

## Higher Biology

### Mutation Checktest

1. Define the term **mutation**.
2. Explain how **gene** mutations can lead to the manufacture of non-functional proteins.
3. Name the **four** types of gene mutation.
4. In terms of a change in **structure** of a chromosome, describe the processes of **translocation** and **duplication**.
5. Which specific process may lead to the presence of an extra chromosome in a human cell?
6. State one feature, **in relation to chromosomes**, that applies to polyploid plants.
7. State **two** possible features that a polyploid plant may possess which make it more economically valuable than its ancestor.
8. Name **two** mutagenic agents.
9. State the **number of chromosomes** the offspring will possess, if a hybrid is created from a cross between two related plants whose chromosome numbers are 14 and 28.
10. Will the hybrid in the question above be fertile or not? Justify your answer.
11. How frequent are gene mutations?