

Year 10 BTEC Health Applications of Life Sciences Homework

Assignment 1	Write a list of physical illnesses that you have had in your life
	Research and print off a picture of 4 pathogens that cause infectious disease
	Write out your meals for a day and say if you think you have had a balanced diet
	Write a food diary for a week – show how you would improve it to have a balanced diet.
	Research – what is the recommended daily energy intake for a person your age.
	Explain why an old person has different energy requirements to a young person.
Assignment 2	Research – what is a phagocyte?
	Research – what is a lymphocyte?
	Find a picture on the internet showing the body defences.
	Explain what has happened to your body when you have cut yourself.
	Which pathogen cause chicken pox and what are the symptoms?
Assignment 3	What is a vaccination? Give an example of one.
	What is an antigen?
	What is an antibody and where in the body are they made?
	What are screening programmes?
	Research the names of 3 antibiotics.
	What does MRSA stand for? What is it?
Assignment 4	Where are stem cells in the body.
	What is cystic fibrosis?
	What are the different blood types?
	What can happen to a patient if the wrong blood type is given?

Year 10 BTEC UNIT 12 Growing Plants for Food Homework

Assignment 1	Research and name some vitamins we can get from plants.
	Print a picture of the inside of a leaf.
	Learn the photosynthesis equation.
	Write a definition for transpiration.
	Research – what is chlorophyll?
	Research five different foods and how we use them for food.
Assignment 2	Research – what are cereal plants – write a list
	Research what are pseudocereals? – write a list
	Research – why are buckwheat and quinoa suitable for coeliac
	Research – why are peanut butter sandwiches good for vegetarians
	Research -make a list of protein producing plants
	Research – what is the water table?
	Research – how are bees useful in crop production?
Assignment 3	Find out who Florence Wambugu is and what she does
	What is genetic engineering?
	What is a mutation?
	What does yield mean?
	Find out what runners are in strawberries
	How are bananas and plantains eaten in Kenya?
Assignment 4	What would a plant look like if it didn't have enough magnesium?
	What is blood fish and bone?
	Draw a flow diagram explain eutrophication
	What does organic mean?
	Find out how too much nitrate in drinking water may harm humans
	What is fertiliser burn?

Year 10 BTEC Unit 4 – Applications of Chemical Substances Homework

Assignment 1	Research the names and chemical formulae of 5 ionic and 5 covalent compounds.
	Research 5 properties of metals
	Research 5 different uses of ionic compounds and 5 uses of covalent compounds
	Risk assessment and method for pass task
	Produce dot and cross diagrams for magnesium sulphate and ammonium chloride
Assignment 2	Research and describe 3 different ways in which we can measure the rate of a reaction
	Research 3 examples each for exothermic and endothermic reactions
	Produce a risk assessment and method for the pass task practical
	Produce a bar chart of pass task results
Assignment 3	Research the names, chemical formulae and uses of 5 alkanes
	Research the names, chemical formulae and uses of 5 alkenes
	Research properties of alkanes and alkenes
	Research uses of alkanes, alkenes, halogen-containing organic compounds and oxygen-containing organic groups
	Research some advantages and disadvantages of using alkanes, alkenes, halogen-containing organic compounds and oxygen-containing organic groups in society
Assignment 4	Research uses of nanochemistry in suncreams
	Research uses of nanochemistry in sports equipment
	Research uses of nanochemistry in water-proof clothes
	Research uses of nanochemistry in colour changing kettles