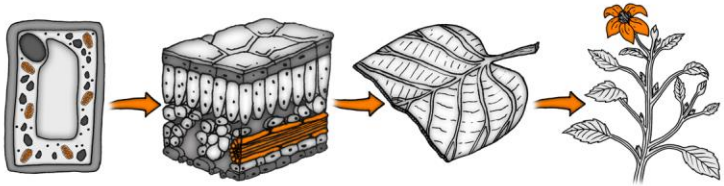
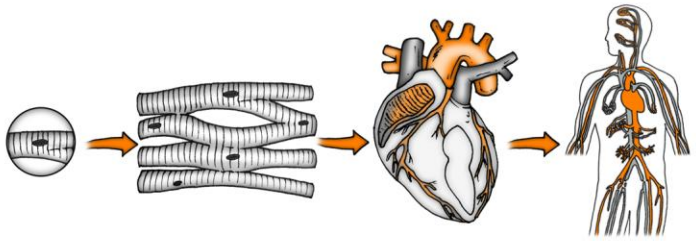
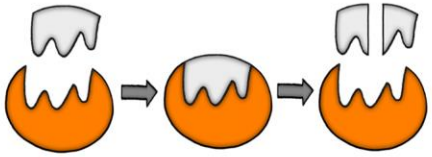
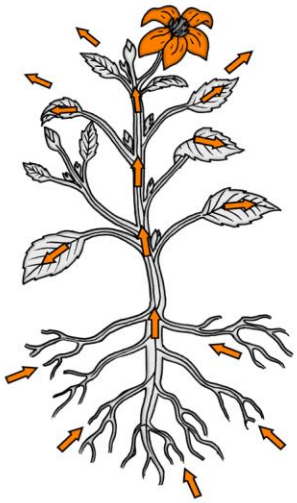
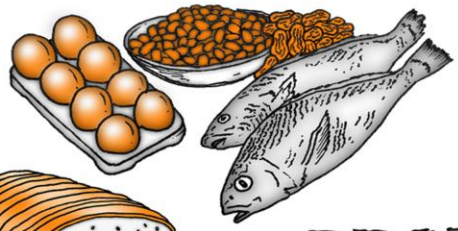


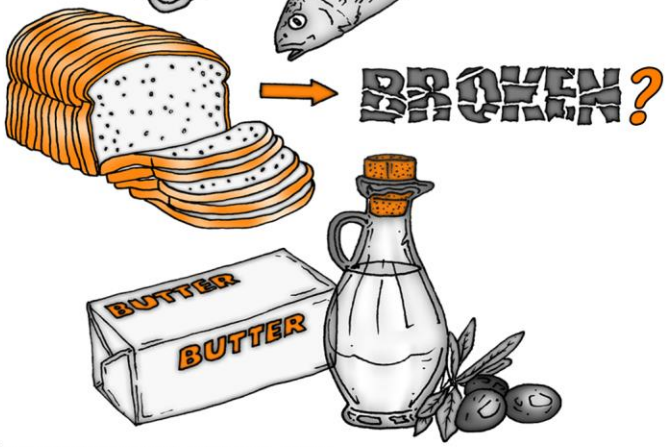


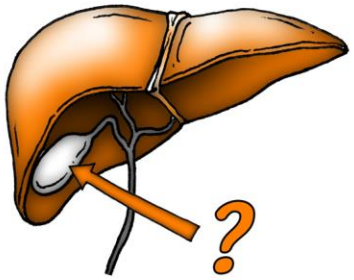


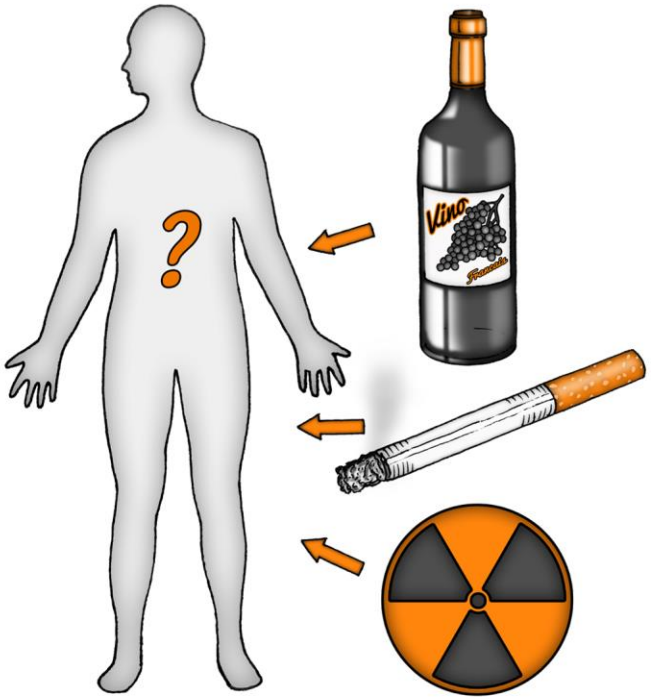


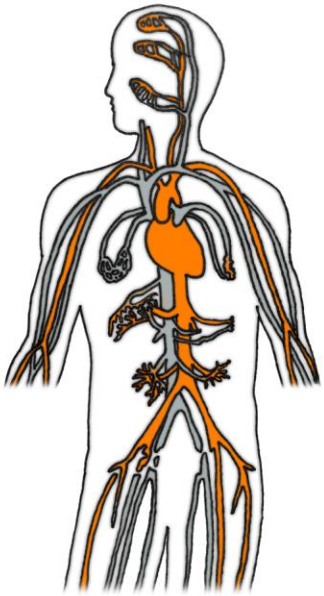
AQA GCSE ORGANISATION THINK IT!











AQA GCSE Organisation

ThinkIT!

Principles of organisation:

- Explain how a change in the DNA in the nucleus of a muscle cell can affect the whole organism
- Rust is a disease in plants that can damage the epidermal tissue and cause brown patches. Suggest how this affects the organisation in plants
- Cystic fibrosis thickens mucus. Explain why this affects both the respiratory system and digestive systems

The heart:

- Explain why the left ventricle has a more muscular wall than any of the other chambers
- Cardiac muscle contains up to 35% mitochondria whereas other muscles contain around 2%. Suggest why this is needed for normal heart functioning
- Explain the effects on the heart of regular exercise
- Where in the heart is the pace maker? Explain its function

Coronary heart disease:

- Compare and contrast the use of stents and statins to treat coronary heart disease
- Evaluate the use of mechanical and biological heart valves as a way of treating heart disease
- For severe heart failure, a heart transplant or artificial heart are two options available. Suggest the advantages and disadvantages of both

The digestive system and enzymes:

- Enzymes action is affected by pH and temperature. Explain why this is determined by the 3D protein structure
- Primary Biliary Cholangitis is a disease that damages the bile ducts in the liver. Suggest how this disease can affect digestion
- History shows evidence of pre-mastication which is where mothers chew food before giving it to their babies. Suggest why mothers may have done this

Lifestyle and non-communicable diseases:

- Explain with examples how peoples lifestyle choices can impact the incidence of non-communicable diseases
- Governments spend a great deal of money on educational health campaigns. Suggest why
- Alcohol consumption, smoking and sunbathing are all major risk factors for disease. Suggest reasons why people continue to do these things

Blood vessels and blood:

- Describe the route through the body of an oxygen molecule in the air to a muscle cell in the hand
- First aid books note that a cut to an artery is more severe than a cut to a vein. Suggest why and describe what difference you may see
- Anaemia is a decrease in the total amount of red blood cells in the blood. Describe and explain the symptoms of anaemia

Non- communicable diseases and health:

- Explain how some diseases can interact to cause ill health
- Smoking is a major risk factor for lung cancer. Explain why some people can smoke for most of their life and not get lung cancer whereas some non smokers do get it
- Explain how physical illness can impact mental health

Plant tissues, organs and systems:

- Explain how plant tissues work together within a plant organism
- Explain how phloem and xylem are adapted to their functions
- Explain how a plants transport system is dependent on environmental conditions
- Explain how gas exchange in plants is affected by the water content of leaves