> Workbook answers

Unit 1 Photosynthesis and the carbon cycle

Topic 1.1 Photosynthesis

Exercise 1.1A How light level affects photosynthesis

1 The type of plant; the mass of the plant; the temperature

Apparatus	Amount of light	Volume of gas collected in cm"	
Α.	high	18.3	
В	low	7.2	
C	niOne.	0.5	

3 Plants photosynthesise faster when they have more light.

Exercise 1.18 The effect of different colours of light on the rate of photosynthesis

- The colour of the light / cellophane.
- 2 The number of bubbles produced in one minute.
- 3 Any three from: the light intensity (strength); the type of water the water plant was in; the quantity of water plant; the type of water plant; the temperature.
- 4 For example:

2

Colour of light	Number of bubbles per minute			
	1st try	2nd try	3rd try	mean
white	11	13	12	12
red	10	12	1.1	1.1
green	- 4	5	- 6	5
blue	8	. 12	10	10



6 Accept any valid conclusion that can be made from these results, for example: plants photosynthesise fastest in white light; photosynthesis happens faster in blue light than in green light.

Exercise 1.1C Turning an idea into a hypothesis that can be tested

- 1 Accept any answer that:
 - · is in the form of a clearly phrased hypothesis
 - relates to the effect of carbon dioxide on the rate of photosynthesis of an aquatic plant
 - · can be tested by experiment.

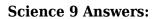
For example, a possible hypothesis could be:

Water plants give off more bubbles per minute when they are given more carbon dioxide.

- 2 Leook for:
 - a clear statement of the independent variable and dependent variable
 - at least two other variables that will be controlled
 - a clearly explained method, with enough detail that someone else could follow it, including a labelled diagram of the apparatus
 - a clear description of how the independent variable will be changed
 - a clear description of how and when results will be collected
 - a results chart, with headings and units (but no results)
 - a prediction based on scientific understanding.

Science 9 Answers

Didier Musso



The Top Books of the Year Science 9 Answers The year 2023 has witnessed a noteworthy surge in literary brilliance, with numerous engrossing novels captivating the hearts of readers worldwide. Lets delve into the realm of bestselling books, exploring the engaging narratives that have enthralled audiences this year. The Must-Read: Colleen Hoovers "It Ends with Us" This poignant tale of love, loss, and resilience has captivated readers with its raw and emotional exploration of domestic abuse. Hoover skillfully weaves a story of hope and healing, reminding us that even in the darkest of times, the human spirit can triumph. Uncover the Best: Taylor Jenkins Reids "The Seven Husbands of Evelyn Hugo" This captivating historical fiction novel unravels the life of Evelyn Hugo, a Hollywood icon who defies expectations and societal norms to pursue her dreams. Reids compelling storytelling and compelling characters transport readers to a bygone era, immersing them in a world of glamour, ambition, and self-discovery. Discover the Magic: Delia Owens "Where the Crawdads Sing" This mesmerizing coming-of-age story follows Kya Clark, a young woman who grows up alone in the marshes of North Carolina. Owens spins a tale of resilience, survival, and the transformative power of nature, entrancing readers with its evocative prose and mesmerizing setting. These bestselling novels represent just a fraction of the literary treasures that have emerged in 2023. Whether you seek tales of romance, adventure, or personal growth, the world of literature offers an abundance of captivating stories waiting to be discovered. The novel begins with Richard Papen, a bright but troubled young man, arriving at Hampden College. Richard is immediately drawn to the group of students who call themselves the Classics Club. The club is led by Henry Winter, a brilliant and charismatic young man. Henry is obsessed with Greek mythology and philosophy, and he quickly draws Richard into his world. The other members of the Classics Club are equally as fascinating. Bunny Corcoran is a wealthy and spoiled young man who is always looking for a good time. Charles Tavis is a quiet and reserved young man who is deeply in love with Henry. Camilla Macaulay is a beautiful and intelligent young woman who is drawn to the power and danger of the Classics Club. The students are all deeply in love with Morrow, and they are willing to do anything to please him. Morrow is a complex and mysterious figure, and he seems to be manipulating the students for his own purposes. As the students become more involved with Morrow, they begin to commit increasingly dangerous acts. The Secret History is a exceptional and gripping novel that will keep you speculating until the very end. The novel is a warning tale about the dangers of obsession and the power of evil.

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