${\bf New\ Question\ Type\ Samplers-Biology\ Answer\ Key}$

Item Position	Item Type	TEKS Alignment	Maximum Number of Points	Correct Answer(s)
1	Text Entry	4.B.10.B; PS.B.3.A	1	xylem
2	Text Entry	2.B.6.F	1	1 [the expected probability is 1/16]
3	Hot Spot	3.B.7.F; PS.B.3.A	2	The student selects Step 2 (independent assortment) and Step 3 (crossing over) in the diagram.
4	Hot Spot	5.B.12.C	2	The student selects Fin whales, Hake, and Humpback whales in the food web.
5	Drag and Drop	4.B.9.B; PS.B.3.A	2	The student responds clockwise starting at the upper left: Light energy, Oxygen AND Glucose (order does not matter), Chemical energy, Carbon dioxide AND Water (order does not matter).
6	Drag and Drop	3.B.7.C	2	Increase; increase
7	Multipart	4.B.9.A; PS.B.3.A	2	Part A. A: Component W carries out active transport and component X carries out passive transport. Part B. B: Component W uses energy to move molecules from an area of low concentration to an area of high concentration, while component X does not use energy to move molecules from an area of high concentration to an area of low concentration.
8	Multipart	3.B.7.A	2	Part A. B: Retractable claws Part B. B: They have similar DNA sequences.
9	Multiselect	1.B.4.A; PS.B.3.A	2	A: Organism Y is a eukaryotic cell, while Organism Z is a prokaryotic cell. E: Organism Y contains membrane-bound organelles, while Organism Z does not.
10	Multiselect	1.B.4.B; PS.B.2.H	2	A: Restricting molecules entering and exiting the cell C: Maintaining the size and shape of the cell
11	Short Constructed Response	5.B.12.A	2	*A rubric is used to determine the score for a short constructed response. The student answers that the relationship between Prochlorococcus and Alteromonas could be commensalism or mutualism AND that additional

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				information on whether <i>Prochlorococcus</i> either benefits <i>Alteromonas</i> or has no effect on <i>Alteromonas</i> is needed to determine which relationship exists.
12	Short Constructed Response	5.B.12.E; PS.B.3.D	2	*A rubric is used to determine the score for a short constructed response. The student answers that the ecosystem's ability to respond to change is decreased AND that this occurs because the diversity/biodiversity of the ecosystem is decreased.