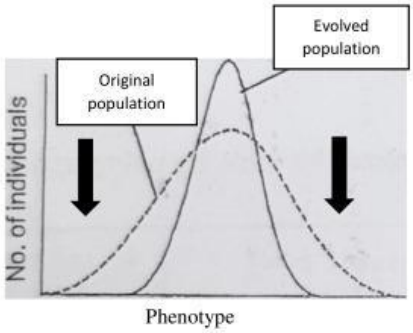
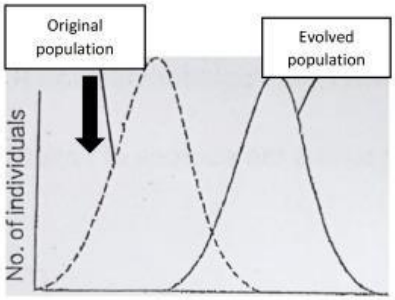
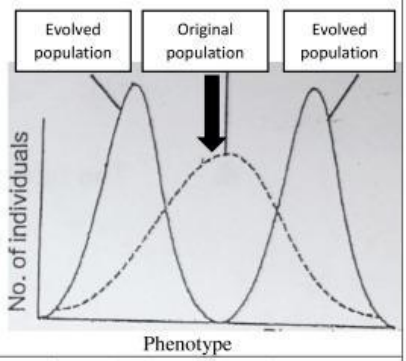
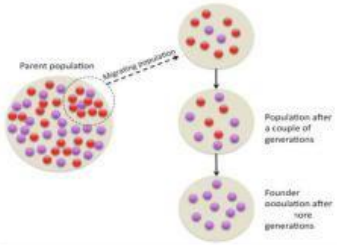
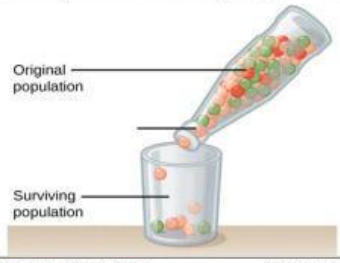
CHAPTER 3: SELECTION AND SPECIATION

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

(a) _____selection	(b) _____selection	(c) _____ selection
		
• favours _____ phenotypes • acts against both _____ phenotypes • _____ genetic variation	• favours one _____ phenotypes • acts against the other _____ phenotypes • _____ genetic variation	• favours both _____ phenotypes • acts against _____ phenotypes • two _____ phenotypes are separated and two subpopulations/ new species will be formed • _____ genetic variation
Example:	Example:	Example:

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

_____ effect	_____ effect
	
• 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 _____	• 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?
_____