Review B1.1 Keeping healthy

Can you…?	☺	😐	☹
B1.1.1 Diet and exercise			
Describe the main components of a balanced diet needed to keep the body healthy			
Define the term 'malnourished' and give examples of how this might happen			
Outline some possible consequences of malnutrition (including Type 2 diabetes)			
Explain how a person's mass is affected by the energy content of the food they eat and the energy expended (used) by the body, and how exercise affects energy expended			
Describe how the metabolic rate (the rate at which chemical reactions in body cells are carried out) is affected by activity and by the proportion of muscle and fat in the body			
Identify inherited factors that can affect health (e.g. cholesterol level or metabolic rate)			
Compare the health of people who exercise regularly with those who take little exercise			
Evaluate information about the effect of food on health, when given data			
B1.1.2 How our bodies defend themselves against infectious diseases			
Define the term 'pathogen'			
Explain how bacteria and viruses can make us feel ill and how viruses damage the body			
State that the body has different ways of protecting itself against pathogens			
Explain the role of white blood cells in defending us against pathogens by: ingesting pathogens; producing antibodies (which destroy particular bacteria or viruses); producing antitoxins (which counteract the toxins released by the pathogens)			
Explain the role of antibodies in the immune system, and how immunity can develop			
Explain how the spread of a particular pathogen can be reduced if a large proportion of the population is immune to it			
Outline how Semmelweiss reduced the number of deaths from infectious diseases in his hospital by changing the behaviour of doctors			
Relate the contribution of Semmelweiss in controlling infection to solving modern problems with the spread of infection in hospitals, when given data to work from			
Describe how some medicines help to relieve the symptoms of infectious disease, but do not kill the pathogens (e.g. painkillers)			
Describe penicillin as an antibiotic, and explain how specific antibiotics help to cure diseases caused by specific bacteria			
State that it is difficult to develop drugs that kill viruses without also damaging body cells			
Outline how the use of antibiotics has reduced deaths from infectious bacterial diseases			
Explain how overuse and inappropriate use of antibiotics has increased the number of antibiotic resistant strains of bacteria (e.g. MRSA), due to mutation and natural selection			
Evaluate the consequences of mutations of bacteria and viruses in relation to epidemics and pandemics			
(HT) Explain how this resistance arises due to survival and reproduction of antibiotic resistant strains of bacteria after non-resistant strains are killed by the antibiotic			
(HT) Explain why antibiotics are no longer used to treat non-serious infections			
State that new antibiotics must be developed to treat antibiotic-resistant bacteria strains			
Describe what vaccines contain, and the effect of the vaccine on white blood cells			
Explain how vaccination can make a person immune, so that their body responds the same way as if they had previously had the disease			
State that the MMR vaccine protects children against measles, mumps and rubella			
Explain how the treatment of disease has changed as a result of increased understanding of the action of antibiotics and immunity			
Evaluate the advantages and disadvantages of being vaccinated against a disease			
Describe how uncontaminated cultures of microorganisms are prepared when investigating the action of disinfectants and antibiotics			
Explain why school and college laboratories incubate cultures at no more than $25^{O}C$			
Explain why higher temperatures are used in industrial situations			

Review B1.1 Keeping healthy