

## **Standard Grade Biology**

### **Inheritance**

#### **2. What is Inheritance?**

At the end of this topic you should be able to:

#### **Checklist      Grade**

- |   |                          |         |
|---|--------------------------|---------|
| (a) state that certain characteristics are determined by genetic information received from the parents and give examples from plants and animals. | <input type="checkbox"/> | General |
| (b) Identify examples of phenotypes of the same characteristics.  | <input type="checkbox"/> | General |
| (c) identify examples of true-breeding, dominant and recessive characteristics from numbers and phenotypes of given crosses.                      | <input type="checkbox"/> | General |
| (d) identify generations as P <sub>1</sub> , F <sub>1</sub> and F <sub>2</sub> from given examples of crosses.                                    | <input type="checkbox"/> | General |
| (e) state that the phenotypes of the F <sub>1</sub> in a true-breeding cross are uniform.   | <input type="checkbox"/> | General |
| (f) state that the parents in experimental crosses are usually true-breeding and show different phenotypes of the same characteristic.            | <input type="checkbox"/> | Credit  |
| (g) predict the proportions of the phenotypes of the F <sub>2</sub> offspring of a monohybrid cross.  | <input type="checkbox"/> | Credit  |
| (h) state that each body has two matching sets of chromosomes.  | <input type="checkbox"/> | General |
| (i) state that the reduction of the number of chromosomes to a single set occurs during gamete formation.   | <input type="checkbox"/> | General |
| (j) state that each gamete contains only one set of chromosomes.  | <input type="checkbox"/> | General |
| (k) describe how a complete set of chromosomes is achieved at fertilisation.  | <input type="checkbox"/> | General |
| (l) state that genes are part of chromosomes.   | <input type="checkbox"/> | General |
| (m) state that characteristics are controlled by 2 forms of the same gene.  | <input type="checkbox"/> | General |
| (n) state that each gamete carries one of the two forms.  | <input type="checkbox"/> | General |
| (o) state the meaning of the word genotype.   | <input type="checkbox"/> | General |
| (p) state that different forms of a gene are called alleles.  | <input type="checkbox"/> | Credit  |
| (q) explain monohybrid crosses in terms of genotypes.   | <input type="checkbox"/> | Credit  |
| (r) explain differences between observed and predicted figures in a cross.  | <input type="checkbox"/> | Credit  |
| (s) state that sex of a child is determined by specific chromosomes called X and Y.   | <input type="checkbox"/> | General |
| (t) state that in humans each male gamete may have an X or a Y chromosome while each female gamete has an X chromosome.                           | <input type="checkbox"/> | General |
| (u) explain how sex is determined with reference to the X and Y chromosomes.  | <input type="checkbox"/> | General |

Homework


**End of Topic Test**