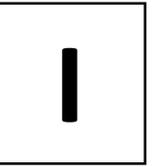


# LOW STAKES TEST



1. Name the **THREE** parts of the digestive system.
2. Explain what a sphincter is.
3. What are names of the four chambers of the heart?
4. Explain why the cartilage around the trachea is 'C' shaped.
5. Identify **ONE** cardiovascular disorder.
6. Identify **ONE** disorder that affects the respiratory system.

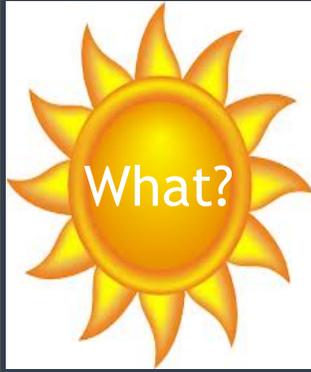
# LOW STAKES TEST: Answers



1. Oesophagus, stomach and intestines.
2. A muscular passage which widens and narrows to allow food and waste to pass through.
3. Left Atrium/Left Ventricle/Right Atrium/Right Ventricle.
4. So they can widen as food passes through the oesophagus (next to the trachea), making them more flexible.
5. CHD/angina/heart attack/heart failure.
6. Asthma/Allergies/COPD/Pneumonia.

# This lesson....

## LO2: Disorders that affect our body systems



- ✓ To understand disorders that affect our cardiovascular, respiratory and digestive system.

Building the Learning Habits for Success!

Resourcefulness

Reflection

So that....

- ✓ You can consider how to implement this knowledge into the next assignment.

# Cardiovascular disorders

## Key Terms

### Disorder

A state where part of the body is not functioning correctly and is causing ill-health.

### Symptoms

An indication of a disease or disorder.

### Diagnosis

An investigation of the symptoms of an illness to identify what is the cause of the problems.

### CT Scan

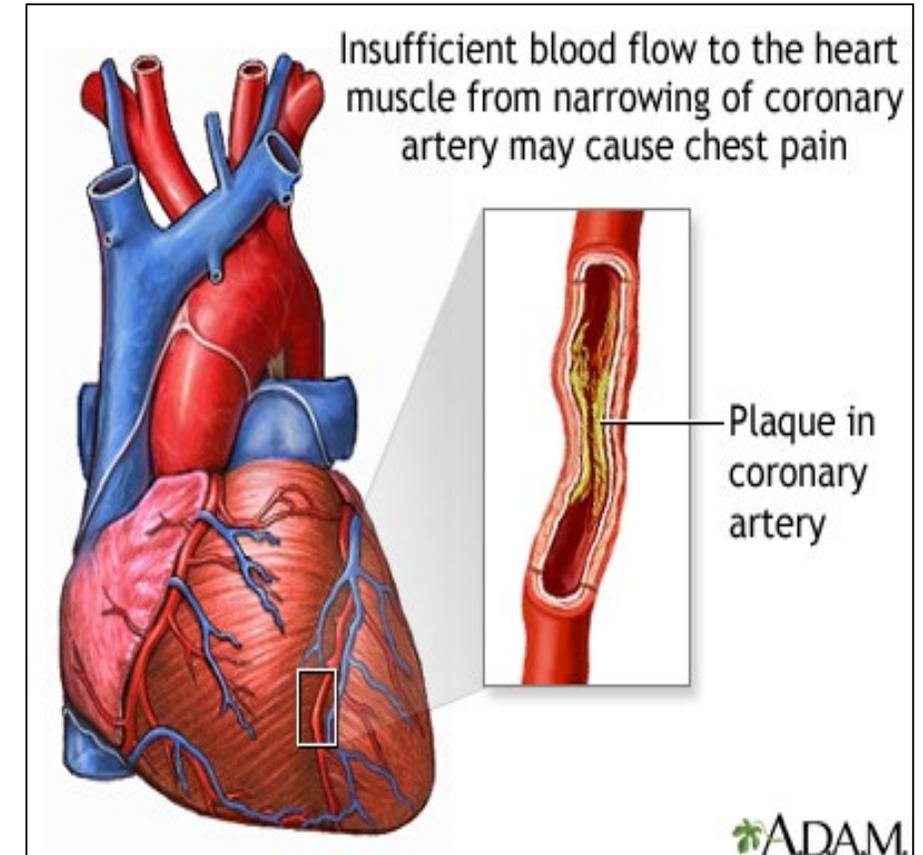
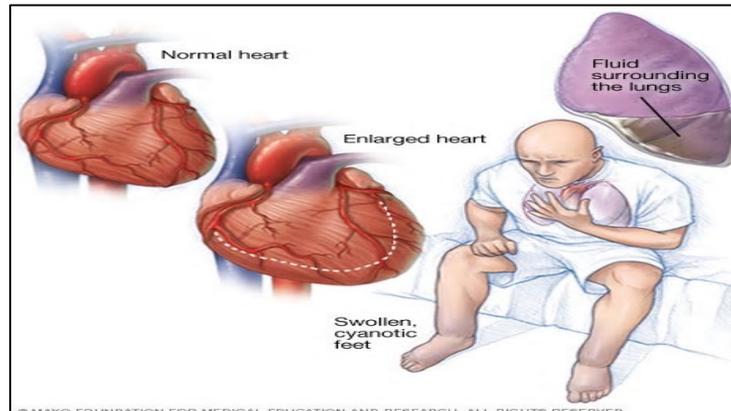
A scan used for internal organs, blood vessels or bones.

### MRI Scan

Used to produce detailed images of almost all body parts.

## EXAMPLES

- Angina
- Heart attack
- Heart failure



**Learning Objective:** To understand disorders that affect our cardiovascular, respiratory and digestive system **so that** you can consider how to implement this knowledge into the next assignment.

# Signs and Symptoms

## Key Terms

### Disorder

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Disorder	Symptoms	Explanation
Angina	Breathlessness/nausea/dizziness /chest pain/tightness in the chest	Walls of the arteries become blocked with fatty deposits, a process called atherosclerosis.
Heart Attack	Light-headed/weakness/sweating/shortness of breath/chest pain	When arteries become completely blocked they can cause a heart attack, which can permanently damage the heart muscle.
Heart Failure	Breathlessness/raised heart rate/tiredness/swollen ankles or legs.	The heart becomes too weak to pump blood around the body, Causing fluid to build up in the lungs.

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# Diagnosis

## Electrocardiogram [ECG]

A test that check the rhythm and electrical activity of the heart. Sensors are attached to the skin and detect the signals by the heart, each time it beats. Can help detect coronary heart disease.

## Echocardiogram

Waves are used to detect the structure of the heart. High-frequency sound is used that reflects against the structure of the heart. It is used to detect any abnormalities of the structure.

## Chest X-ray

Visual image of a body system through the use of radioactive wave technology. This can show if the heart is bigger than it should be- indicating whether there is a disorder present or not.

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# Diagnosis

## Blood Tests

Chemical imbalance is detected. An indication is provided of any potential problems that may be occurring. Cardiac enzyme tests can detect if there is any damage to the heart- the more damage there is, the more enzymes that are released.

## Pulse Rates

Usually a resting heart rate of 60 to 100 beats per minute (bpm) for an adult. Irregular pulses could be a sign of cardiac arrhythmia- abnormal heart rhythm.

## Blood Pressure

A sphygmomanometer is used to measure this. Blood pressure measurement is usually in the “safe range” if below 140/90 and above 90/60. The first number is known as **systolic** pressure, the lower is known as **diastolic** pressure.

**Learning Objective:** To understand disorders that affect our cardiovascular, respiratory and digestive system **so that** you can consider how to implement this knowledge into the next assignment.

# Respiratory disorders

## Key Terms

### Disorder

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### Symptoms

An indication of a disease or disorder.

### Diagnosis

An investigation of the symptoms of an illness to identify what is the cause of the problems.

### CT Scan

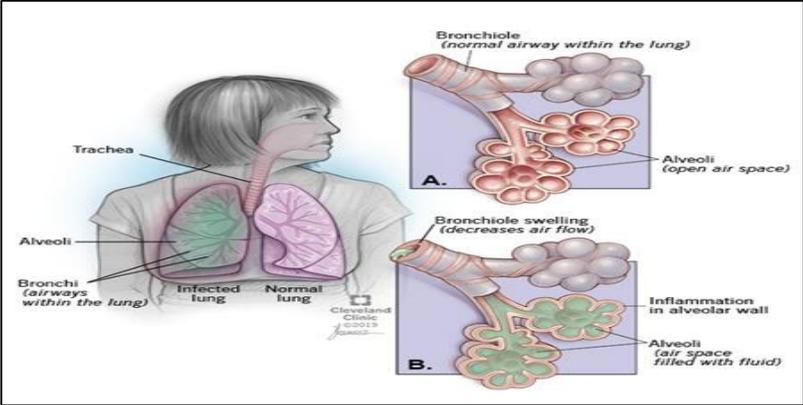
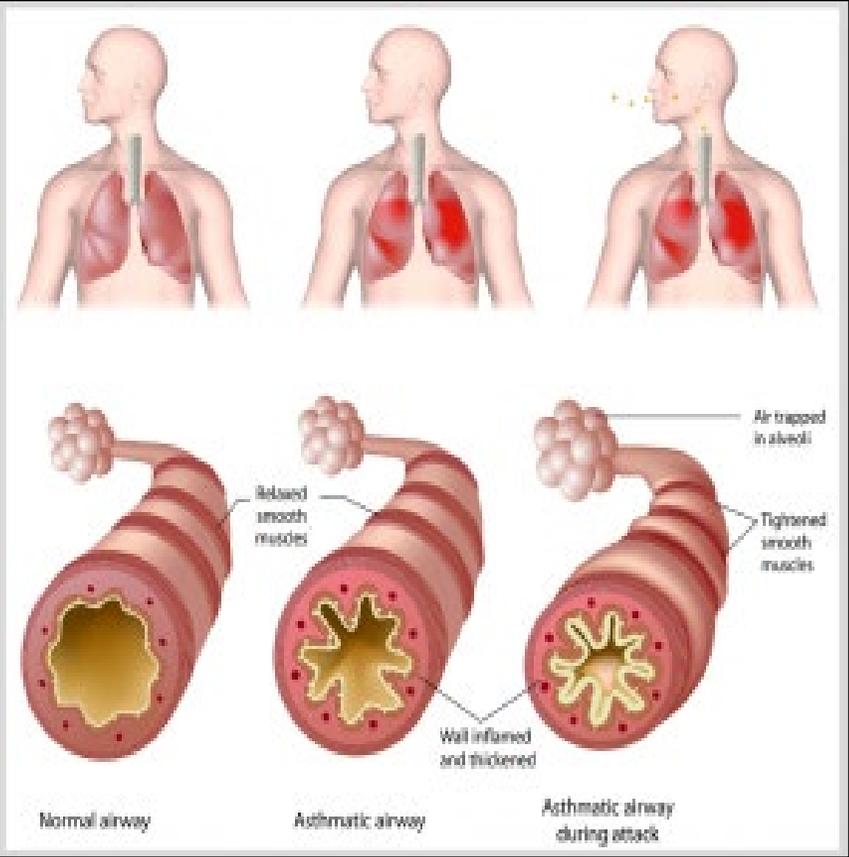
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## EXAMPLES

- Asthma
- Pneumonia
- Chronic Obstructive Pulmonary Disease [COPD]



**Learning Objective:** To understand disorders that affect our cardiovascular, respiratory and digestive system **so that** you can consider how to implement this knowledge into the next assignment.

# Signs and Symptoms

## Key Terms

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Disorder	Symptoms	Explanation
Asthma	Breathlessness/tight chest/wheezing/itchy eyes or skin/coughing/runny nose	Inflammation of the bronchi, causing extreme sensitivity.
Pneumonia	Mucus filled cough/breathing difficulties/rapid heartbeat/fever/sweating/shivering/loss of appetite.	Swelling of the tissue in one or both of the lungs. Alveoli inflame and fill up with liquid making it harder to breath.
COPD	Breathlessness/yellow <b>sputum</b> /persistent cough/frequent chest infections.	Airways of the lungs are inflamed and narrowed. Air sacs become permanently damaged.

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# Diagnosis

## MRI and CT Scans

Detailed images can be provided through the use of these pieces of technology. They can be repeated over-time and can monitor any changes in conditions.

## Lung Function Test

Spirometry tests are used to measure the breathing capacity of the lungs. This measure the **volume** of air expired in total, and at what force it is expired out. The peak flow test is similar, although it measures the speed in which air is expired.

## X-rays

These can show whether there is any fluid on the lungs, or whether anything occurring in the lung can be the cause of an individual's symptoms.

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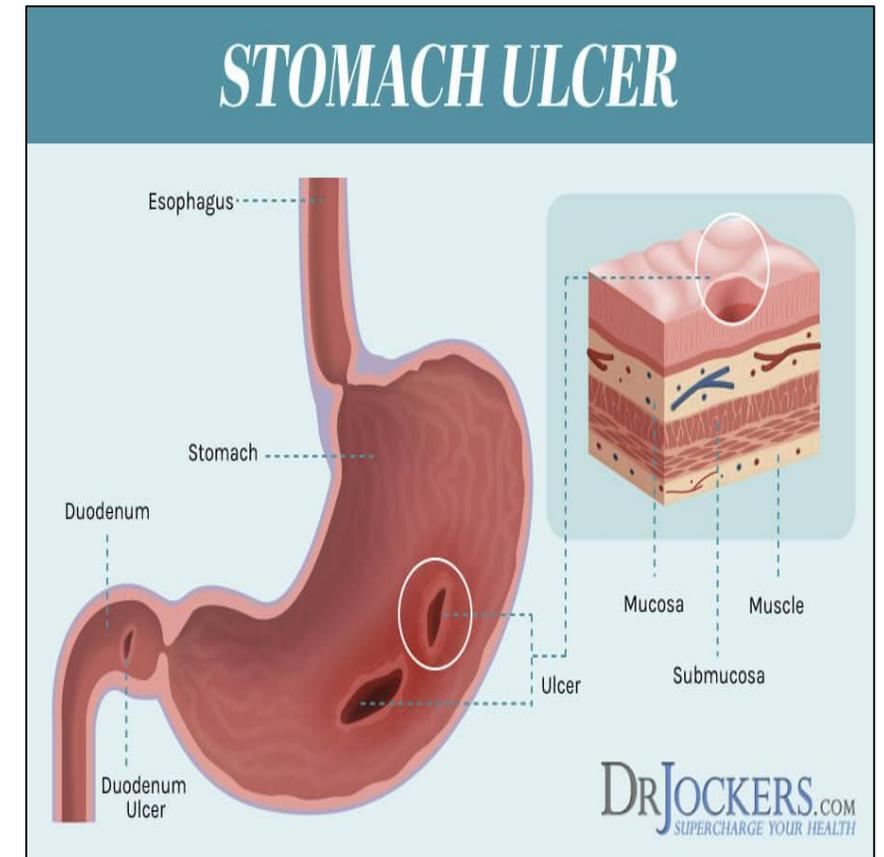
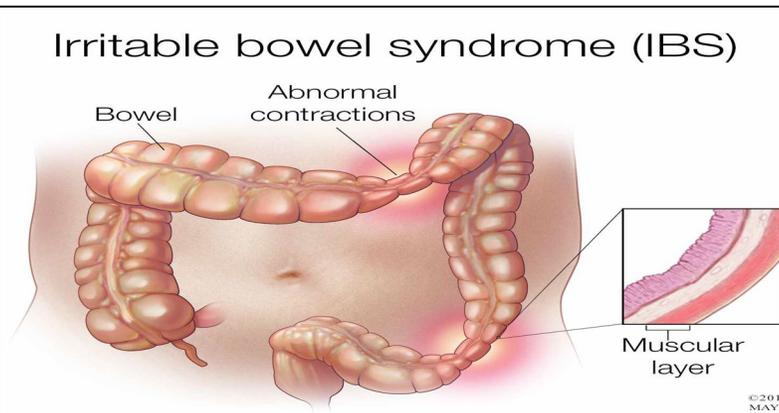
### MRI Scan

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# Digestive disorders

## EXAMPLES

- Irritable Bowel Syndrome (IBS)
- Ulcers
- Heartburn



**Learning Objective:** To understand disorders that affect our cardiovascular, respiratory and digestive system **so that** you can consider how to implement this knowledge into the next assignment.

# Signs and Symptoms

## Key Terms

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Disorder	Symptoms	Explanation
IBS	Stomach cramp or pain/changes in bowel movement i.e. diarrhoea or constipation/bloating of the stomach/flatulence/mucus passing from the anus.	Food moves too quickly or too slowly through the system. If it is quick- causes diarrhoea, too slow- causes constipation.
Ulcers	Burning sensation around abdomen/loss of appetite/loss of weight/indigestion/heartburn/ blood loss/nausea.	Gastric ulcers are open sores, found on the stomach lining, duodenal ulcers are found in the small intestine.
Heartburn	Burning sensation in the chest/acid reflux/bad breath/sore throat/bloating	The sphincter at the base of the oesophagus doesn't close fully- allowing stomach acid to leak.

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# Diagnosis

## Medical history and physical examination

GP's diagnose heartburn/reflux based on symptoms and information provided by the patient. An ulcer can be suspected initially- although further tests would be carried out first.

## Body Mass Index tests (BMI)

This is a calculation used to find out whether someone is a healthy weight for their height. If not, this can indicate weight loss or gain.

## Blood Test

Antibody levels can be tested to see if there are more fighting infection than usual.

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# Diagnosis

## Ultrasound

Used to examine the liver and other organs around that area. A gel is used to move a hand-held probe which sends waves down to the organs in the area being scanned.

## Gastroscopy

This examines the oesophagus, stomach and duodenum. A long flexible tube (endoscope) is entered through the mouth or anus to investigate symptoms like difficulties to swallow food etc.

## X-rays

A barium enema test can be used to detect IBS. This is when the colon is filled with liquid and can be shown on a x-ray.

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# LO2 Assignment Detail: Disorders of our Systems

## Key Terms

### Disorder

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### Diagnosis

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**CV System disorder** : Choose ONE disorder (from the three identified);

- In detail, describe the symptoms of it
- *comprehensively* describe the methods of diagnosis.
- Ensure you make links to the disorders and the structure of the system-how it effects it.

**Respiratory System disorder:** Choose ONE disorder (from the three identified);

- In detail, describe the symptoms of it
- *comprehensively* describe the methods of diagnosis.
- Ensure you make links to the disorders and the structure of the system-how it effects it.

**Digestive System disorder:** Choose ONE disorder (from the three identified);

- In detail, describe the symptoms of it
- *comprehensively* describe the methods of diagnosis.
- Ensure you make links to the disorders and the structure of the system-how it effects it.

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# LO2 Additional Information: Disorders of our Systems

- Complete this assignment on separate documents- one for each system.
- Use pages 83-90 for some additional information
- The best MB3 assignments will add additional research from other sources.
- Each part of this assignment is worth a maximum of 7 marks- so detail is required, but pages and pages are not.
- **BE CLEAR AND ACCURATE** with the information you give. This is information that is suitable for patients to read, so **DO NOT** overcomplicate the information.

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