** A level Year 1** Eduqas Component 3

**Adaptations for Nutrition**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | R | A | G |
| 1 | the terms autotrophic and heterotrophic and that autotrophic organisms can be photoautotrophic or chemoautotrophic |  |  |  |
| 2 | the terms saprotrophic/ saprobiotic, holozoic, parasitic in relation to heterotrophic organisms |  |  |  |
| 3 | saprotrophic nutrition involving the secretion of enzymes, external digestion of food substances followed by absorption of the products of digestion into the organism, e.g. fungi |  |  |  |
| 4 | holozoic nutrition; the internal digestion of food substances |  |  |  |
| 5 | nutrition in unicellular organisms, e.g. *Amoeba*, food particles are absorbed and digestion is carried out intracellularly |  |  |  |
| 6 | the adaptation of multicellular organisms for nutrition showing increasing levels of adaptation from a simple, undifferentiated, sac-like gut with a single opening, e.g. *Hydra*, to a tube gut with different openings for ingestion and egestion and specialised regions for the digestion of different food substances |  |  |  |
| 7 | the adaptations of the human gut to a mixed, omnivorous diet that includes both plant and animal material, including examination of microscope slides of duodenum and ileum |  |  |  |
| 8 | the efficient digestion of different food substances requiring different enzymes and different conditions |  |  |  |
| 9 | the adaptations of herbivore guts and dentition, in particular ruminants to a high cellulose diet and the adaptations of carnivore guts and dentition to a high protein diet, including examination of skulls and dentition of a herbivore and a carnivore |  |  |  |
| 10 | parasites; highly specialised organisms that obtain their nutrition at the expense of a host organism e.g. *Taenia* and *Pediculus*, including examination of specimens and slides of tapeworm e.g. *Taenia* |  |  |  |