

AQA Biology

GCSE Student checklist

B5

Name _____ Class _____ Date _____

Communicable diseases

Lesson	Aiming for 4		Aiming for 6		Aiming for 8	
B5.1 Health and disease	I can describe health as a state of physical and mental wellbeing.	<input type="checkbox"/>	I can describe the difference between communicable and non-communicable diseases.	<input type="checkbox"/>	I can suggest how communicable diseases are spread.	<input type="checkbox"/>
	I can state some causes of ill health.	<input type="checkbox"/>	I can use a scatter diagram to identify a correlation between two variables.	<input type="checkbox"/>	I can suggest links between lifestyle and health.	<input type="checkbox"/>
	I can state a simple conclusion from data on health.	<input type="checkbox"/>	I can construct and interpret bar charts, frequency tables, frequency diagrams and histograms.	<input type="checkbox"/>	I can discuss the validity of a statement based on evidence in the form of data.	<input type="checkbox"/>
B5.2 Pathogens and disease	I can state that pathogens are microorganisms that cause disease.	<input type="checkbox"/>	I can describe how bacteria and viruses cause disease.	<input type="checkbox"/>	I can explain why viruses are always pathogens but not all bacteria are.	<input type="checkbox"/>
	I can describe ways that pathogens can be spread.	<input type="checkbox"/>	I can explain why communicable diseases spread rapidly following a natural disaster.	<input type="checkbox"/>	I can explain how pathogens are passed from one organism to another and use this to suggest ways of preventing the spread.	<input type="checkbox"/>
B5.3 Growing bacteria in the lab	I can state that bacteria reproduce by cell division and this is called binary fission.	<input type="checkbox"/>	I can explain why numbers of bacteria on an agar plate will eventually stop growing.	<input type="checkbox"/>	I can explain what is meant by exponential growth and analyse a graph showing it.	<input type="checkbox"/>
	I can prepare a bacterial culture on agar gel.	<input type="checkbox"/>	I can explain why it is important to use an uncontaminated culture to investigate bacterial growth.	<input type="checkbox"/>	I can suggest how to measure the growth of bacteria and discuss uncertainty.	<input type="checkbox"/>
	I can follow the rules needed to prepare an uncontaminated culture.	<input type="checkbox"/>	I can describe and explain why each rule is needed in order to safely prepare, incubate and dispose of a culture.	<input type="checkbox"/>	I can plan a detailed investigation to find out how a variable affects the growth of bacteria.	<input type="checkbox"/>

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B5.4 Preventing bacterial growth	I can describe the difference between an antiseptic, disinfectants and antibiotic.	<input type="checkbox"/>	I can explain when an antiseptic, disinfectant, and antibiotic would be used	<input type="checkbox"/>	I can write a prediction using detailed scientific knowledge.	<input type="checkbox"/>
	I can write a prediction.	<input type="checkbox"/>	I can calculate the number of bacteria in a population after a certain time if given the mean division time.	<input type="checkbox"/>	I can calculate the number of bacteria in a sample when using a counting chamber.	<input type="checkbox"/>
	I can measure the diameter of clear areas around colonies.	<input type="checkbox"/>	I can calculate the area of the clear circle around colonies using r^2 .	<input type="checkbox"/>	I can apply knowledge of sampling techniques to ensure samples are representative.	<input type="checkbox"/>
B5.5 Preventing infections	I can state some ways that communicable diseases are spread.	<input type="checkbox"/>	I can describe how the spread of diseases can be reduced or prevented.	<input type="checkbox"/>	I can use scientific knowledge to explain in detail how methods reduce or prevent the spread of disease.	<input type="checkbox"/>
	I can take a role in designing a form of communication to inform the public about how to prevent the spread of a disease.	<input type="checkbox"/>	I can communicate to the public about how to stop the spread of a disease.	<input type="checkbox"/>	I can use an example to explain how the scientific method has been applied to help prevent the spread of disease.	<input type="checkbox"/>
B5.6 Viral diseases	I can name some diseases that are caused by viruses.	<input type="checkbox"/>	I can describe how measles, HIV and tobacco mosaic virus affect the infected organism.	<input type="checkbox"/>	I can explain how measles, HIV and tobacco mosaic virus affect the infected organism.	<input type="checkbox"/>
	I can state how measles and HIV are spread.	<input type="checkbox"/>	I can use a microscope to identify the different tissues in a cross-section of a leaf the UK has changed over time.	<input type="checkbox"/>	I can explain why viral infections are often more difficult to prevent and treat than bacterial infections.	<input type="checkbox"/>
	I can summarise information in a table.	<input type="checkbox"/>	I can design a table and use it to summarise information.	<input type="checkbox"/>	I can write a persuasive letter to parents urging them to vaccinate their children against measles.	<input type="checkbox"/>
B5.7 Bacterial diseases	I can name some diseases that are caused by bacteria.	<input type="checkbox"/>	I can describe similarities and differences between salmonella and gonorrhoea.	<input type="checkbox"/>	I can suggest why more people die from viral diseases compared to bacterial diseases.	<input type="checkbox"/>
	I can state how salmonella and gonorrhoea are spread.	<input type="checkbox"/>	I can describe how the spread of salmonella and gonorrhoea is controlled.	<input type="checkbox"/>	I can explain in detail how methods to control the spread of salmonella and gonorrhoea work.	<input type="checkbox"/>
B5.8 Diseases	I can state that rose black spot is caused by fungi and malaria is caused by protists.	<input type="checkbox"/>	I can describe how rose black spot affects the plant and how it is treated.	<input type="checkbox"/>	I can explain how rose black spot affects the growth of a plant.	<input type="checkbox"/>

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caused by fungi and protists	I can use a diagram to describe the life cycle of the malaria protist.	<input type="checkbox"/>	I can link ways of controlling the spread of malaria to specific parts of the protist's life cycle.	<input type="checkbox"/>	I can explain why it is so expensive to stop the spread of malaria.	<input type="checkbox"/>
	I can state some ways that malaria is controlled.	<input type="checkbox"/>				
B5.9 Human defence responses	I can state some ways in which the human body defends itself against the entry of pathogens.	<input type="checkbox"/>	I can describe how human body defence mechanisms stop the entry of pathogens.	<input type="checkbox"/>	I can explain how a reduced or over active immune system can cause illness.	<input type="checkbox"/>
	I can state that white blood cells help defend the body against pathogens.	<input type="checkbox"/>	I can describe the role of white blood cells in the defence against disease.	<input type="checkbox"/>	I can explain in detail how antibody production fights pathogens.	<input type="checkbox"/>
	I can state how one part of a model is similar to real life.	<input type="checkbox"/>	I can use a model to explain how the body defends itself against disease.	<input type="checkbox"/>	I can evaluate an analogy of the human defence systems against disease.	<input type="checkbox"/>
B5.10 More about plant diseases	I can describe some signs of plant disease.	<input type="checkbox"/>	I can describe how a plant disease is detected and the methods used to identify the cause.	<input type="checkbox"/>	I can analyse data on plant growth to write conclusions using scientific knowledge.	<input type="checkbox"/>
	I can name organisms that can cause disease in plants.	<input type="checkbox"/>	I can explain how disease damages a plant.	<input type="checkbox"/>	I can suggest how plant diseases affect food security.	<input type="checkbox"/>
	I can state that plants can be damaged by ion deficiency.	<input type="checkbox"/>	I can match signs of plant disease to ion deficiency.	<input type="checkbox"/>	I can explain in detail how and why ion deficiencies affect plant growth.	<input type="checkbox"/>
B5.11 Plant defence responses	I can state examples of plant defence responses.	<input type="checkbox"/>	I can classify plant defences as physical, chemical or mechanical.	<input type="checkbox"/>	I can explain in detail how plant defence responses work.	<input type="checkbox"/>
	I can describe why plants need to defend themselves.	<input type="checkbox"/>	I can carry out research using secondary resources of own choice to present examples of plant defence responses.	<input type="checkbox"/>	I can interpret information from a scientific article to explain how plant to plant communication can be used as a form of defence.	<input type="checkbox"/>