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| *Need to know* | *Yes/No* |
| *Differences between the small intestines and large intestines – structure and function* |  |
| *What would occur if the large intestine did not function properly* |  |
| *Define elimination and excretion (differences)* |  |
| *Difference in recessive and dominant genetic conditions* |  |
| *Difference in autosomal and X-linked genetic conditions* |  |
| *Constructing Punnett squares to predict offspring* |  |
| *Labelling of the cell membrane* |  |
| *Explain how water moves across the cell membrane* |  |
| *Explain the process of translation (location)* |  |
| *Define epigenetics* |  |
| *Define osteoporosis and provide treatment and prevention methods* |  |
| *Illustrate the processes of spermatogenesis and oogenesis* |  |
| *What happens during ovulation (hormones)* |  |
| *Describe the structure and function of sperm* |  |
| *List the three processes that lead to variation* |  |
| *Explain the structure and function of red blood cells (transport of gases)* |  |
| *An understanding of the ABO blood groups and how to use Punnett squares to predict outcomes* |  |
| *What is meant by antagonistic pairs of muscles* |  |
| *Describe fixator muscles and their importance* |  |
| *Describe the sliding filament theory* |  |
| *Labelling of a synovial joint* |  |
| *Describe the structure and function of the different types of cartilage (hyaline)* |  |
| *Describe how osteoarthritis can occur and explain prevention and treatment methods* |  |
| *Describe the structure of cardiac muscle* |  |
| *Illustrate and label the heart and define the functions for each part (major blood vessels)* |  |
| *Explain the role of valves in the circulatory system* |  |
| *Describe the role of the placenta and umbilical cord* |  |
| *What is the role of progesterone* |  |
| *Macroscopic and microscopic structure of muscle (skeletal)* |  |
| *Describe the process of deamination* |  |
| *The difference between aerobic and anaerobic respiration* |  |
| *How does the digestive and circulatory system allow for cellular respiration* |  |
| *Describe mitosis in detail (PMAT)* |  |
| *Define cancer and its effects and recall the different types of tumours* |  |
| *How do screening tests (e.g. breast screening) help detect cancer* |  |
| *Explain how sperm travels (epididymis to ovum) and outline fertilisation* |  |
| *Explain the following embryo or foetus screening techniques (blood test, ultrasound, and amniocentesis* |  |



