

Combined Science: Foundation Revision list

Biology Paper 1

Topic	Tick
Chapter 1:	
State where chromosomes are found in the cell https://www.youtube.com/watch?v=QCCp-Y_-7J0	
Describe the process of mitosis https://www.youtube.com/watch?v=RHyZVmbiA78	
Describe what a stem cell is and how it can be used https://www.youtube.com/watch?v=Kh27eyjxvYM	
RPA Light microscope https://www.youtube.com/watch?v=jBVxo5T-ZQM	
Chapter 2:	
Describe the role of all the digestive organs in the digestive system https://www.youtube.com/watch?v=4ui4oSHHzA	
Describe how enzymes work https://www.youtube.com/watch?v=VNX9UQ08fZ4	
State the specific enzymes in the digestive system and how they work https://www.youtube.com/watch?v=VLK2wANjQm0	
Describe the role of bile in the digestive system https://www.youtube.com/watch?v=TNG-RRzwBVU	
RPA Food test https://www.youtube.com/watch?v=akMLGbNA0gE	
Describe the structure and function of the heart https://www.youtube.com/watch?v=y1DsaAzYamQ	
Describe the structure and function of the respiratory system https://www.youtube.com/watch?v=C4zaV5r6-KI	
Describe the structure and function of blood vessels https://www.youtube.com/watch?v=ALSQEs694qY	
State the role of a pacemaker (natural and artificial) https://www.youtube.com/watch?v=ALSQEs694qY	
Identify different blood components from diagrams and photographs https://www.youtube.com/watch?v=81w0BXg7QJA	
Describe the function of the different components of blood	
Describe what CHD is https://www.youtube.com/watch?v=UN5BIPfMUKg	
Describe the various treatments of CHD https://www.youtube.com/watch?v=Z70tdbDin4E	

Define the term health https://www.youtube.com/watch?v=thAyrNpD77A	
Describe examples of risk factors for non-communicable diseases https://www.youtube.com/watch?v=H6DrSG_KQjo	
Describe the effect of lifestyle of non-communicable diseases	
Define the terms cancer, benign and malignant tumours https://www.youtube.com/watch?v=B5VHRKBI4PY	
Chapter 3:	
State how diseases are spread by bacteria, fungi, viruses and protists in animals and plants https://www.youtube.com/watch?v=dbd5iydu3EY	
Define the term pathogen	
Describe the symptoms, treatment and how to reduce the following viral diseases; measles; HIV; TMV https://www.youtube.com/watch?v=m0o8mhu9Arg	
Describe the symptoms, treatment and how to reduce the following bacterial diseases; salmonella; gonorrhoea https://www.youtube.com/watch?v=Z5c8lVXDiqc	
Describe the symptoms, treatment and how to reduce the following fungal disease; rose black spot https://www.youtube.com/watch?v=sY6n7s49Xu8	
Describe the symptoms, treatment and how to reduce the following protist disease; malaria https://www.youtube.com/watch?v=aGWP3Xbk0OY	
Describe the life cycle of a mosquito	
Describe the role of non specific defence systems in the human body https://www.youtube.com/watch?v=63XExOKWrqq	
Describe the role of the immune system when destroying a pathogen https://www.youtube.com/watch?v=HSrrPdJDqxM	
Explain how a vaccine works https://www.youtube.com/watch?v=23fQscOSqVU	
Explain the use of antibiotics and other drugs to treat disease https://www.youtube.com/watch?v=r_5GM3_u0Wo	
Describe the process of drug trials https://www.youtube.com/watch?v=w3ykU52K-Hw	
State how traditional drugs were extracted (digitalis, aspirin, penicillin)	
Explain the importance of a peer review	
Chapter 4:	
Know the word and symbol equation for photosynthesis https://www.youtube.com/watch?v=X81OIkeuHJw	
Describe photosynthesis	

Explain the effects of temperature, light, carbon dioxide and chlorophyll on the rate of photosynthesis https://www.youtube.com/watch?v=kx7AeCx_6xQ	
RPA photosynthesis https://www.youtube.com/watch?v=id0aO_OdFwA	
Describe the uses of glucose in plants https://www.youtube.com/watch?v=e_V7h37vI3Q	

Biology Paper 2

Topic	Tick
Chapter 5	
Describe the role of the endocrine system (hormonal) https://www.youtube.com/watch?v=c6olhi88KZs	
Label the following glands - pituitary gland; pancreas; thyroid; adrenal gland; ovary and testes	
Describe how blood glucose levels are monitored and controlled https://www.youtube.com/watch?v=OHrX3X3LGzI	
Describe Type 1 and Type 2 diabetes - causes and treatments https://www.youtube.com/watch?v=bFnO8Uc9gjQ	
Describe the role of hormones in the menstrual cycle https://www.youtube.com/watch?v=iXswGsfeHJg	
Describe and compare the different methods of contraception https://www.youtube.com/watch?v=5rsdXadNj-E	
Chapter 6	
Compare asexual and sexual reproduction https://www.youtube.com/watch?v=Fh9b6a-3DLQ	
Describe the process of meiosis https://www.youtube.com/watch?v=w7vp_uRA8kw	
Describe the structure of DNA https://www.youtube.com/watch?v=T6_wKPAbf2k	
Define the term genome https://www.youtube.com/watch?v=-hryHoTIIHak	
Explain the importance of researching the human genome	
Define these key terms; gamete; chromosome; gene; allele; dominant; recessive; homozygous; heterozygous; genotype; phenotype https://www.youtube.com/watch?v=a_eC6LA5QTo	
Construct Punnett squares https://www.youtube.com/watch?v=BRMcTdKNpOA	
Describe the inheritance of Polydactyly and cystic fibrosis https://www.youtube.com/watch?v=sYPwWHszLDo	

Use a genetic cross diagram to show the inheritance of sex https://www.youtube.com/watch?v=Lomr_t5Pdjs	
Chapter 7	
Describe the different levels in a ecosystem https://www.youtube.com/watch?v=VX22pBMXFs8	
Explain the importance of interdependence and competition https://www.youtube.com/watch?v=XVD5izWXmKo	
Describe abiotic and biotic factors that affect an ecosystem https://www.youtube.com/watch?v=kIfMwZU8nk4	
RPA Quadrats and transects https://www.youtube.com/watch?v=RhMOCxXcDrQ	
Describe food chains and webs https://www.youtube.com/watch?v=2lqhJNgn_Wg	
Describe the carbon cycle https://www.youtube.com/watch?v=cWj3u8voDSq	
Describe the water cycle https://www.youtube.com/watch?v=MfCLqCGqe6E	