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| **Topic heading** | **Syllabus Ref** | **Idea cluster** | **Question 1** | **Question 2** | **Question 3** | **Question 4** |
| B4 Ecosystems |  | Biodiversity | What do food chains show?A. The animals that eat each otherB. How energy is transferred from producer to consumer and beyondC. How much of each plant and animal is involvedD. The longer the chain the better the energy transfer | Myxomatosis is a disease that kills rabbits. What would happen to the predators of rabbits if this happened?A. They would increaseB. They would decreaseC. No change.D. Increase rapidly. | Human activity can negatively affect populations through:A. Building zoosB. Use of herbicides and pesticidesC. Adopting animals that are endangeredD. Breeding programmes | Put these into the correct order for the levels of organisation in an ecosystem:A. Individual, population, community, ecosystemB. Population, Community, Individual, EcosystemC. Ecosystem, Community, Population, IndividualD. Individual, community, population, ecosystem |
|  |  |  | B | B | B | A |
| B7 Growing our food |  | Pollination, Fertilisation and plant growth | Pollination is the transfer of pollen from:A. stigma to antherB. anther to stigmaC. pollen tube to ovaD. inset to anther | The main function of the root of a plant is to:A. hold it uprightB. absorb water to provide it to the plantC. balance it undergroundD. store water underground | During fertilisation in a plant, what happens?A. Pollen goes from the anther to the stigmaB. A pollen tube develops. C. The pollen fuses with the ovum.D. The ovum gets smaller | Bees are important pollinators and we have been encouraged to plant bee-friendly plants. Why is pollination so important?A. Ensures gardens have lots of flowersB. Keeps flowers growing and increasing in numberC. Is important in looking after living things.D. In important for human food security.  |
|  |  |  | A | B | C | D |
| B8 Genetics and Evolution |  | Variation and inheritance | Where is the genetic information, DNA, found in a cell?A. NucleusB. MitochondriaC. CytoplasmD. Chloroplast | Natural selection is a theory of how evolution occurs and was proposed by:A. DarwinB. GalileoC. LamarckD. Galapagos  | An example of discontinuous variation is:A. heightB. weightC. blood groupD. all of the above. | Variation (and diversity) in a gene pool is good for:A. species evolution and survival.B. survival and cloningC. cloning and population growthD. evolution only. |
|  |  |  | A | A | C | A |
| B9 Plants |  | Plants | What factors affect the rate of photosynthesis?A Temperature, light, carbon dioxideB Water, light, oxygenC oxygen, temperature, glucoseD Carbon dioxide, water, glucose | Light is absorbed by what:A nucleusB chloroplasmC chlorophyll D cytoplasts | Glucose made in respiration is used for which of the following:A respirationB cellulose cell wallsC stored as oil/starchD all of the above | Plants require nutrients NPK which are absorbed in water. These are:A Nitrogen, Phosfuma, KaroteneB Nitrogen, Potassium, KeroseneC Nitrogen, Phosphorus, PotassiumD Neon, Phosphorus, Potassium |
|  |  |  | A | C (in chloroplasts) | D | C |