRESSURE	1	VENA CAVA				
			5	✓	THICK WALLS	2	RIGHT ATRIUM				
			6		BACK TO	3	TRICUSPID VALVE				
	2	VEIN	7	✓	LOW PRESSURE	4	RIGHT VENTRICLE				
			8		THICK WALLS	5	PULMONARY ARTERY				
			9		AWAY	6	LUNGS				
	3	CAPILLIARY	10	✓	ONE CELL THICK	7	PULMONARY VEIN			10	LEFT VENTRICLE
			11		AWAY	8	LEFT ATRIUM			11	AORTA
			12	✓	GAS EXCHANGE	9	BICUSPID VALVE				

FOLD ALONG THIS LINE

TASK 3			Identify (13-25) vessels, describe (16-24) each			TASK 4		Identify 1-11 in the diagram below		
13		ARTERY	16	High pressure	1	VENA CAVA				
			17	Away from the heart	2	RIGHT ATRIUM				
			18	Thick muscular walls	3	TRICUSPID VALVE				
14		VEIN	19	Low pressure	4	RIGHT VENTRICLE				
			20	Back to the heart	5	PULMONARY ARTERY				
			21	Thin walls	6	LUNGS				
			22	Valves prevent backflow	7	PULMONARY VEIN				
15		CAPILLIARY	23	One cell thick	8	LEFT ATRIUM			10	LEFT VENTRICLE
			24	Gas exchange	9	BICUSPID VALVE			11	AORTA

SHORT TERM EFFECTS OF EXERCISE (1/1)				TOTAL Score 1		/29			
TASK 1		Identify the short term effects of exercise on the heart and lungs (1-6)				Score		/6	
LUNGS				HEART					
1		↑ Amount of air inhaled or exhaled per minute	4		↑ Volume of blood pumped around the body per minute				
2		↑ Volume of air inspired or expired per breath	5		↑ Volume of blood pumped per beat				
3		↑ Number of breaths in a minute	6		↑ Number of beats per minute				

FOLD ALONG THIS LINE

TASK 2		Describe the short-term effects of exercise on the heart and lungs (7-12)				Score		/6	
LUNGS				HEART					
TV	7			HR	10				
MV	8			Q	11				
BR	9			SV	12				

FOLD ALONG THIS LINE

TASK 3		Identify (13-18) & describe (19-24) short-term effects of exercise on the heart & lungs				Score		/12	
LUNGS				HEART					
13		19		16		22			
14		20		17		23			
15		21		18		24			
TASK 4		Describe the vascular shunt mechanism (25-27) & short-term effects on muscles (28-29)				Score		/5	
VASCULAR SHUNT MECHANISM	25			28					
	26			29					
	27								

SHORT TERM EFFECTS OF EXERCISE (1/1)				ANSWERS	
TASK 1 Identify the short term effects of exercise on the heart and lungs (1-6)					
LUNGS			HEART		
1	MINUTE VOLUME	Amount of air inhaled or exhaled per minute	4	CARDIAC OUTPUT	Volume of blood pumped around the body per minute
2	TIDAL VOLUME	Volume of air inspired or expired per breath	5	STROKE VOLUME	Volume of blood pumped per beat
3	RESPIRATORY RATE	Number of breaths in a minute	6	HEART RATE	Number of beats per minute

FOLD ALONG THIS LINE

TASK 2 Describe the short-term effects of exercise on the heart and lungs (7-12)					
LUNGS			HEART		
TV	7	Volume of air inspired or expired per breath	HR	10	Number of beats per minute
MV	8	Amount of air inhaled or exhaled per minute	Q	11	Volume of blood pumped around the body per minute
BR	9	Number of breaths in a minute	SV	12	Volume of blood pumped per beat

FOLD ALONG THIS LINE

TASK 3 Identify (13-18) & describe (19-24) short-term effects of exercise on the heart & lungs							
LUNGS			HEART				
13	MV	16	Amount of air inhaled or exhaled per minute	19	Q	22	Volume of blood pumped around the body per minute
14	TV	17	Volume of air inspired or expired per breath	20	SV	23	Volume of blood pumped per beat
15	RR	18	Number of breaths in a minute	21	HR	24	Number of beats per minute

TASK 4 Describe the vascular shunt mechanism as a short-term effect of exercise (25-27)						
VASCULAR SHUNT MECHANISM	25	Happens during exercise			28	↑ Muscle Temp & ↑ flexibility
	26	The body redistributes blood to the muscles that need it (Vasodilation)			29	↑ Lactic Acid & ↑ fatigue
	27	Blood flow is reduced to internal organs (Vasoconstriction)				

LONG TERM EFFECTS OF TRAINING (1/2)

TOTAL Score 1

/15

TASK 1 Identify 15 long term effects of Training (Incl. effect)

CARDIOVASCULAR SYSTEM

Effect	1	Effect	2	Effect	3	Effect	4
Number of beats per minute at rest		Vol. of blood pumped per beat at rest		Volume of blood pumped per minute		Increase in the size of heart cardiac muscles	

RESPIRATORY SYSTEM

Effect	5	Effect	6	Effect	7	Effect	8
Intercostal muscles that help in the process of breathing		Vol. of air inhaled or exhaled per breath		Vol. of air inhaled or exhaled per minute.		↑ in number of capillaries , increasing surface area for gas exchange	

MUSCULAR SYSTEM

Effect	9	Effect	10	Effect	11	Effect	12
Point at which fatigue negatively affects performance		Muscles ability to exert force for short period of time		Ability of the muscle or muscle group to keep going without rest		Increase in the size of skeletal muscles	

OTHER

Effect	13	Effect	14	Effect	15	
The strength & health of bones		Speed at which the body returns back to its pre exercise state		The ability to take in, transport and use oxygen to sustain aerobic exercise		

LONG TERM EFFECTS OF TRAINING (1/2)

ANSWERS

TASK 1 Identify 15 long term effects of training (Incl. effect)

CARDIOVASCULAR SYSTEM

Effect ↓	1	RESTING HEART RATE	Effect ↑	2	RESTING STROKE VOLUME	Effect ↑	3	CARDIAC OUTPUT	Effect ↑	4	CARDIAC HYPERTROPHY
Number of beats per minute at rest		Vol. of blood pumped per beat at rest		Volume of blood pumped per minute		Increase in the size of heart cardiac muscles					

RESPIRATORY SYSTEM

Effect ↑	5	RESPIRATORY MUSCLES	Effect ↑	6	TIDAL VOLUME (During Exercise)	Effect ↑	7	MINUTE VOLUME (During Exercise)	Effect ↑	8	CAPILLIARISATION
Intercostal muscles that help in the process of breathing		Vol. of air inhaled or exhaled per breath		Vol. of air inhaled or exhaled per minute.		↑ in number of capillaries , increasing surface area for gas exchange					

MUSCULAR SYSTEM

Effect ↑	9	RESISTANCE TO FATIGUE	Effect ↑	10	MUSCULAR STRENGTH	Effect ↑	11	MUSCULAR ENDURANCE	Effect ↑	12	MUSCULAR HYPERTROPHY
Point at which fatigue negatively affects performance		Muscles ability to exert force for short period of time		Ability of the muscle or muscle group to keep going without rest		Increase in the size of skeletal muscles					

OTHER

Effect ↑	13	BONE DENSITY	Effect ↑	14	RATE OF RECOVERY	Effect ↑	15	AEROBIC CAPACITY (CV ENDURANCE)
The strength & health of bones		Speed at which the body returns back to its pre exercise state		The ability to take in, transport and use oxygen to sustain aerobic exercise				

LONG TERM EFFECTS OF TRAINING (2/2)

TOTAL Score 2

/15

TASK 2 Describe 15 long term effects of Training (Incl. effect)

CARDIOVASCULAR SYSTEM

Effect	RESTING HEART RATE	Effect	RESTING STROKE VOLUME	Effect	CARDIAC OUTPUT	Effect	CARDIAC HYPERTROPHY
1		2		3		4	

RESPIRATORY SYSTEM

Effect	RESPIRATORY MUSCLES	Effect	TIDAL VOLUME (During Exercise)	Effect	MINUTE VOLUME (During Exercise)	Effect	CAPILLIARISATION
5		6		7		8	

MUSCULAR SYSTEM

Effect	RESISTANCE TO FATIGUE	Effect	MUSCULAR STRENGTH	Effect	MUSCULAR ENDURANCE	Effect	MUSCULAR HYPERTROPHY
9		10		11		12	

OTHER

Effect	BONE DENSITY	Effect	RATE OF RECOVERY	Effect	AEROBIC CAPACITY (CV ENDURANCE)
13		14		15	

LONG TERM EFFECTS OF TRAINING (2/2)

ANSWERS

TASK 2 Describe 15 long term effects of Training (Incl. effect)

CARDIOVASCULAR SYSTEM

Effect ↓	1	RESTING HEART RATE	Effect ↑	2	RESTING STROKE VOLUME	Effect ↑	3	CARDIAC OUTPUT	Effect ↑	4	CARDIAC HYPERTROPHY
Number of beats per minute at rest			Vol. of blood pumped per beat at rest			Volume of blood pumped per minute			Increase in the size of heart cardiac muscles		

RESPIRATORY SYSTEM

Effect ↑	5	RESPIRATORY MUSCLES	Effect ↑	6	TIDAL VOLUME (During Exercise)	Effect ↑	7	MINUTE VOLUME (During Exercise)	Effect ↑	8	CAPILLIARISATION
Intercostal muscles that help in the process of breathing			Vol. of air inhaled or exhaled per breath			Vol. of air inhaled or exhaled per minute.			↑ in number of capillaries , increasing surface area for gas exchange		

MUSCULAR SYSTEM

Effect ↑	9	RESISTANCE TO FATIGUE	Effect ↑	10	MUSCULAR STRENGTH	Effect ↑	11	MUSCULAR ENDURANCE	Effect ↑	12	MUSCULAR HYPERTROPHY
Point at which fatigue negatively affects performance			Muscles ability to exert force for short period of time			Ability of the muscle or muscle group to keep going without rest			Increase in the size of skeletal muscles		

OTHER

Effect ↑	13	BONE DENSITY	Effect ↑	14	RATE OF RECOVERY	Effect ↑	15	AEROBIC CAPACITY (CV ENDURANCE)			
The strength & health of bones			Speed at which the body returns back to its pre exercise state			The ability to take in, transport and use oxygen to sustain aerobic exercise					

COMPONENTS OF FITNESS (1/4)		TOTAL Score 1	/20
TASK 1	Identify each Component of Fitness below, using the definition provided (CoF 1-10)	Score	/10
CoF 1		CoF 6	
A combination of strength and speed		The range of movement at a joint	
CoF 2		CoF 7	
The ability of the body to move quickly		Ability to keep your centre of mass over a base of support	
CoF 3		CoF 8	
The time it takes to initiate an action/movement		Ability to repeat a pattern of movement with fluency & accuracy	
CoF 4		CoF 9	
Ability to change direction under control & maintaining speed		Ability of the muscle or muscle group to repeatedly contract	
CoF 5		CoF 10	
The ability to continuously exercise without tiring		Ability of the muscle to exert a force for a short period of time	

FOLD ALONG THIS LINE

TASK 2	Describe each Component of Fitness below (11-20)		Score	/10
STAMINA (Muscular)	11		POWER	16
STAMINA (Cardiovascular)	12		CO-ORDINATION	17
STRENGTH	13		BALANCE	18
SUPPLENESS / FLEXIBILITY	14		AGILITY	19
SPEED	15		REACTION TIME	20

COMPONENTS OF FITNESS (1/4)**ANSWERS****TASK 1** Identify each Component of Fitness below, using the definition provided (CoF 1-10)

CoF 1	POWER	CoF 6	SUPPLENESS (FLEXIBILITY)
A combination of strength and speed		The range of movement at a joint	
CoF 2	SPEED	CoF 7	BALANCE
The ability of the body to move quickly		Ability to keep your centre of mass over a base of support	
CoF 3	REACTION TIME	CoF 8	CO-ORDINATION
The time it takes to initiate an action/movement		Ability to repeat a pattern of movement with fluency & accuracy	
CoF 4	AGILITY	CoF 9	(STAMINA) MUSCULAR ENDURANCE
Ability to change direction under control & maintaining speed		Ability of the muscle or muscle group to repeatedly contract	
CoF 5	(STAMINA) CARDIOVASCULAR ENDURANCE	CoF 10	STRENGTH
The ability to continuously exercise without tiring		Ability of the muscle to exert a force for a short period of time	

FOLD ALONG THIS LINE

TASK 2 Describe each Component of Fitness below (11-20)

STAMINA (Muscular)	11	Ability of the muscle or muscle group to keep going without rest	POWER	16	A combination of strength and speed
STAMINA (Cardiovascular)	12	The ability to continuously exercise without tiring	CO-ORDINATION	17	Ability to repeat a pattern of movement with fluency & accuracy
STRENGTH	13	Ability of the muscle to exert a force for a short period of time	BALANCE	18	Ability to keep your centre of mass over a base of support
SUPPLENESS / FLEXIBILITY	14	The range of movement at a joint	AGILITY	19	Ability to change direction under control & maintaining speed
SPEED	15	The ability of the body to move quickly	REACTION TIME	20	The time it takes to initiate an action/movement

COMPONENTS OF FITNESS (2/4)					TOTAL Score 2		/34
TASK 3 Identify test names for each CoF (1-20)			/14	TASK 4 Give sporting e.g. for each (21-40)			/20
CoF 1	STAMINA (Muscular)	1	Test 1:	CoF 6	POWER	11	Test 1:
Ability of the muscle or muscle group to keep going without rest		2	Test 2:	A combination of strength and speed		12	Test 2:
		21	EG 1:			31	EG 1:
		22	EG 2:			32	EG 2:
CoF 2	STAMINA (Cardiovascular)	3	Test 1:	CoF 7	CO-ORDINATION	13	Test 1:
The ability to continuously exercise without tiring		4	Test 2:	Ability to repeat a pattern of movement with fluency and accuracy		14	Test 2:
		23	EG 1:			33	EG 1:
		24	EG 2:			34	EG 2:
CoF 3	STRENGTH	5	Test 1:	CoF 8	BALANCE	15	Test 1:
Ability of the muscle to exert a force for a short period of time		6	Test 2:	Ability to keep your centre of mass over a base of support		16	Test 2:
		25	EG 1:			35	EG 1:
		26	EG 2:			36	EG 2:
CoF 4	SUPPLENESS (FLEXIBILITY)	7	Test 1:	CoF 9	AGILITY	17	Test 1:
The range of movement at a joint		8	Test 2:	Ability to change direction under control & maintaining speed, balance & power		18	Test 2:
		27	EG 1:			37	EG 1:
		28	EG 2:			38	EG 2:
CoF 5	SPEED	9	Test 1:	CoF 10	REACTION TIME	19	Test 1:
The ability of the body to move quickly		10	Test 2:	The time it takes to initiate an action/movement		20	Test 2:
		29	EG 1:			39	EG 1:
		30	EG 2:			40	EG 2:

COMPONENTS OF FITNESS (2/4)					ANSWERS			
TASK 3		Identify test names for each CoF (1-20)			TASK 4		Give sporting examples for each CoF (21-40)	
CoF 1	STAMINA (Muscular)	1	Press Up Test		CoF 6	POWER	11	Standing Broad Jump
		2	Sit Up Test				12	Sargent Jump/Vertical Jump
		21	Long distance running / Aerobics / Long distance swimming /				31	Athletics: Triple jump /
		22	Cardio bike (15-20min): Medium pace					
Ability of the muscle or muscle group to keep going without rest				A combination of strength and speed				
CoF 2	STAMINA (Cardiovascular)	3	Multi-Stage Fitness Test		CoF 7	CO-ORDINATION	13	Wall Throw / Ball Toss
		4	Cooper 12 Minute Run				14	
		23	Cross-country/Cycling/Swimming/				33	Dance / Gymnastics / Tennis
		24	Rowing/Canoeing/Rugby/Football					
The ability to continuously exercise without tiring				Ability to repeat a pattern of movement with fluency and accuracy				
CoF 3	STRENGTH	5	Hand Grip Dynamometer		CoF 8	BALANCE	15	Stork Stand Test
		6	1 Repetition Max Test				16	
		25	Sprinting / Rugby / Cycling /				35	Gymnastics / Dance /
		26	Rowing / Weightlifting					
Ability of the muscle to exert a force for a short period of time				Ability to keep your centre of mass over a base of support				
CoF 4	SUPPLENESS / FLEXIBILITY	7	Sit & Reach Test		CoF 9	AGILITY	17	Illinois Agility Run
		8					18	
		27	Gymnastics / Dance / Field				37	Trampolining / Gymnastics
		28	Hockey					
The range of movement at a joint				Ability to change direction under control & maintaining speed, balance & power				
CoF 5	SPEED	9	30 Metre Sprint Test		CoF 10	REACTION TIME	19	Ruler Drop Test
		10					20	
		29	Athletics / Swimming / Netball /				39	Athletics: Sprint Start /
		30	Football / Basketball					
The ability of the body to move quickly				The time it takes to initiate an action/movement				

COMPONENTS OF FITNESS (3/4)					TOTAL Score 4		/44		
TASK 5	Describe CoF (1-10)	/10	TASK 6	Identify test names (11-30)	/14	TASK 7	Give e.g. (31-50)	/20	
S	STAMINA (Muscular)	11	P	POWER	21	6	Test 1:	/44	
		12			22				Test 2:
		31			41				EG 1:
		32			42				EG 2:
S	STAMINA (Cardiovascular)	13	C	CO-ORDINATION	23	7	Test 1:	/44	
		14			24				Test 2:
		33			43				EG 1:
		34			44				EG 2:
S	STRENGTH	15	B	BALANCE	25	8	Test 1:	/44	
		16			26				Test 2:
		35			45				EG 1:
		36			46				EG 2:
S	SUPPLENESS/FLEXIBILITY	17	A	AGILITY	27	9	Test 1:	/44	
		18			28				Test 2:
		37			47				EG 1:
		38			48				EG 2:
S	SPEED	19	R	REACTION TIME	29	10	Test 1:	/44	
		20			30				Test 2:
		39			49				EG 1:
		40			50				EG 2:

COMPONENTS OF FITNESS (3/4)					ANSWERS				
TASK 5		Describe each CoF (1-10)		TASK 6		Identify test names (11-30)		TASK 7	Give examples (31-50)
S	STAMINA (Muscular)	11	Press Up Test	P	POWER	21	Standing Broad Jump		
1		12	Sit Up Test	6		A combination of strength and speed	22	Sargent Jump/Vertical Jump	
		31	Long distance running / Aerobics / Long distance swimming / Cardio bike(15-20min): Med. pace				41	Athletics: Triple jump / Throwing events /Sprinting	
		32					42	Rugby / Basketball	
S	STAMINA (Cardiovascular)	13	Multi-Stage Fitness Test	C	CO-ORDINATION	23	Wall Throw / Ball Toss		
2		14	Cooper 12 Minute Run	7		Ability to repeat a pattern of movement with fluency and accuracy	24		
		33	Cross-country/Cycling/Swimming/ Rowing/Canoeing/Rugby/Footbal				43	Dance / Gymnastics / Tennis	
		34	l				44		
S	STRENGTH	15	Hand Grip Dynamometer	B	BALANCE	25	Stork Stand Test		
3		16	1 Repetition Max Test	8		Ability to keep your centre of mass over a base of support	26		
		35	Sprinting / Rugby / Cycling / Rowing / Weightlifting				45	Gymnastics / Dance /	
		36					46	Athletics: Pole Vault	
S	SUPPLENESS / FLEXIBILITY	17	Sit & Reach Test	A	AGILITY	27	Illinois Agility Run		
4		18		9		Ability to change direction under control & maintain speed, balance & power	28		
		37	Gymnastics / Dance / Field Hockey				47	Trampolining / Gymnastics	
		38					48	Basketball/Netball/Football	
S	SPEED	19	30 Metre Sprint Test	R	REACTION TIME	29	Ruler Drop Test		
5		20		10			30		
		39					49	Athletics: Sprint Start /	

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		40	Athletics / Swimming / Netball / Football / Basketball		The time it takes to initiate an action/movement	50	Tennis: Receiving a serve / Basketball/Hockey/Football
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COMPONENTS OF FITNESS (4/4)				TOTAL Score 4		/42	
TASK 8 Describe test protocols / for each test below (1-42)							
STAMINA (Muscular)	1		POWER	22		Standing Broad Jump	
	2			23			
Press Up Test	3			24			
Sit Up Test	4		Sargent Jump /Vertical Jump	25			
	5			26			
	6			27			
STAMINA (Cardiovascular)	7		SPEED	28			
	8			30 Metre Sprint Test	29		
MSFT	9			30			
Cooper 12 Min Run	10		CO- ORDINATION	31			
	11			32			
	12			Wall Throw	33		
STRENGTH	13		BALANCE	34			
Hand Grip Dynamometer	14		Stork Stand Test	35			
	15			36			
1 Repetition Max Test	16		AGILITY	37			
	17			Illinois Agility Run	38		
	18			39			
SUPPLENESS / FLEXIBILITY	19		REACTION TIME	40			
	20			41			
Sit & Reach	21		Ruler Drop	42			

COMPONENTS OF FITNESS (4/4)

ANSWERS

TASK 8		Describe test protocols / for each test below (1-42)			
STAMINA (Muscular)	1	As many as possible, with no rest, until they are unable to continue. Press up: Each time arms are fully extended after being lowered to 90°	POWER	22	The athlete places their feet on a line, crouches down and jumps as far as possible (landing on 2 feet). The assistant measures and records the distance from the line to the back of the heel. The athlete repeats the test 3 times & records the furthest
	2		Standing Broad Jump	23	
	3		Press Up Test	24	
Sit Up Test	4	Using a mat complete as many sit ups as possible in 30 seconds. Knees bent throughout, shoulders must touch the mat and chest makes contact with quadriceps to complete sit up.	Sargent Jump /Vertical Jump	25	The athlete stands side onto the wall (chalking finger tips). Keeping both feet on the ground, reach as high as possible with one hand & mark the wall with the finger tips (M1). Jumps as high as possible, marks the wall with chalk (M2). Difference between M1 & M2, repeating 3 times. Avg value
	5			26	
	6			27	
STAMINA (Cardiovascular)	7	Mark a square 20m x 20m with cones. Start the Test CD/track and listen to the instructions. Reach the 20m distance by each beep, stop when not. Triple beep signals a new level and an ↑ in speed. RESULT: Level & shuttles completed in that level.	SPEED	28	A 50m distance is measured out with cones at the start, 20m & 50m. Performer sprints for 50m, with a 20m rolling start. Timer starts when the participant crosses the cones at 20m & finishes when they cross the cones at 50m.
	8		30 Metre Sprint Test	29	
	9		MSFT	30	
Cooper 12 Min Run	10	Using a measured area (Athletics track). Participants run as far as possible in 12 minutes. Record distance covered and round to the nearest 10m.	CO-ORDINATION	31	Stand 2m away from a wall, assistant says "GO" and times. The athlete throws a tennis ball with their right hand against the wall and catches it with the left hand, throws the ball with the left hand and catches it with the right hand. The assistant counts the number of catches in 30 seconds
	11			32	
	12			33	
STRENGTH	13	Dynamometer is set to zero and hold above your head. Move down to the side of the body with dial facing away from you. Read the score, perform the test 3 times, use highest value. (1min rest)	BALANCE	34	Lift the right leg and put sole of the right foot on kneecap. "GO", time start, raise the left heel to stand on their toes. Time is stopped when the athlete's left heel touches the ground or right foot moves away from the left knee. Rest for 3mins, repeat on other leg. Add both times=result.
	14		Hand Grip Dynamometer	35	
	15		36		
1 Repetition Max Test	16	Warm-up: 10 reps (Light weights), 1min rest. X2 sets of 2-5 reps (Heavier weights), 2min rest. Perform 1 rep: success = 2mins rest, 10% increase in weight. Failed: 5% reduction, Max weight lifted with 5 attempts. (Male: 1.25 x body weight; Female: 0.8 x body weight)	AGILITY	37	The assistance sets up the course as detailed in the diagram. Face down, at "Start" cone, "GO", start the stopwatch. The athlete jumps to his/her feet and negotiates the course around the cones. Stopwatch as they cross finish & records the time.
	17		Illinois Agility Run	38	
	18		39		
SUPPLENESS / FLEXIBILITY	19	Take shoes off and place feet against the side of the bench. Partner holds knees and participant moves ruler as far as possible. Participant given 3 goes and the avg. of the 3 attempts = result.	REACTION TIME	40	Hold ruler between index finger & thumb of dominant hand, top of thumb level with zero-centimetre line on ruler. Catch the ruler ASAP, between index finger and thumb. Distance between bottom of ruler and top of the thumb. The test is repeated 3 times and the average value is used.
	20			41	
	21			Ruler Drop	

APPLYING THE PRINCIPLES OF TRAINING (1/3)				TOTAL Score 1	/11
TASK 1	Identify the principles of training using the descriptions below (1-4)			Score	/4
1		Training demands gradually increase over time to ensure that adaptations occur and performance improves.	3		The training must be specific to the activity / energy / muscles / actions
2		Adaptations from training are reversed if the training is reduced or stopped	4		Involves the body working harder than normal to make improvements
TASK 2	Identify 3 types of training (5-7) and 4 types of interval training (8-11)			Score	/7
5		Exercise that incorporates periods of work followed by a rest period.			
6		Exercise where the intensity varies. High intensity work is alternated with lower intensity work			
7		Exercise performed at a constant intensity, within the aerobic training zone without rest			
TYPES OF INTERVAL TRAINING					
8		Series of exercise stations arranged to work alternate muscle groups	10		Explosive exercises that involve repeated muscular contractions
9		Use of sets and reps with increased resistance from weights/pulley	11		Repeated periods of high intensity exercise followed by active recovery

APPLYING THE PRINCIPLES OF TRAINING (1/3)**ANSWERS****TASK 1** Identify the principles of training using the descriptions below (1-4)

1	PROGRESSION	Training demands gradually increase over time to ensure that adaptations occur, and performance improves.	3	SPECIFICITY	The training must be specific to the activity / energy / muscles / actions
2	REVERSIBILITY	Adaptations from training are reversed if the training is reduced or stopped	4	OVERLOAD	Involves the body working harder than normal to make improvements

TASK 2 Identify 3 types of training (5-7) and 4 types of interval training (8-11)

5	INTERVAL TRAINING	Exercise that incorporates periods of work followed by a rest period.
6	FARTLEK TRAINING	Exercise where the intensity varies. High intensity work is alternated with lower intensity work
7	CONTINUOUS TRAINING	Exercise performed at a constant intensity, within the aerobic training zone without rest

TYPES OF INTERVAL TRAINING

8	CIRCUIT TRAINING	Series of exercise stations arranged to work alternate muscle groups	10	PLYOMETRIC TRAINING	Explosive exercises that involve repeated muscular contractions
9	WEIGHT TRAINING	Use of sets and reps with increased resistance from weights/pulley	11	HIGH INTENSITY INTERVAL TRAINING	Repeated periods of high intensity exercise followed by active recovery

APPLYING THE PRINCIPLES OF TRAINING (2/3)				TOTAL Score 2		/11			
TASK 3		Describe the principles of training (1-4)				Score		/4	
SPECIFICITY		1		OVERLOAD		3			
PROGRESSION		2		REVERSIBILITY		4			
TASK 4		Describe 3 types of training (5-7) and 4 types of interval training (8-11)				Score		/7	
CONTINUOUS TRAINING		5							
FARTLEK TRAINING		6							
INTERVAL TRAINING		7							
TYPES OF INTERVAL TRAINING									
CIRCUIT TRAINING		8		PLYOMETRIC TRAINING		10			
WEIGHT TRAINING		9		HIGH INTENSITY INTERVAL TRAINING		11			

APPLYING THE PRINCIPLES OF TRAINING (2/3)**ANSWERS****TASK 3** Describe the principles of training (1-4)

SPECIFICITY	1	The training must be specific to the activity / energy / muscles / actions	OVERLOAD	3	Involves the body working harder than normal to make improvements
PROGRESSION	2	Training demands gradually increase over time to ensure that adaptations occur and performance improves.	REVERSIBILITY	4	Adaptations from training are reversed if the training is reduced or stopped

TASK 4 Describe 3 types of training (5-7) and 4 types of interval training (8-11)

CONTINUOUS TRAINING	5	Exercise performed at a constant intensity, within the aerobic training zone without rest
FARTLEK TRAINING	6	Exercise where the intensity varies. High intensity work is alternated with lower intensity work
INTERVAL TRAINING	7	Exercise that incorporates periods of work followed by a rest period.

TYPES OF INTERVAL TRAINING

CIRCUIT TRAINING	8	Series of exercise stations arranged to work alternate muscle groups	PLYOMETRIC TRAINING	10	Explosive exercises that involve repeated muscular contractions
WEIGHT TRAINING	9	Use of sets and reps with increased resistance from weights/pulley	HIGH INTENSITY INTERVAL TRAINING	11	Repeated periods of high intensity exercise followed by active recovery

APPLYING THE PRINCIPLES OF TRAINING (3/3)						TOTAL Score 3		/22	
TASK 5		Identify (1-4) and describe (5-8) the principles of training						Score	/8
1		5		3		7			
2		6		4		8			
TASK 6		Identify & describe 3 types of training (9-14) and 4 types of interval training (15-22)						Score	/14
9			12						
10			13						
11			14						
TYPES OF INTERNAL TRAINING									
15		19		17		21			
16		20		18		22			

APPLYING THE PRINCIPLES OF TRAINING (3/3)						ANSWERS	
TASK 5 Identify (1-4) and describe (5-8) the principles of training							
1	SPECIFICITY	5	The training must be specific to the activity / energy / muscles / actions	3	OVERLOAD	7	Involves the body working harder than normal to make improvements
2	PROGRESSION	6	Training demands gradually increase over time to ensure that adaptations occur and performance improves.	4	REVERSIBILITY	8	Adaptations from training are reversed if the training is reduced or stopped
TASK 6 Identify & describe 3 types of training (9-14) and 4 types of interval training (15-22)							
9	CONTINUOUS TRAINING	12	Exercise performed at a constant intensity, within the aerobic training zone without rest				
10	FARTLEK TRAINING	13	Exercise where the intensity varies. High intensity work is alternated with lower intensity work				
11	INTERVAL TRAINING	14	Exercise that incorporates periods of work followed by a rest period.				
TYPES OF INTERNAL TRAINING							
15	CIRCUIT TRAINING	19	Series of exercise stations arranged to work alternate muscle groups	17	PLYOMETRIC TRAINING	21	Explosive exercises that involve repeated muscular contractions
16	WEIGHT TRAINING	20	Use of sets and reps with increased resistance from weights/pulley	18	HIGH INTENSITY INTERVAL TRAINING	22	Repeated periods of high intensity exercise followed by active recovery

WARMUP & COOL DOWN (1/2)					TOTAL Score 1		/21
TASK 1			Identify components of a warmup & cool down (1-7), Identify which they belong (8-14)			Score	/14
COMPONENT		WU / CD	DESCRIPTION	COMPONENT		WU / CD	DESCRIPTION
1		8	Stretches completed for longer than in the warm up. They are usually static stretches	5		12	The flexibility of muscles is temporarily improved by stretching during a warm up
2		9	Important to slowly increase heart rate prior to physical exercise	6		13	Takes performers close to full intensity and allows skills to be practised
3		10	Copy sporting actions and prepare muscles and joints for more explosive movements	7		14	Preparing joints for physical activity by moving them through their full range of motion
4		11	Helps the body return back to its resting state				

FOLD ALONG THIS LINE

TASK 2			Describe the components of an effective warmup and cool down (15-21)			Score	/7
COMPONENT	WU/CD	DESCRIPTION	COMPONENT	WU/CD	DESCRIPTION		
PULSE RAISER	WU	15	SKILL REHEARSAL	WU	19		
DYNAMIC MOVEMENTS	WU	16	LOW INTENSITY EXERCISE	CD	20		
STRETCHES	WU	17	STRETCHES	CD	21		
MOBILITY EXERCISES	WU	18					

WARMUP & COOL DOWN (1/2)					ANSWERS			
TASK 1-2		Identify components of a warmup & cool down (1-7), Identify which they belong (8-14)					Score	/14
COMPONENT		WU / CD		DESCRIPTION	COMPONENT		WU / CD	DESCRIPTION
1	STRETCHES	8	CD	Stretches completed for longer than in the warm up. They are usually static stretches	5	STRETCHES	12 WU	The flexibility of muscles is temporarily improved by stretching during a warm up
2	PULSE RAISER	9	WU	Important to slowly increase heart rate prior to physical exercise	6	SKILL REHEARSAL	13 WU	Takes performers close to full intensity and allows skills to be practised
3	DYNAMIC MOVEMENTS	10	WU	Copy sporting actions and prepare muscles and joints for more explosive movements	7	MOBILITY EXERCISES	14 WU	Preparing joints for physical activity by moving them through their full range of motion
4	LOW INTENSITY EXERCISE	11	CD	Helps the body return back to its resting state				

WARMUP & COOL DOWN (2/2)	TOTAL Score 2	/21
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TASK 3	Identify (1-5), describe (6-10) & give an example (11-15) of the components of a warmup	Score	/15
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COMPONENT	DESCRIPTION	EXAMPLE
1	6	11
2	7	12
3	8	13
4	9	14
5	10	15

TASK 4	Identify (16-17), describe (18-19) & give an e.g. (20-21) of the components of a cool down	Score	/6
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COMPONENT	DESCRIPTION	EXAMPLE
16	18	20
17	19	21

WARMUP & COOL DOWN (ALL)				ANSWERS	
TASKS 1-4		Identify (1-5), describe (6-10) & give an example (11-15) of the components of a warmup			
COMPONENT		DESCRIPTION		EXAMPLE	
1	PULSE RAISER	6	Important to slowly increase heart rate prior to physical exercise	11	Jogging / Cycling / Skipping
2	MOBILITY EXERCISES	7	Preparing joints for physical activity by moving them through their full range of motion	12	Shoulder Circles / Arm Swings / Side Bends / Leg Swings / Lunges
3	STRETCHES	8	The flexibility of muscles is temporarily improved by stretching during a warm up	13	Squats / Open and close the gate / Calf walk / Hamstring walk
4	DYNAMIC MOVEMENTS	9	Copy sporting actions and prepare muscles and joints for more explosive movements	14	High Knees / Heel Flicks / Side Steps / Slow Skip
5	SKILL REHEARSAL	10	Takes performers close to full intensity and allows skills to be practised	15	Basketball: Ball handling skills / Lay-ups / Three-pointers
TASKS 1-4		Identify (16-17), describe (18-19) & give an example (20-21) of components of a cool down			
COMPONENT		DESCRIPTION		EXAMPLE	
16	LOW INTENSITY EXERCISE	18	Helps the body return back to its resting state	20	Slow Jogging / Swimming / Cycling
17	STRETCHES	19	Stretches completed for longer than in the warm up. They are usually static stretches	21	Squats / Open and close the gate / Calf walk / Hamstring walk

PREVENTION OF INJURY (1/2)				TOTAL Score 1	/20
TASK 1	Identify (1-3) and describe (4-6) 3 ways we can minimise the risk of injury			Score	/6
1		4			
2		5			
3		6			
TASK 2	Identify the key terms below, using the definitions (7-9)			Score	/3
7			Something that has the potential to cause harm		
8			The chance of being harmed by the hazard		
9			Potentially to be caused by the hazard		
TASK 3	Identify (10-12) & describe (13-15) how competitions are made appropriate			Score	/6
10	T	13	Tag rugby / touch rugby / midi rugby / 7's / 15-a-side		
11	P	14	Weight category in boxing and age group in football		
12	S	15	Passing / tackling / skills performed to a basic level		
TASK 4	Identify 5 different types of hazard (16-20)			Score	/5
16	W		Pool: Sunlight makes it hard to see floor		
17	E		Fitness Centre: Broken equipment		
18	L		Playing Field: Glass / Cans		
19	S		Sportshall: Wet floor		
20	H		Artificial Outdoor Area: Too many people		

PREVENTION OF INJURY (1/2)**ANSWERS****TASK 1** Identify (1-3) and describe (4-6) 3 ways we can minimise the risk of injury

1	LIFTING & CARRYING EQUIPMENT CORRECTLY	4	Ensure sports equipment is lifted and carried using the correct technique
2	CORRECT CLOTHING / FOOTWEAR	5	Clothing should provide enough warmth and must not be hazardous to themselves and others to ensure a safe competitive environment
3	WARMUP & COOL DOWN	6	A warm up should be completed before & a cool down after activity to ↓ the chance of injury

TASK 2 Identify the key terms below, using the definitions (7-9)

7	HAZARD	Something that has the potential to cause harm
8	RISK	The chance of being harmed by the hazard
9	INJURY	Potential to be caused by the hazard

TASK 3 Identify (10-12) & describe (13-15) how competitions are made appropriate

10	TYPE	13	Appropriate type of competition entered to compete safely	Tag rugby / touch rugby / midi rugby / 7's / 15-a-side
11	PHYSICAL	14	Performers physicality developed to compete safely	Weight category in boxing and age group in football
12	SKILL	15	Performers skills are developed to compete safely	Passing / tackling / skills performed to a basic level

TASK 4 Identify 5 different types of hazard (16-20)

16	W	WEATHER/SUNLIGHT	21	Pool: Sunlight makes it hard to see floor
17	E	EQUIPMENT/FOOTWEAR	22	Fitness Centre: Broken equipment
18	L	LITTER & FAECES	23	Playing Field: Glass / Cans
19	S	SURFACE	24	Sportshall: Wet floor
20	H	HEAVILY CROWDED AREA	25	Artificial Outdoor Area: Too many people

PREVENTION OF INJURY (2/2)				TOTAL Score 2		/25			
TASK 5		Identify (1-3) and describe (4-6) 3 ways we can minimise the risk of injury				Score		/6	
1		4							
2		5							
3		6							
TASK 6		Describe the key terms below (7-9)				Score		/3	
HAZARD	7								
RISK	8								
INJURY	9								
TASK 7		Describe (10-12) & give examples (13-15) of how competitions are made appropriate				Score		/6	
TYPE	10			13					
PHYSICAL	11			14					
SKILL	12			15					
TASK 8		Identify (16-20) & give examples (21-25) of 5 different types of hazard				Score		/10	
16				21					
17				22					
18				23					
19				24					
20				25					

PREVENTION OF INJURY (2/2)

ANSWERS

TASK 5 Identify (1-3) and describe (4-6) 3 ways we can minimise the risk of injury

1	LIFTING & CARRYING EQUIPMENT CORRECTLY	4	Ensure sports equipment is lifted and carried using the correct technique
2	CORRECT CLOTHING / FOOTWEAR	5	Clothing should provide enough warmth and must not be hazardous to themselves and others to ensure a safe competitive environment
3	WARMUP & COOL DOWN	6	A warm up should be completed before & a cool down after activity to ↓ the chance of injury

TASK 6 Describe the key terms below (7-9)

7	HAZARD	Something that has the potential to cause harm
8	RISK	The chance of being harmed by the hazard
9	INJURY	Potential to be caused by the hazard

TASK 7 Describe (10-12) & give examples (13-15) of how competitions are made appropriate

10	TYPE	13	Appropriate type of competition entered to compete safely	Tag rugby / touch rugby / midi rugby / 7's / 15-a-side
11	PHYSICAL	14	Performers physicality developed to compete safely	Weight category in boxing and age group in football
12	SKILL	15	Performers skills are developed to compete safely	Passing / tackling / skills performed to a basic level

TASK 8 Identify (16-20) and give examples (21-25) for 5 different types of hazard

16	W	WEATHER/SUNLIGHT	21	Pool: Sunlight makes it hard to see floor
17	E	EQUIPMENT/FOOTWEAR	22	Fitness Centre: Broken equipment
18	L	LITTER & FAECES	23	Playing Field: Glass / Cans
19	S	SURFACE	24	Sportshall: Wet floor
20	H	HEAVILY CROWDED AREA	25	Artificial Outdoor Area: Too many people