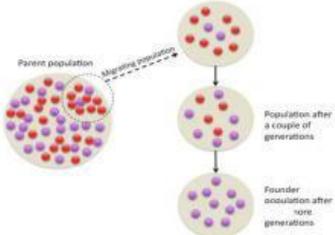
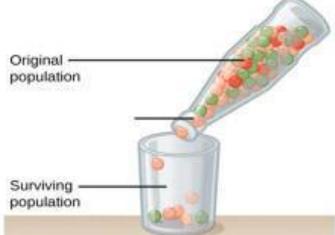


CHAPTER 3: SELECTION AND SPECIATION

1. Complete the following table to describe the THREE(3) types of natural selection:

| (a) _____ selection | (b) _____ selection | (c) _____ selection |
|---|--|--|
| | | |
| <ul style="list-style-type: none"> • favours _____ phenotypes • acts against both _____ phenotypes • _____ genetic variation | <ul style="list-style-type: none"> • favours one _____ phenotypes • acts against the other _____ phenotypes • _____ genetic variation | <ul style="list-style-type: none"> • favours both _____ phenotypes • acts against _____ phenotypes • two _____ phenotypes are separated and two subpopulations/ new species will be formed • _____ genetic variation |
| <p>Example:</p> | <p>Example:</p> | <p>Example:</p> |

2. Complete the table to describe the **TWO** (2) types of genetic drift.

| _____ effect | _____ effect |
|---|--|
|  |  |
| <ul style="list-style-type: none"> Occurs in _____ population which is isolated from the larger original population. The small population becomes _____ and forms a new _____ _____ frequencies of the new population are _____ from the original population There is _____ in genetic variation. Leads to _____ | <ul style="list-style-type: none"> Occurs when there is sudden _____ in the original population size due to _____. _____ frequencies of the _____ population are different from the original population. Certain alleles maybe overrepresented/ underrepresented/ eliminated There is _____ in genetic variation. Leads to _____ |
| Example : | Example : |

3. List the factors involved in the formation of new species.

4. State the types of reproductive isolating mechanisms that prevent the formation of hybrid zygotes.

5. State the types of reproductive isolating mechanisms that prevent zygote from developing into viable and fertile adult.

6. How does allopolyploidy lead to speciation?
