	Year 11 Health and Social Care – jan – march 2021
What concepts will we be covering this half term?	 How do the respiratory, cardiovascular and digestive systems work? Structure and function of each system, how does the structure help the function? What are the disorders which can affect the functioning of the systems? Diagnosis and symptoms of the conditions- how is it done, how does each test work to show the malfunction (ECG, X Ray, MRI, Peak Flow) How can data be used to assess the health of a person? Measures of health can reflect overall health how and what are the normal ranges? Scientific evaluation skills. Data interpretation. Are important Literacy to access academic text. Ability to write in an analytical manner. There may be links to both PE and Biology
What resources can you use to support your learning?	 Knowledge organisers- RO23 Worksheets- work books I01/2 and I03 Checklists and PLC
Tasks to complete so we can assess your understanding/ Key Performance Indicator tasks	RO23 PLC Youtube – crash course on cardiovascular system, respiratory system and digestive system . https://www.youtube.com/channel/UCX6b17PVsYBQ0ip5gyeme-Q cardiovascular https://www.youtube.com/watch?v=X9ZZ6tcxArl https://www.youtube.com/watch?v=X9ZZ6tcxArl https://www.youtube.com/watch?v=Y4Z6tcxArl https://www.youtube.com/watch?v=43ej5ICeBo https://www.youtube.com/watch?v=ZVkIPwGALpl https://www.youtube.com/watch?v=TVM4Xxhx32U https://www.youtube.com/watch?v=2VkIPwGALpl https://www.youtube.com/watch?v=2VkIPwGALpl https://www.youtube.com/watch?v=2VkIPwGALpl https://www.youtube.com/watch?v=2VkIPwGALpl https://www.youtube.com/watch?v=PZVkIPwGALpl https://www.youtube.com/watch?v=PYNWVOUZM heart attacks respiratory https://www.youtube.com/watch?v=bHZsvBdUC2I https://www.youtube.com/watch?v=Cl44LJHnMEA https://www.youtube.com/watch?v=QCl44LJHnMEA https://www.youtube.com/watch?v=YloTRGfcMqM https://www.youtube.com/watch?v=gNrGfcMqM https://www.you
What can you do if you need help/ support?	Mrs Colley and Mrs Weston are available to answer questions if needed either email or on teams.

LO3 Checklist	Done	Marks Available
Heart Rate Table and Write up		
What is Heart Rate		
How do you measure Heart Rate		5
What is the average Heart Rate		J
Compare your results to average		
Peak Flow Table and Write up		
What is Peak Flow		
How do you measure Peak Flow		5
What is the average Peak Flow		
Compare your results to average		
BMI Table and Write up		
What is BMI		
How do you measure it BMI		5
What is the average BMI		
Compare your results to average		

LO3 Checklist	Done	Marks Available
Heart Rate Table and Write up		
What is Heart Rate		
How do you measure Heart Rate		5
What is the average Heart Rate		
Compare your results to average		
Peak Flow Table and Write up		
What is Peak Flow		
How do you measure Peak Flow		5
What is the average Peak Flow		
Compare your results to average		
BMI Table and Write up		
What is BMI		
How do you measure it BMI		5
What is the average BMI		
Compare your results to average		





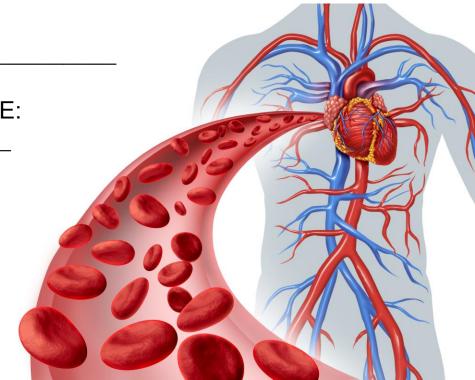
LO1 -Understanding Body Systems

L02-

Understanding Disorders That Affect Body Systems

NAME:

TARGET GRADE:



LO1 - KNOW THE BODY SYSTEMS CHECKLIST

The Cardiovascular System	 The structure of the cardiovascular system The heart – ventricles, left & right atrium * aorta Veins – size & diameter Arteries Size, diameter and pressure The function of the cardiovascular system The circulation of blood around the body Oxygenated & deoxygenated blood 	
The Respiratory System	 The Structure of the respiratory system Trachea: tube of bone Lungs: cone shaped & right is bigger than left Alveoli: in the lungs & microscopic sacs bunched together The function of the respiratory system Inhaling: sucking in air diaphragm expands, air goes into lungs, breathes in oxygen. Exhaling: diaphragm relaxes and ribcage moves inwards and downwards, breathes out CO2 	
The Digestive System Esophagus Liver Gail Bladder Large Intestine Appendix Rectum	 The structure of the digestive system The stomach: expanding sac structure & muscular walls. Oesophagus: length, extends to stomach, moves food down to the stomach. Intestines: small & large The function of the digestive system Digestion: breaks down food, absorption of molecules into blood, waste removal from the body. 	

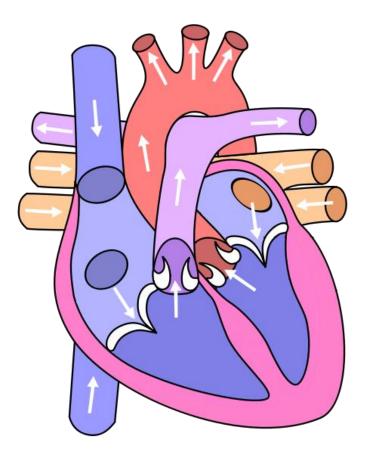
LO2 UNDERSTAND THE BODY SYSTEMS CHECKLIST ✓

The Cardiovascular System	Disorders of the heart• Heart Attack• Angina• Heart FailureThe symptoms of a heart disorder• Chest pains, discomfort in arms/back etc, shortness of breath, tiredness, dizzinessDiagnosis of disorders• ECG, x-rays, blood tests, checking pulse rates and blood pressures	
The Respiratory System	Disorders of the respiratory system• Asthmas/allergies• Bronchitis• Pneumonia• EmphysemaThe symptoms of the disorder• Wheezing, shortness of breaths, increased breathing rateThe diagnosis of the disorders• CT scan, MRI, x-rays, function tests	
The Digestive System	Disorders of the digestive systemIrritable bowl syndromeHeartburnUlcersThe symptoms of the disorderPain, discomfort, bloating, diarrhoea, sour/bitter taste in mouth, vomiting, weight lossThe diagnosis of the disordersMedical history, physical exam, endoscopy, x-ray, ultrasound, blood tests, BMI tests	

THE CARDIOVASCULAR SYSTEM

YOUR TASK -

- 1 Label the blank diagram of the heart.
- 2 Include the LEFT & RIGHT side of the heart
- 3 Ventricles & atrium
- 4 Veins, Arteries & Valves



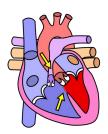




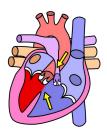
LO1 – To know and understand how the cardiovascular system is structured.

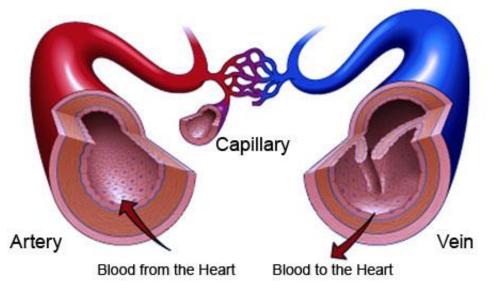
Define each of these parts and what they are used for.

AORTA	
VENTRICLES	
LEFT & RIGHT ATRIUM	
SEPTUM	
PULMONARY VEIN	
PUMONARY ARTERY	
VENA CAVA	
BICUSPID VALVE	
TRICUSPID VALVE	
SEMILUNAR VALVE	

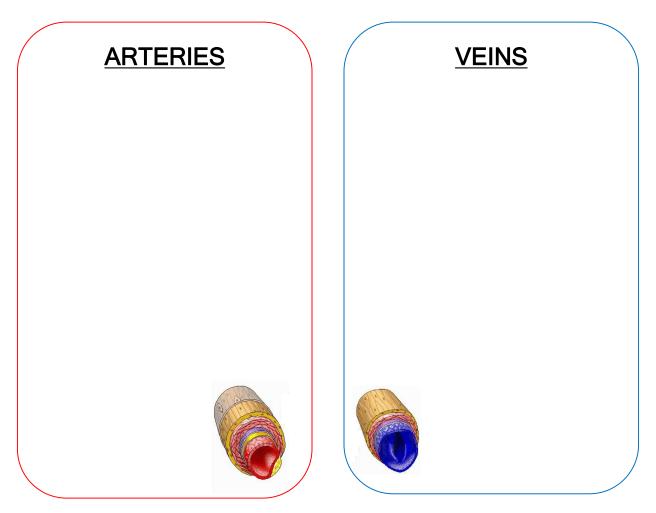


VEINS & ARTERIES





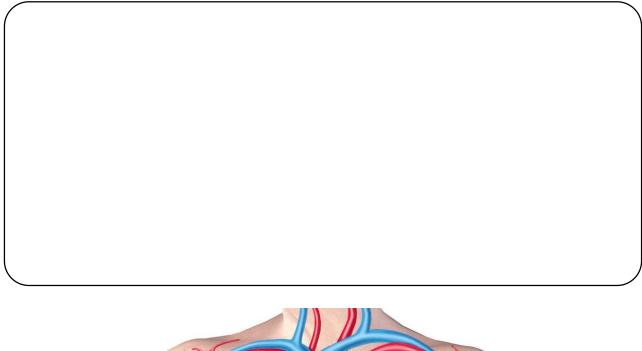
LO1 - You need to know what the arteries and veins are used for and the size, diameter and pressure of veins and arteries.

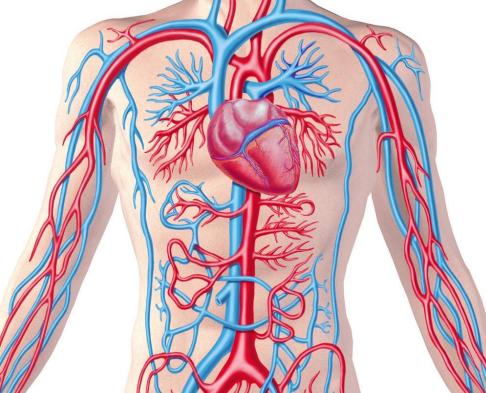




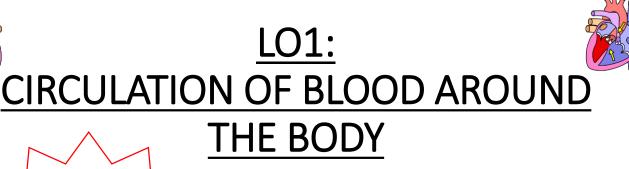
LO1 – You need to know what the functions of the cardiovascular system are.

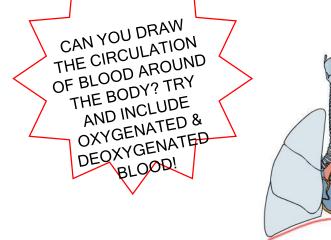
CHALLENGE: Can you do some extra research about the functions?

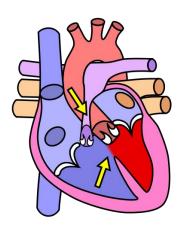






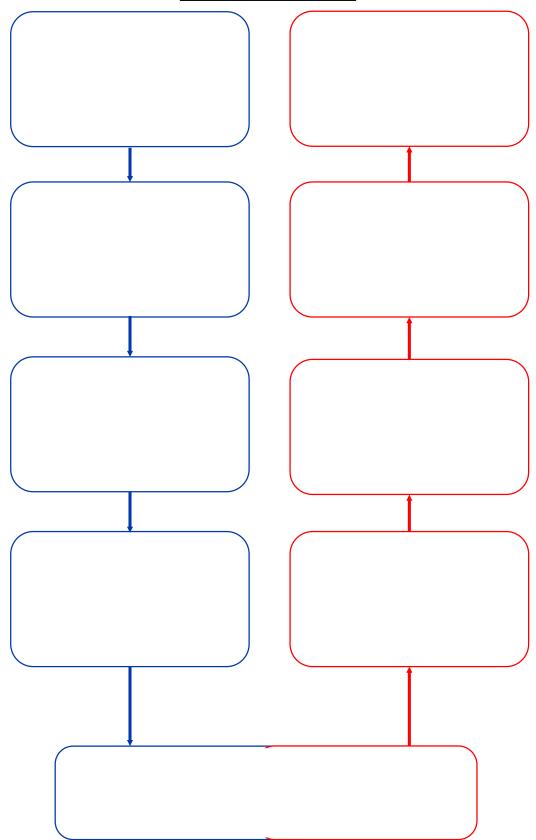


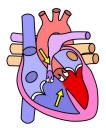




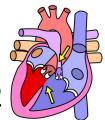


<u>LO1:</u> CIRCULATION OF BLOOD AROUND THE BODY



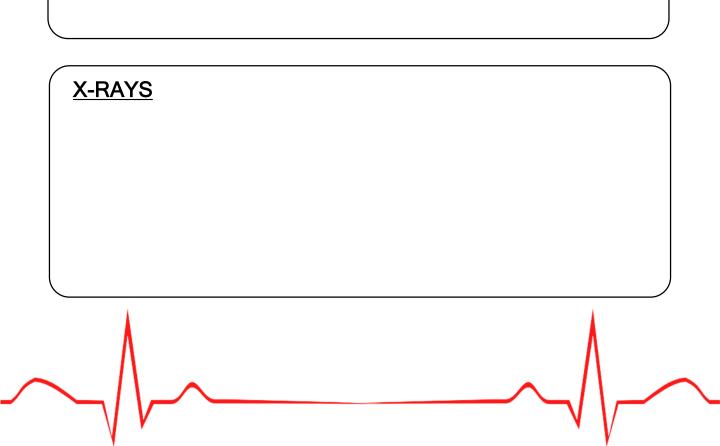


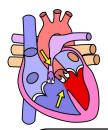
LO2 DIAGNOSIS OF DISORDERS



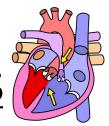
ECG - ECHOCARDIOGRAM

ECG - ELECTROCARDIOGRAM





<u>LO2 –</u> DIAGNOSIS OF DISORDERS



BLOOD TESTS

PULSE RATES TESTS

BLOOD PRESSURE TESTS





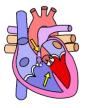
You need to include information about what a <u>HEART</u> <u>ATTACK</u> is, what its symptoms are, how its diagnosed and how it can effect people.

WHAT ARE HEART ATTACKS?

WHAT ARE THE SYMPTOMS?









You need to include information about what <u>ANGINA</u> is, what its symptoms are, how its diagnosed and how it can effect people.

WHAT IS ANGINA?

WHAT ARE THE SYMPTOMS?

ANGINA







You need to include information about what <u>HEART</u> <u>FAILURE</u> is, what its symptoms are, how its diagnosed and how it can effect people.

WHAT IS HEART FAILURE?

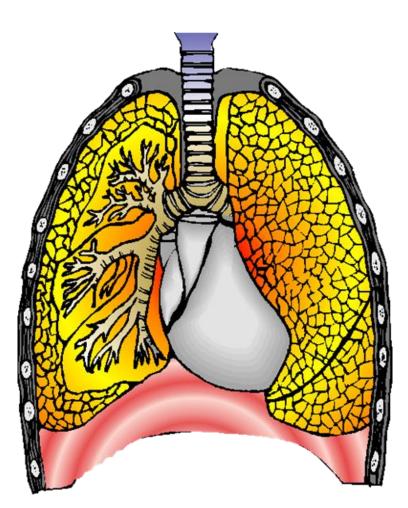
WHAT ARE THE SYMPTOMS?



THE RESPIRATORY SYSTEM SYSTEM

YOUR TASK -

- 1 Label the blank diagram of the respiratory system.
- 2 Trachea
- 3 Bronchi & Bronchioles
- 4 Alveoli
- 5 Lungs, Ribcage, Intercostal Muscles & Diaphragm





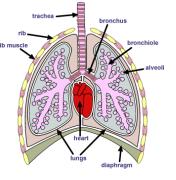
DO YOU THINK YOU COULD EXPLAIN USING THIS DIAGRAM THE FUNCTION OF THE RESPIRATORY SYSTEM?



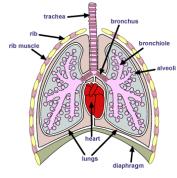
LO1 – To know and understand how the respiratory system is structured.

Define each of these parts and what they are used for.

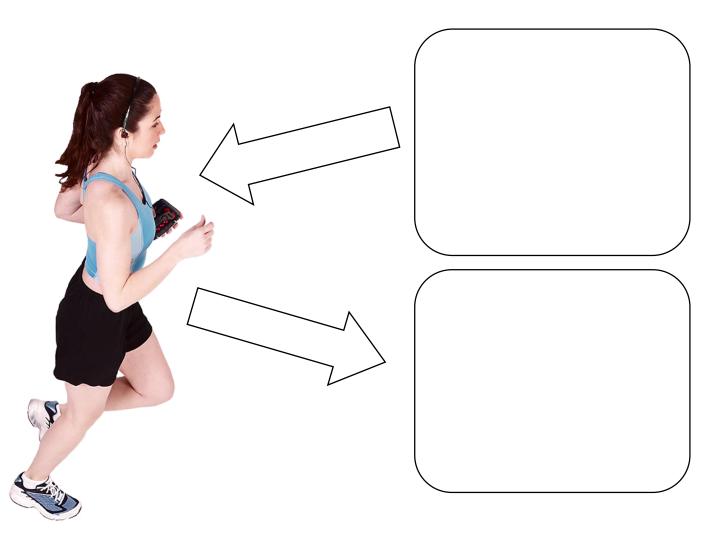
TRACHEA	
BRONCHI	
BRONCHIOLES	
ALVEOLI	
LUNGS	
RIB CAGE	
INTERCOSTAL MUSCLES	
DIAPGRAGM	

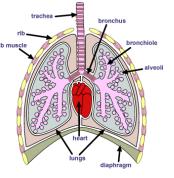


<u>LO1:</u> INHALATION

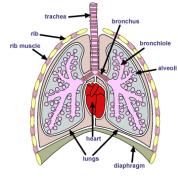


LO1 – You need to know the functions of the respiratory system.

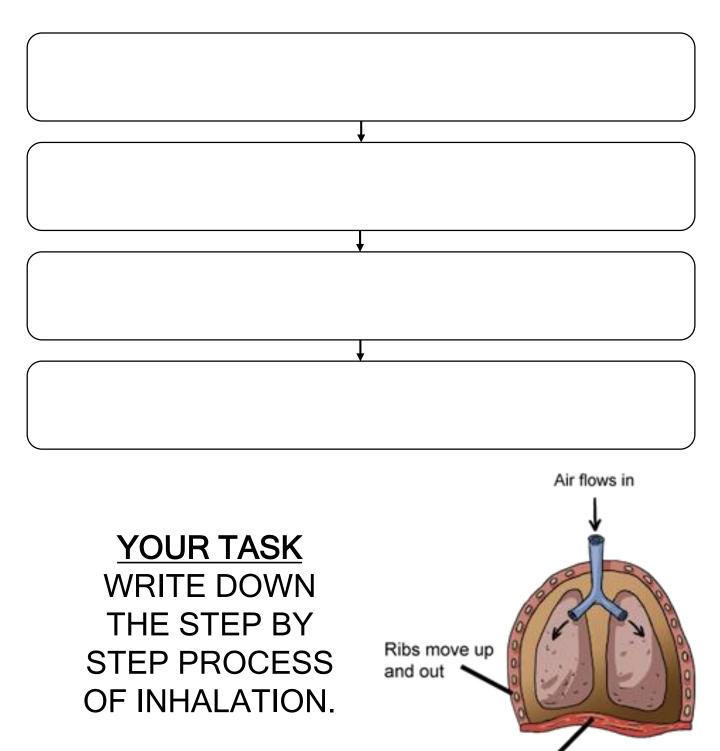




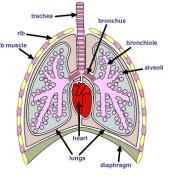


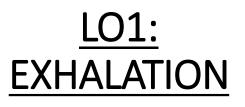


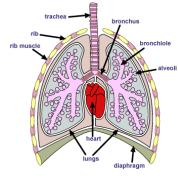
LO1 – To know and understand the function of the respiratory system during inhalation and exhalation. .



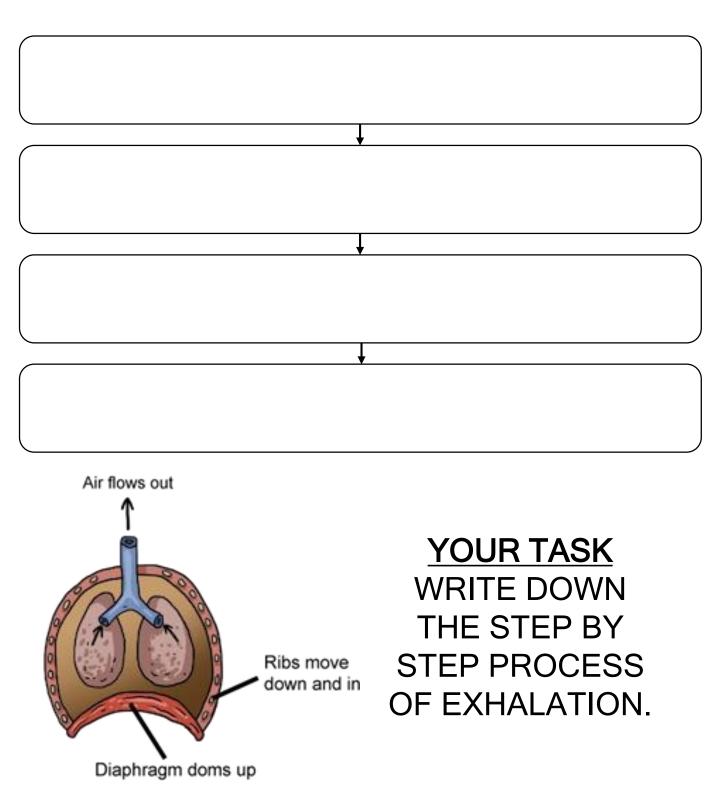
Diaphragm flattens

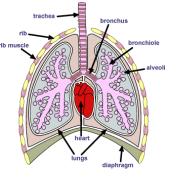




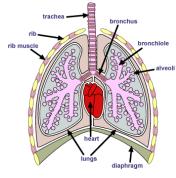


LO1 – To know and understand the function of the respiratory system during inhalation and exhalation. .

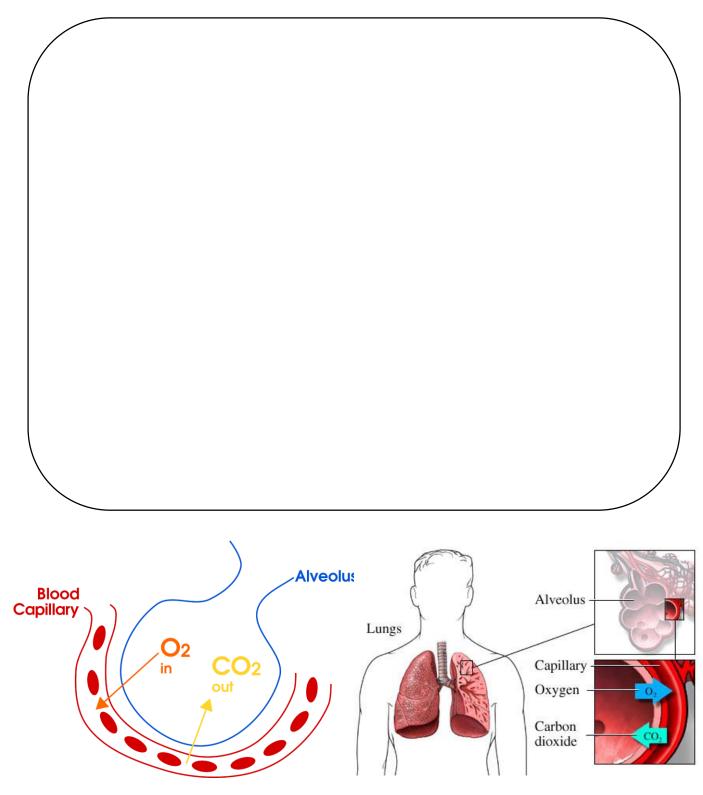


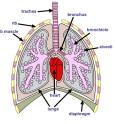




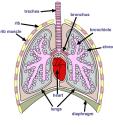


LO1 – To understand what happens to oxygen once it has been inhaled. Take notes of the key information.





<u>LO2</u> DIAGNOSIS OF DISORDERS



CT SCAN

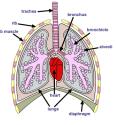
<u>MRI</u>

<u>X-RAYS</u>

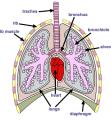




— MRI scanner



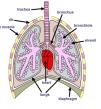




SPIROMETRY

PEAK FLOW





<u>LO2</u> RESPIRATORY DISORDERS

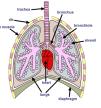
You need to include information about what <u>ASTHMA</u> is, what are its symptoms, how its diagnosed and how it can effect people.

WHAT IS ASTHMA?

WHAT ARE THE SYMPTOMS?

HOW IS IT DIAGNOSED?





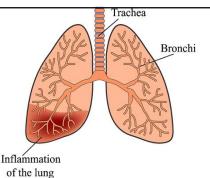


You need to include information about what <u>PNEUMONIA</u> is, what are its symptoms, how its diagnosed and how it can effect people.

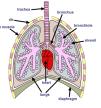
WHAT IS PNEUMONIA?

WHAT ARE THE SYMPTOMS?

HOW IS IT DIAGNOSED?



PNEUMON IA



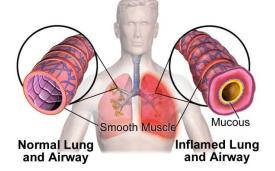
<u>LO2</u> <u>RESPIRATORY DISORDERS</u>

You need to include information about what <u>BRONCHITIS &</u> <u>EMPHYSEMA</u> is, what are its symptoms, how its diagnosed and how it can effect people.

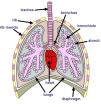
WHAT IS BRONCHITIS & EMPHYSEMA?

WHAT ARE THE SYMPTOMS?

HOW IS IT DIAGNOSED?





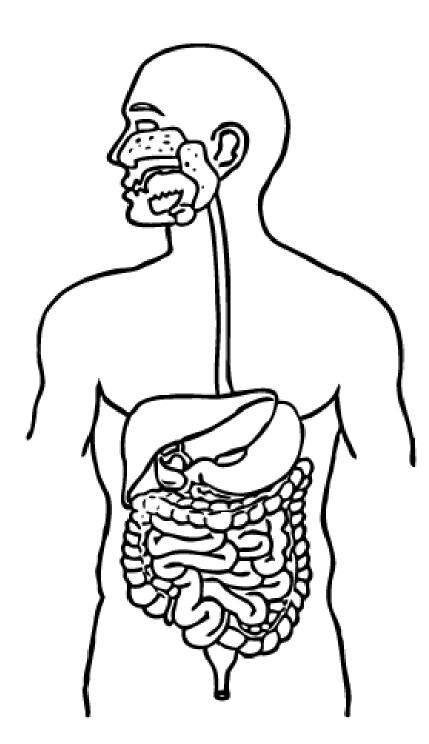


THE DIGESTIVE SYSTEM

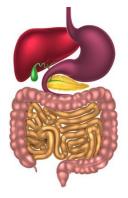
YOUR TASK -

- 1 Label the blank diagram of the digestive system.
- 2 Include the mouth, stomach & oesophagus
- 3 The intestines, liver & pancreas

<u>KEY:</u>



YOU MUST LABEL AND COLOUR THE DIAGRAM. CREATE A KEY TO IDENTIFY THE COLOURS.

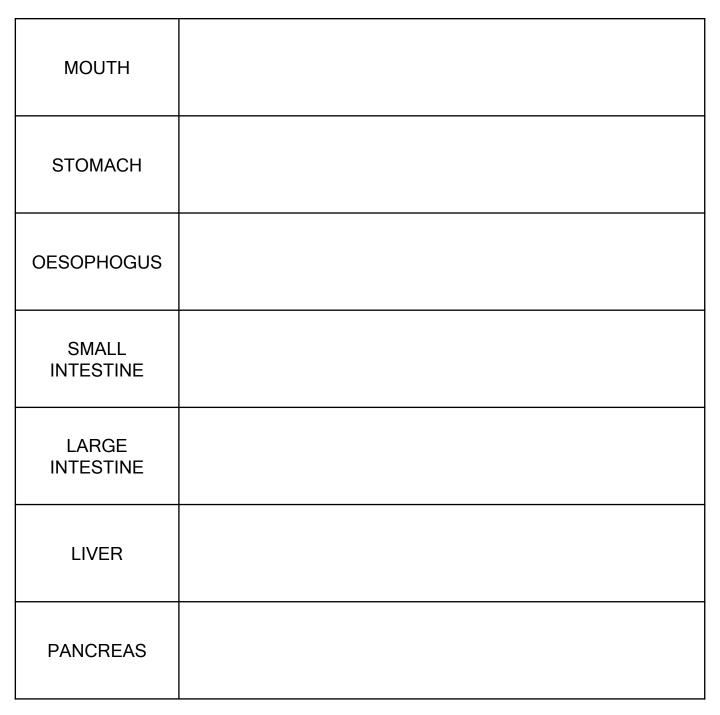


STRUCTURE OF THE DIGESTIVE SYSTEM



LO1 – To know and understand how the digestive system is structured.

Define each of these parts and what they are used for.



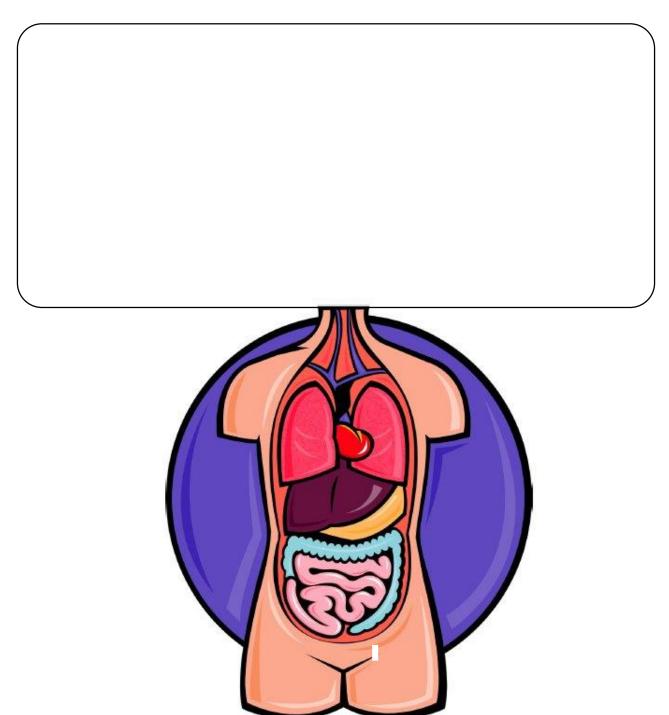


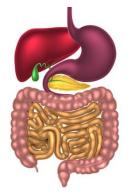


LO1 – You need to know what the functions of the digestive

system are.

CHALLENGE: Can you do some extra research about the functions?

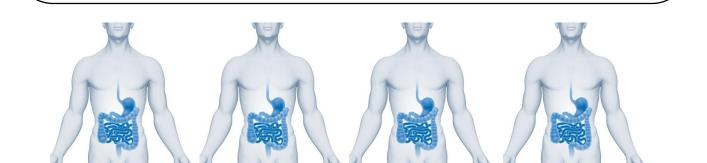


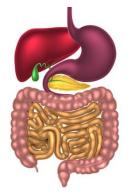


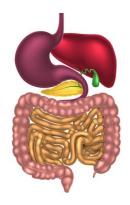


LO1 – You need to understand the function of the digestive system. Talk about DIGESTION. How food is broken down, the absorption of molecules into the blood and waste removal from the body.

INGESTION

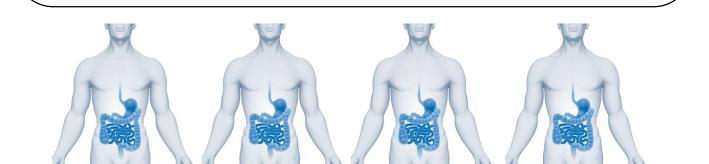






LO1 – You need to understand the function of the digestive system. Talk about DIGESTION. How food is broken down, the absorption of molecules into the blood and waste removal from the body.

DIGESTION

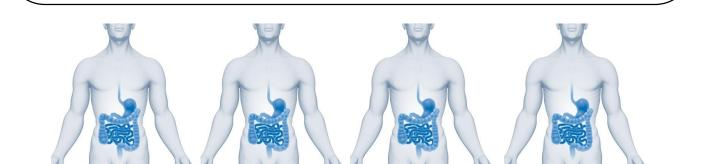


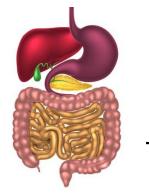


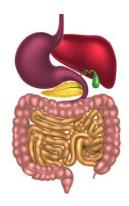


LO1 – You need to understand the function of the digestive system. Talk about DIGESTION. How food is broken down, the absorption of molecules into the blood and waste removal from the body.

ABSORTION

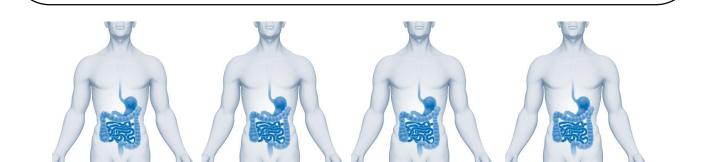






LO1 – You need to understand the function of the digestive system. Talk about DIGESTION. How food is broken down, the absorption of molecules into the blood and waste removal from the body.

ELIMINATION





<u>LO2</u> DIAGNOSIS OF DISORDERS



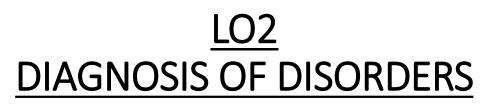
MEDICAL HISTORY & PHYSICAL EXAMS

X-RAYS

BODY MASS INDEX (BMI) TESTS









BLOOD TESTS

ULTRASOUNDS

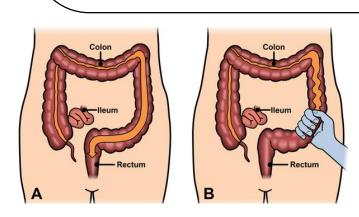
GASTROSCOPY USING AN ENDOSCOPE





<u>LO2</u> DIGESTIVE SYSTEM DISORDERS

You need to include information about what <u>IRRITABLE</u> <u>BOWL SYNDROME</u> is, what are its symptoms, how its diagnosed and how it can effect people.







LO2 DIGESTIVE SYSTEM DISORDERS

You need to include information about what <u>HEARTBURN</u> is, what are its symptoms, how its diagnosed and how it can effect people.





<u>LO2</u> DIGESTIVE SYSTEM DISORDERS



You need to include information about what <u>STOMACH</u> <u>ULCERS</u> are, what are its symptoms, how its diagnosed and how it can effect people.







LO3:

Be able to interpret data obtained from measuring body rates with reference to the functioning of healthy body systems.



<u>CLIENT</u> INFORMATION

Name:	
Age (YRS):	
Weight (KG):	
Height (M):	

On average how many times per week do you exercise?

0 1 2 3 4 5 +

How healthy do you think your lifestyle is?

- 1. Very unhealthy
- 2. Unhealthy
- 3. Average
- 4. Healthy
- 5. Very healthy

Do you have any injuries or health disorders? Y N

CARDIOVASCULAR TEST PULSE RATES

CLIENT INFORMATION FOR PULSE RATES:

WHAT I WILL BE DOING:

<u>CARDIOVASCULAR</u> <u>TEST</u> <u>PULSE RATES</u>

CLIENT RESTING HR: _____bpm

	PULSE RATE IMMEDIATELY AFTER EXERCISE	PULSE RATE 2 MINUTES AFTER EXERCISE	RECOVERY RATE NUMBER
1			
2			
3			
AVERAGE			

DIFFERENCE	BODY AGE INDICATOR	FITNESS LEVEL
LESS THAN 22	Slightly older than actual age	BELOW AVERAGE – UNFIT
22-52	About the same as actual age	AVERAGE FITNESS LEVEL
53-58	Slightly younger than actual age	SLIGHTLY ABOVE AVERAGE
59-65	Moderately younger than actual age	GOOD LEVEL OF FITNESS
66 OR MORE	A lot younger that actual age	EXCELLENT LEVEL OF FITNESS

CARDIOVASCULAR TEST PULSE RATES

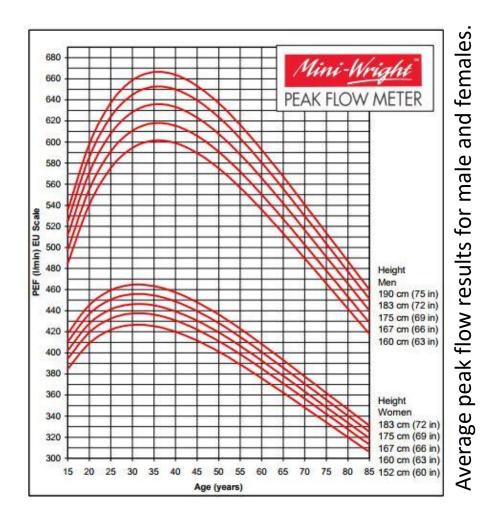
COMPARISON & EVALUATIONS

RESPIRATORY TEST PEAK FLOW TESTS:

WHAT I WILL BE DOING:

<u>RESPIRATORY</u> <u>TEST</u> <u>PEAK FLOW TEST</u>

	PEAK FLOW AT RESTING	PEAK FLOW IMMEDIATELEY AFTER EXERCISE
1		
2		
3		
BEST SCORE		



RESPIRATORY TEST PEAK FLOW TEST COMPARISON & EVALUATIONS

DIGESTIVE TESTS BMI CLIENT INFORMATION FOR PULSE RATES:

WHAT I WILL BE DOING:

DIGESTIVE TESTS BMI

BMI = WEIGHT (KG) ÷ HEIGHT (M)2

HEIGHT (M) = _____

WIGHT (KG) = _____

BMI	SIGNIFICANCE
LESS THAN 18.5	UNDERWEIGHT
18.5-24.9	HEALTHY
25-29.9	OVERWEIGHT
30-39.9	OBESE
40+	MORBIDLY OBESE

DIGESTIVE TESTS BMI COMPARISON & EVALUATIONS

RO23 Body Systems

LO	You Should be able to	LAP (pass)	MAP (merit)	HAP (dist)
LOI	Demonstrate knowledge of how the cardiovascular system works (it's role within the body)	Includes the simple facts of how the cardiovascular system works (it's role)	Logical and well reasoned understanding of how the cardiovascular system works (it's role)	Detailed (includes all the facts) information of how the cardiovascular system works (it's role)
LOI	Provide information to illustrate the structure of the cardiovascular system making links between structure and function	Information is basic and shows few links between structure and function	Information is clear and accurately expressed and shows some links between structure and function	Information is detailed and coherent / consistent and shows many links between structure and function
LOI	Describe how the system functions using appropriate terminology to demonstrate understanding (cardiovascular system)	Basic description of the system functionality making limited use of terminology to demonstrate a basic understanding	Clear and accurately expressed description of the system functionality making some (about 50%) effective use of terminology to demonstrate a logical (sound) understanding	Comprehensive (includes all the facts) description of the system functionality, effectively using terminology to demonstrate a clear and thorough understanding
LOI	Demonstrate knowledge of how the respiratory system works (it's role within the body)	Includes the simple facts of how the respiratory system works (it's role)	Logical and well reasoned understanding of how the respiratory system works (it's role)	Detailed (includes all the facts) information of how the respiratory system works (it's role)
LO1	Provide information to illustrate the structure of the respiratory system making links between structure and function	Information is basic and shows few links between structure and function	Information is clear and accurately expressed and shows some links between structure and function	Information is detailed and coherent / consistent and shows many links between structure and function

LO	You Should be able to	LAP (pass)	MAP (merit)	HAP (dist)
LOI	Describe how the system functions using appropriate terminology to demonstrate understanding (respiratory system)	Basic description of the system functionality making limited use of terminology to demonstrate a basic understanding	Clear and accurately expressed description of the system functionality making some (about 50%) effective use of terminology to demonstrate a logical (sound) understanding	Comprehensive (includes all the facts) description of the system functionality, effectively using terminology to demonstrate a clear and thorough understanding
LOI	Demonstrate knowledge of how the digestive system works (it's role within the body)	Includes the simple facts of how the digestive system works (it's role)	Logical and well reasoned understanding of how the digestive system works (it's role)	Detailed (includes all the facts) information of how the digestive system works (it's role)
LOI	Provide information to illustrate the structure of the digestive system making links between structure and function	Information is basic and shows few links between structure and function	Information is clear and accurately expressed and shows some links between structure and function	Information is detailed and coherent / consistent and shows many links between structure and function
LOI	Describe how the system functions using appropriate terminology to demonstrate understanding (digestive system)	Basic description of the system functionality making limited use of terminology to demonstrate a basic understanding	Clear and accurately expressed description of the system functionality making some (about 50%) effective use of terminology to demonstrate a logical (sound) understanding	Comprehensive (includes all the facts) description of the system functionality, effectively using terminology to demonstrate a clear and thorough understanding
LO2	Provide information of the symptoms for a disorder associated with the cardiovascular system giving reasons for the symptoms	Simple list with basic reasons for some of the symptoms	Sound description of the symptoms giving reasons for many of the symptoms	Detailed (includes all the facts) description of the symptoms giving detailed reasons for most of the symptoms

LO	You Should be able to	LAP (pass)	MAP (merit)	HAP (dist)
LO2	Provide a list of the methods of diagnosis	Basic list included	Sound (well reasoned) list is included	Comprehensive (includes all the facts) list is included
LO2	Make links between the disorder (cardiovascular system) and the structure and / or functionality of the system	Few, if any, links between disorder and structure and / or functionality of the system	Some (50%) links made between the disorder and structure and / or functionality of the system	Clear links between the disorder and structure and / or functionality of the system
LO2	Provide information of the symptoms for a disorder associated with the respiratory system giving reasons for the symptoms	Simple list with basic reasons for some of the symptoms	Sound description of the symptoms giving reasons for <i>many</i> of the symptoms	Detailed (includes all the facts) description of the symptoms giving detailed reasons for most of the symptoms
LO2	Provide a list of the methods of diagnosis	Basic list included	Sound (well reasoned) list is included	Comprehensive (includes all the facts) list is included
LO2	Make links between the disorder (respiratory system) and the structure and / or functionality of the system	Few, if any, links between disorder and structure and / or functionality of the system	Some (50%) links made between the disorder and structure and / or functionality of the system	Clear links between the disorder and structure and / or functionality of the system
LO2	Provide information of the symptoms for a disorder associated with the digestive system giving reasons for the symptoms	Simple list with basic reasons for some of the symptoms	Sound description of the symptoms giving reasons for many of the symptoms	Detailed (includes all the facts) description of the symptoms giving detailed reasons for most of the symptoms
LO2	Provide a list of the methods of diagnosis	Basic list included	Sound (well reasoned) list is included	Comprehensive (includes all the facts) list is included
LO2	Make links between the disorder (digestive system) and the structure and / or functionality of the system	Few, if any, links between disorder and structure and / or functionality of the system	Some (50%) links made between the disorder and structure and / or functionality of the system	Clear links between the disorder and structure and / or functionality of the system

LO	You Should be able to	LAP (pass)	MAP (merit)	HAP (dist)
LO3	Demonstrate confidence in measuring body rates (heart rate, peak flow, BMI)	Limited confidence demonstrated	Some confidence demonstrated	Demonstrates confidence and competency
LO3	Interpret the data obtained from measuring body rates and compare against the norms making reference to the functioning of healthy body systems	Limited interpretation of data with limited reference to functioning of healthy body systems	Reasonable (not flawless) interpretation of data making some reference to functioning of healthy body systems	Thorough (accurate and detailed) interpretation of data making detailed reference to functioning of healthy body systems
LO3	Spelling, Punctuation and Grammar	Some errors	Minor errors	Few errors (not many but more than one)
LO3	Draws upon skills / knowledge / understanding from other units in the specification	Limited (partial) evidence related to other units	Some relevant evidence related to other units	Accurately expressed relevance to other units