













BIOLOGY – PROBLEM SET

CHAPTERS 11 & 14: HEREDITY

1. *Identify* and *describe* two specific examples of levels of organization that relate to a topic in chapters 11 and 14. [2 points]
2. *Identify*, *describe*, and *draw* one example of a structure-function relationship OR a lock-and-key fit that relates to a topic in chapters 11 and 14. [3 points]
3. *Identify*, *describe*, and *draw* one example of surface area to volume ratio that relates to a topic in chapters 11 and 14. [3 points]
4. *Identify* and *describe* one example of matter or energy that relates to a topic in chapters 11 and 14. [2 points]
5. *Identify* and *describe* one example of evolution that relates to a topic in chapters 11 and 14. [2 points]
6. *Describe* and *interpret* the meaning of the following chart: [3 points]

Character	Dominant Trait	×	Recessive Trait	F ₂ Generation Dominant: Recessive	Ratio
Flower color	Purple	×	White	705:224	3.15:1
					
Seed color	Yellow	×	Green	6,022:2,001	3.01:1
					
Seed shape	Round	×	Wrinkled	5,474:1,850	2.96:1
					
Pod shape	Inflated	×	Constricted	882:299	2.95:1
					
Pod color	Green	×	Yellow	428:152	2.82:1
					
Flower position	Axial	×	Terminal	651:207	3.14:1
					
Stem length	Tall	×	Dwarf	787:277	2.84:1
	