Answer Key
unity of life midterm practice

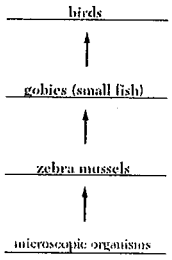
1. D
2. B
3. B
4. A
5. C
6. B
7. B
8. A
9. C
10. C
11. B
12. A
13. B
14. C
15.

Fish	Scientific Name	Subgroup	Pelvic Fin Color	Spot Near Dorsal Fin Filament
A	*C. ephippium*	Rabdophorus	light	large
B	*C. kleinii*	Lepidochaetodon	dark	none
C	*C. auriga*	Rabdophorus	light	small

Answer Key
ecology midterm practice

1. D
2. B
3. D
4. B
5. B
6. A
7. A
8. C
9. B
10. B
11. C
12. A
13. B
14. C
15. A
16. D
17. C
18. D
19. B
20. B
21. B
22. C
23. C
24. D
25. D
26. C
27. A
28. C
29. D
30. C
31. B
32. A
33. D
34. A
35. B
36. C
37. D
38. D
39. B

Answer Key
human impact

1. B
2. B
3. A
4. A
5. D
6. D
7. B
8. A
9. B
10. A
11. C
12. B
13. C
14. D
15. C
16. A
17. – Animals that eat the birds would not have enough food. – The decomposing birds could spread disease. – The gobie population would increase. – decreases biodiversity, – disrupts food webs
18. – They outcompete native species. – They harm/negatively affect native species. – They were introduced to the Great Lakes by humans. – They interfere with the ability of other organisms to function in the environment. – They are not native to the Great Lakes.
19. 

20. – The concentration of the toxin increases in each level of the food chain until it is high enough to kill top-level predators.-- The birds eat gobies that have accumulated toxins.-- The food chain increases the concentration of naturally occuring toxins by passing dangerous levels on to top-level predators.
21. – solar energy – energy from the Sun is free. – wind energy - no air pollution. – geothermal – no carbon dioxide released. – hydroelectricity – Energy is generated locally.
22. – The decision involves balancing the economic gains and the possible environmental damage. – Fracking will provide people with more natural gas but might damage the environment. – There might be more jobs, but there is a possiblity for increased water pollution.
23. – The predator might feed on beneficial organisms. – might outcompete other species of predators, – might become a pest, – They might overpopulate and wipe out prey species. – might bring in a disease, – could alter the existing ecosystem
24. – use reusable water bottles not made with BPA, – pass legislation that outlaws the manufacturing of products with BPA, – ensure that water bottles are not littered in the environment, – receycle disposable water bottles, – use metal/glass containers, – control the disposal of industrial waste
25. – establishing endangered species lists and laws that protect endangered species and their habitats – setting up laws that regulate the release of pollutants – enacting hunting or fishing regulations that protect endangered species – recycling of metals and plastics – replanting trees – stopping/slowing deforestation – breeding programs – regulating what chemicals can be used on farms
26. – The less biodiversity there is in an ecosystem, the less stable the ecosystem will be. – A loss of biodiversity would make it harder for the ecosystem to maintain stability. – It would reduce resources/food/shelter that are used by the organisms in the ecosystem. – A species might become extinct.

Answer Key
biochemistry midterm practice

1. **B**
2. **C**
3. **A**
4. **D**
5. **B**
6. **D**
7. **A**
8. **C**
9. **C**
10. **C**
11. **A**
12. **D**
13. **A**
14. **B**
15. **A**
16. **A**
17. **D**
18. **C**
19. **C**

Answer Key
cells midterm practice

1. **A**
2. **C**
3. **B**
4. **B**
5. **B**
6. **B**
7. **A**
8. **B**
9. **D**
10. **A**
11. **A**
12. **D**
13. **A**
14. **B**
15. **C**
16. **B**
17. **B**
18. **C**
19. **B**
20. **C**
21. **C**
22. water *or* glucose
23. **A**
24. **B**
25. **A**
26. **A**
27. **A**

Answer Key
photosynthesis and respiration (energy)

1. **B**
2. **D**
3. **A**
4. **C**
5. **D**
6. **A**
7. **B**
8. **D**
9. **D**
10. **A**
11. **C**
12. **A**
13. **A**
14. **D**
15. **A**
16. (essay)
17. **C**
18. **B**
19. **A**
20. **B**
21. **A**
22. • regulate the movement of gases into and out of the leaf
    • control the size of the leaf openings
    • regulate water loss

Answer Key
photosynthesis and respiration (energy)

16. Identify the organelle where the process occurs:
Photosynthesis: — chloroplast
Respiration: — mitochondrion
•Acceptable responses include, but are not limited to:
Photosynthesis: — CO_2 and H_2O
Respiration: — organic molecules and O_2 — sugar and oxygen
•Acceptable responses include, but are not limited to:
Photosynthesis: — glucose
Respiration: — ATP
•Acceptable responses include, but are not limited to:
Glucose: — to produce ATP — to produce starch
ATP: — to provide energy for metabolism
•Acceptable responses include, but are not limited to:
Photosynthesis: — The gas is used for respiration. — provides O_2 for respiration
Respiration: — provides CO_2 for photosynthesis — The gas is used for photosynthesis.