** A level Year 1** Eduqas Component 2

**All organisms are related through their evolutionary history** (Classification and Biodiversity)

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|  |  | R | A | G |
| 1 | the classification of organisms into groups based on their evolutionary relationships and that classification places organisms into discrete and hierarchical groups with other closely related species |  |  |  |
| 2 | the need for classification and its tentative nature |  |  |  |
| 3 | the three domain classification system as compared with the five Kingdom classification system |  |  |  |
| 4 | the characteristic features of Kingdoms: Prokaryotae, Protoctista, Plantae, Fungi, Animalia |  |  |  |
| 5 | the use of physical features and biochemical methods to assess the relatedness of organisms, including DNA ‘genetic fingerprinting’ and enzyme studies to show relatedness without the problem of morphological convergence |  |  |  |
| 6 | the concept of species |  |  |  |
| 7 | the use of the binomial system in naming organisms |  |  |  |
| 8 | biodiversity as the number and variety of organisms found within a specified geographic region |  |  |  |
| 9 | biodiversity varying spatially and over time and affected by many factors |  |  |  |
| 10 | biodiversity can be assessed in a habitat e.g. Simpson’s Diversity Index |  |  |  |
| 11 | biodiversity can be assessed within a species at a genetic level by looking at the variety of alleles in the gene pool of a population, i.e. the proportion of polymorphic loci across the genome |  |  |  |
| 12 | biodiversity can be assessed at a molecular level using DNA fingerprinting and sequencing |  |  |  |
| 13 | biodiversity has been generated through natural selection and the different types of adaptations of organisms to their environment including anatomical, physiological and behavioural adaptations |  |  |  |

SPECIFIED PRACTICAL WORK

· Investigation into biodiversity in a habitat