

# Biology I

## Pre-Test

### Introduction

#### **Introduction**

The pre-test that follows is designed to identify areas where you can improve your skills before or after taking the Biology I end-of-course test. This pre-test will be similar in format to the Mississippi SATP2 end-of-course test for Biology I.

#### **Directions**

Read the directions on the following page. These directions should be similar to what you will see on the actual SATP2 end-of-course test for Biology I. Once you have completed this pre-test, circle the questions you answered incorrectly on the pre-test evaluation chart on page 30. For each question that you missed on the pre-test, review the corresponding sections in the book as given in the evaluation chart. Read the instructional material, do the practice exercises, and take the section review tests at the end of each section.

#### **Scoring the Pre-Test**

The following pre-test can be used as practice for the SATP2 Biology I test, but it is primarily a diagnostic tool to help you identify which skills you can improve in order to prepare better for the actual test. Any pre-test question answered incorrectly may identify a skill needing improvement or mastery. Review the corresponding skill(s) indicated in the Pre-Test Evaluation Chart by reading the instructional material on the given pages and completing the practice exercises and reviews. By reviewing each skill, you will improve mastery of the material to be tested on the SATP2 Biology I test and potentially increase the score you receive on that test. (The practice tests, which are given in separate booklets, are provided to give you additional practice taking tests similar to the actual SATP2 Biology I test.)

- 1 The bottle of a chemical used in a biology laboratory is labeled with the following symbol.

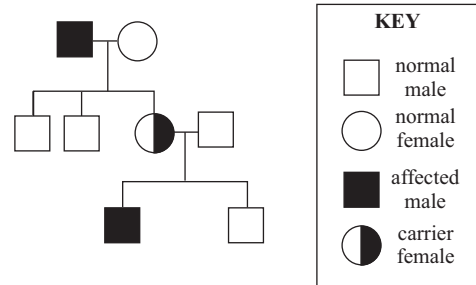


What does this laboratory safety symbol indicate about the chemical?

- A It should be heated first before it is used.
- B It evaporates easily and should be used only under a vent hood.
- C It is corrosive and should not be allowed to contact the skin.
- D It is flammable and should not be used around open flames.

(A) (B) (C) (D)

- 4 Look at the pedigree graphic below.



This pedigree shows that only males are affected by a certain disorder. What type of inheritance is indicated by the pedigree?

- F recessive
- G dominant
- H incomplete
- J sex-linked

(F) (G) (H) (J)

- 2 Which of the following is NOT found in a carbohydrate?

- F Carbon
- G Hydrogen
- H Nitrogen
- J Oxygen

(F) (G) (H) (J)

- 5 Which two processes cycle carbon and oxygen between living organisms?

- A Oxidation and combustion
- B Transpiration and condensation
- C Pollination and fertilization
- D Cellular respiration and photosynthesis

(A) (B) (C) (D)

- 3 In which circumstance would a high rate of mutation in a population be beneficial to the population?

- A Only if the environment is very stable
- B Only if the environment is changing rapidly
- C Only if the environment is changing very slowly over a long period of time
- D In any environment regardless of its stability

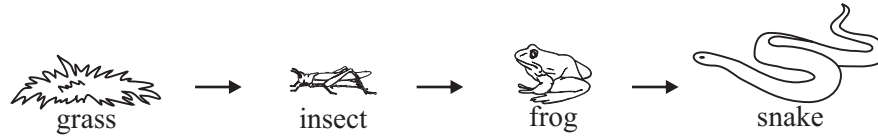
(A) (B) (C) (D)

- 6 Millions of acres of rainforests are destroyed each year. Which of the following is a negative result of this human activity?

- F A decrease in atmospheric carbon dioxide
- G A decrease in biodiversity
- H An increase in atmospheric oxygen
- J An increase in precipitation

(F) (G) (H) (J)

30 A diagram of a food web is shown below.

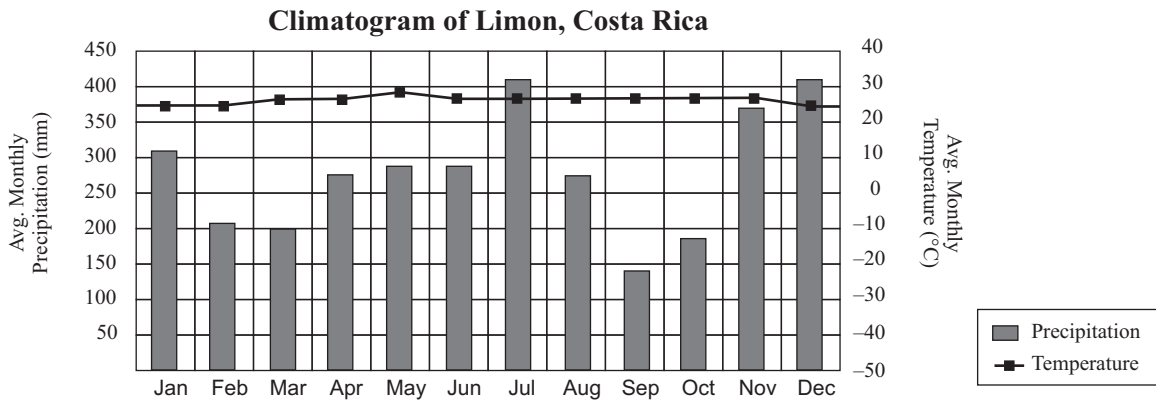


Which of the following organisms gets the MOST energy directly from the sun?

- F frog
- G grass
- H insect
- J snake

(F) (G) (H) (J)

31 The graph below is a climatogram of Limon, Costa Rica.



Which behavioral adaptation would be seen in animals in this biome?

- A Likely to hibernate during winter months
- B Prefer to live in trees to escape predators
- C Dig deep underground tunnels to get to water
- D Likely to migrate during dry months

(A) (B) (C) (D)

# Biology I

## Pre-Test

### Evaluation Chart

Circle the questions you answered incorrectly on the chart below, and review the corresponding sections in the book. Read the instructional material, do the practice exercises, and take the section review tests at the end of each section.

If you missed question #:	Go to section(s):	If you missed question #:	Go to section(s):	If you missed question #:	Go to section(s):
1	1.7	31	17.8, 20.1, 20.2	61	12.1
2	5.2	32	12.3	62	11.3, 11.4
3	14.1, 14.2	33	6.2, 6.3, 8.2, 8.3	63	9.1
4	10.1, 10.2, 10.3, 11.3, 11.4	34	1.6, 1.7	64	6.4, 16.6
5	8.2, 8.3, 8.4, 18.2, 18.3	35	9.1	65	14.4, 14.5
6	21.4	36	13.4	66	10.1, 10.2, 11.2
7	2.1	37	9.1	67	13.2
8	5.6	38	3.1	68	2.3
9	14.2	39	16.7, 20.1	69	10.1, 10.2, 11.1
10	19.2, 19.3, 19.4	40	9.2	70	15.2, 15.4, 19.3
11	15.1, 15.2, 15.3, 16.1	41	2.3, 2.4	71	10.1, 10.2, 10.3, 11.4
12	4.2, 4.3, 4.4, 4.5, 4.6, 5.1	42	17.8, 20.3	72	18.4
13	6.2, 6.3	43	4.7	73	12.5
14	17.7	44	13.2	74	19.2
15	10.1, 10.2, 11.3	45	9.2, 12.4	75	12.5, 13.5
16	14.1, 14.2	46	6.2	76	7.3
17	10.1, 10.2, 10.3	47	14.2, 14.3, 14.4	77	13.1
18	16.6	48	4.7	78	12.2, 12.4
19	21.4	49	8.1, 8.2, 8.3	79	6.4
20	3.1	50	12.3	80	13.4
21	14.1, 14.2	51	5.4	81	9.1, 9.2, 9.3
22	13.3	52	17.7, 17.8, 20.1, 20.2, 20.3	82	15.1
23	16.1, 16.2, 16.3	53	17.8, 20.2	83	16.6
24	4.6	54	1.1, 1.3	84	6.4
25	17.1, 17.2, 17.3, 17.4, 17.5, 17.6	55	10.1, 10.2	85	14.1, 14.2
26	10.1, 10.2	56	1.5		
27	4.7, 5.6	57	9.4		
28	12.1, 12.2	58	21.1, 21.4		
29	7.2	59	2.1, 2.2, 2.3		
30	19.3, 19.4	60	6.1		