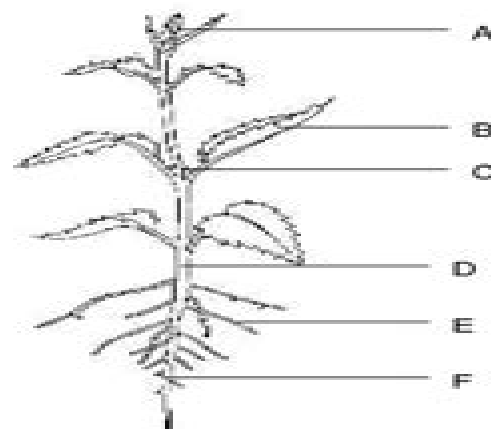


6 Plant structure and function

1 Name the parts of the plant shown in the drawing.

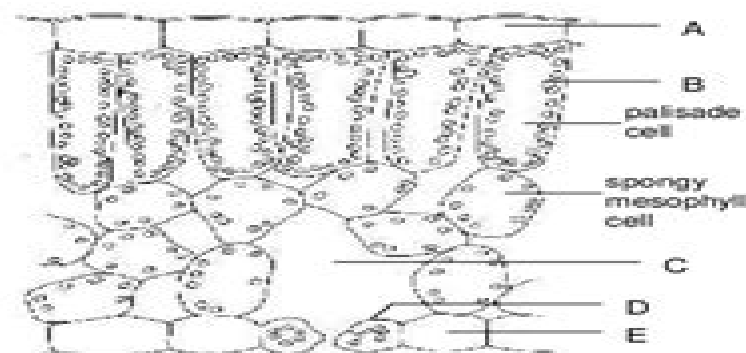
2 Match the structures stem, leaf, root, terminal bud, lateral bud to the following functions:

- (a) produces carbohydrates
- (b) carries water to leaves
- (c) absorbs sunlight
- (d) continues growth in height
- (e) absorbs mineral salts
- (f) makes branches
- (g) anchors plant in soil
- (h) conducts food to roots
- (i) evaporates water
- (j) produces new leaves
- (k) spaces out leaves
- (l) produces flowers
- (m) absorbs carbon dioxide
- (n) absorbs water.



3 The drawing represents a vertical section through a leaf x 200

- (a) Name the parts indicated by the letters A - E.
- (b) What differences can you see between the palisade cells and the spongy mesophyll cells?
- (c) What is the function of C?
- (d) (i) Name the features represented in the diagram, which are thought to adapt the leaf to its function in photosynthesis.
(ii) Say how these features help to promote this process.
- (e) State three other structural features, not shown in the drawing, which are thought to be adaptations to the process of photosynthesis in most leaves.
Explain briefly how these features contribute to the efficiency of photosynthesis.



4 Which of the following are most likely to be true? When the stomata are open, the leaf is

- (a) absorbing oxygen
- (b) giving off water vapour
- (c) absorbing carbon dioxide
- (d) giving off carbon dioxide
- (e) giving off oxygen

5 (a) How many stomata are shown in this drawing of leaf epidermis?

(b) How many of the stomata are open?

(c) How many are likely to be open at night?

(d) What is the magnification of the drawing?



Plant Structure And Function Workbook Answers Key

JS Bruner



Plant Structure And Function Workbook Answers Key:

Embark on a breathtaking journey through nature and adventure with Explore with is mesmerizing ebook, Witness the Wonders in **Plant Structure And Function Workbook Answers Key** . This immersive experience, available for download in a PDF format (PDF Size: *), transports you to the heart of natural marvels and thrilling escapades. Download now and let the adventure begin!

<https://crm.avenza.com/results/browse/Documents/Pg%201realidades%203%20Workbook%20Answers.pdf>

Table of Contents Plant Structure And Function Workbook Answers Key

1. Understanding the eBook Plant Structure And Function Workbook Answers Key
 - The Rise of Digital Reading Plant Structure And Function Workbook Answers Key
 - Advantages of eBooks Over Traditional Books
2. Identifying Plant Structure And Function Workbook Answers Key
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Plant Structure And Function Workbook Answers Key
 - User-Friendly Interface
4. Exploring eBook Recommendations from Plant Structure And Function Workbook Answers Key
 - Personalized Recommendations
 - Plant Structure And Function Workbook Answers Key User Reviews and Ratings
 - Plant Structure And Function Workbook Answers Key and Bestseller Lists
5. Accessing Plant Structure And Function Workbook Answers Key Free and Paid eBooks
 - Plant Structure And Function Workbook Answers Key Public Domain eBooks
 - Plant Structure And Function Workbook Answers Key eBook Subscription Services
 - Plant Structure And Function Workbook Answers Key Budget-Friendly Options

6. Navigating Plant Structure And Function Workbook Answers Key eBook Formats
 - ePub, PDF, MOBI, and More
 - Plant Structure And Function Workbook Answers Key Compatibility with Devices
 - Plant Structure And Function Workbook Answers Key Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Plant Structure And Function Workbook Answers Key
 - Highlighting and Note-Taking Plant Structure And Function Workbook Answers Key
 - Interactive Elements Plant Structure And Function Workbook Answers Key
8. Staying Engaged with Plant Structure And Function Workbook Answers Key
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Plant Structure And Function Workbook Answers Key
9. Balancing eBooks and Physical Books Plant Structure And Function Workbook Answers Key
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Plant Structure And Function Workbook Answers Key
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Plant Structure And Function Workbook Answers Key
 - Setting Reading Goals Plant Structure And Function Workbook Answers Key
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Plant Structure And Function Workbook Answers Key
 - Fact-Checking eBook Content of Plant Structure And Function Workbook Answers Key
 - Distinguishing Credible Sources
13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
14. Embracing eBook Trends
 - Integration of Multimedia Elements

- Interactive and Gamified eBooks

Plant Structure And Function Workbook Answers Key Introduction

In the digital age, access to information has become easier than ever before. The ability to download Plant Structure And Function Workbook Answers Key has revolutionized the way we consume written content. Whether you are a student looking for course material, an avid reader searching for your next favorite book, or a professional seeking research papers, the option to download Plant Structure And Function Workbook Answers Key has opened up a world of possibilities. Downloading Plant Structure And Function Workbook Answers Key provides numerous advantages over physical copies of books and documents. Firstly, it is incredibly convenient. Gone are the days of carrying around heavy textbooks or bulky folders filled with papers. With the click of a button, you can gain immediate access to valuable resources on any device. This convenience allows for efficient studying, researching, and reading on the go. Moreover, the cost-effective nature of downloading Plant Structure And Function Workbook Answers Key has democratized knowledge. Traditional books and academic journals can be expensive, making it difficult for individuals with limited financial resources to access information. By offering free PDF downloads, publishers and authors are enabling a wider audience to benefit from their work. This inclusivity promotes equal opportunities for learning and personal growth. There are numerous websites and platforms where individuals can download Plant Structure And Function Workbook Answers Key. These websites range from academic databases offering research papers and journals to online libraries with an expansive collection of books from various genres. Many authors and publishers also upload their work to specific websites, granting readers access to their content without any charge. These platforms not only provide access to existing literature but also serve as an excellent platform for undiscovered authors to share their work with the world. However, it is essential to be cautious while downloading Plant Structure And Function Workbook Answers Key. Some websites may offer pirated or illegally obtained copies of copyrighted material. Engaging in such activities not only violates copyright laws but also undermines the efforts of authors, publishers, and researchers. To ensure ethical downloading, it is advisable to utilize reputable websites that prioritize the legal distribution of content. When downloading Plant Structure And Function Workbook Answers Key, users should also consider the potential security risks associated with online platforms. Malicious actors may exploit vulnerabilities in unprotected websites to distribute malware or steal personal information. To protect themselves, individuals should ensure their devices have reliable antivirus software installed and validate the legitimacy of the websites they are downloading from. In conclusion, the ability to download Plant Structure And Function Workbook Answers Key has transformed the way we access information. With the convenience, cost-effectiveness, and accessibility it offers, free PDF downloads have become a popular choice for students, researchers, and book lovers worldwide. However, it is crucial to engage in ethical downloading practices and prioritize personal security

when utilizing online platforms. By doing so, individuals can make the most of the vast array of free PDF resources available and embark on a journey of continuous learning and intellectual growth.

FAQs About Plant Structure And Function Workbook Answers Key Books

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer webbased readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Plant Structure And Function Workbook Answers Key is one of the best book in our library for free trial. We provide copy of Plant Structure And Function Workbook Answers Key in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Plant Structure And Function Workbook Answers Key. Where to download Plant Structure And Function Workbook Answers Key online for free? Are you looking for Plant Structure And Function Workbook Answers Key PDF? This is definitely going to save you time and cash in something you should think about. If you trying to find then search around for online. Without a doubt there are numerous these available and many of them have the freedom. However without doubt you receive whatever you purchase. An alternate way to get ideas is always to check another Plant Structure And Function Workbook Answers Key. This method for see exactly what may be included and adopt these ideas to your book. This site will almost certainly help you save time and effort, money and stress. If you are looking for free books then you really should consider finding to assist you try this. Several of Plant Structure And Function Workbook Answers Key are for sale to free while some are payable. If you arent sure if the books you would like to download works with for usage along with your computer, it is possible to download free trials. The free guides make it easy for someone to free access online library for download books to your device. You can get free download on free trial for lots of books categories. Our library is the biggest of these that have literally hundreds of thousands of different products categories represented. You will also see that there are specific sites catered to different product types or categories, brands or niches related with Plant Structure And Function Workbook Answers Key. So depending on what exactly you are searching, you will be able to choose e books to suit your own need.

Need to access completely for Campbell Biology Seventh Edition book? Access Ebook without any digging. And by having access to our ebook online or by storing it on your computer, you have convenient answers with Plant Structure And Function Workbook Answers Key To get started finding Plant Structure And Function Workbook Answers Key, you are right to find our website which has a comprehensive collection of books online. Our library is the biggest of these that have literally hundreds of thousands of different products represented. You will also see that there are specific sites catered to different categories or niches related with Plant Structure And Function Workbook Answers Key So depending on what exactly you are searching, you will be able to choose ebook to suit your own need. Thank you for reading Plant Structure And Function Workbook Answers Key. Maybe you have knowledge that, people have search numerous times for their favorite readings like this Plant Structure And Function Workbook Answers Key, but end up in harmful downloads. Rather than reading a good book with a cup of coffee in the afternoon, instead they juggled with some harmful bugs inside their laptop. Plant Structure And Function Workbook Answers Key is available in our book collection an online access to it is set as public so you can download it instantly. Our digital library spans in multiple locations, allowing you to get the most less latency time to download any of our books like this one. Merely said, Plant Structure And Function Workbook Answers Key is universally compatible with any devices to read.

Find Plant Structure And Function Workbook Answers Key :

pg 1realidades 3 workbook answers

pharmacology math made easy

peugeot diesel injection pump repair manual

philippines grade 7 guide in filipino

peugeot 406 service repair manual 1996 1998

pharmacology connections to nursing practice 2nd edition

pfaff 8repair manual

pg 13 animal farm study guide

peugeot automated manual transmission

peugeot sum up manual

phantom of the opera by calvin custer

pfaff 463 manual

peugeot jetforce 50cc 125cc workshop service repair manual

peugeot tud5 manual

pgps434300bt 535300bt navitel user manual ru

Plant Structure And Function Workbook Answers Key :

ora plata embroidered costumes of the bullfight - Dec 25 2021

web ora plata embroidered costumes of the bullfight 2022 10 06 you get their books published with the best and most up to date listings of key book publishing insiders

ora plata embroidered costumes of the bullfight c pdf - Aug 01 2022

web oro plata ora plata embroidered costumes of the bullfight c downloaded from sam arabtravelers com by guest dashawn kiera athanor costume fashion press

ora plata embroidered costumes of the bullfight c merriam - Jun 30 2022

web ora plata embroidered costumes of the bullfight c is available in our book collection an online access to it is set as public so you can download it instantly our digital library

ora plata embroidered costumes of the bullfight c - Nov 04 2022

web 2 ora plata embroidered costumes of the bullfight c 2021 10 07 ora plata embroidered costumes of the bullfight c downloaded from sam arabtravelers com

oro plata embroidered costumes of the bullfight by danielle - Mar 08 2023

web item 1 ora plata embroidered costumes of bullfight by daniël carbonel peter müller hc ora plata embroidered costumes of bullfight by daniël carbonel peter müller

ora plata embroidered costumes of the bullfight pdf 2013 - Nov 23 2021

web ora plata embroidered costumes of the bullfight downloaded from 2013 thecontemporaryaustin org by guest ty cason the right to dress brill the

ora plata embroidered costumes of the bullfight c book - Apr 09 2023

web ora plata embroidered costumes of the bullfight c the century club nov 12 2022 the century club is written for anyone and everyone who possesses a passion for

renewalcc com - Dec 05 2022

web renewalcc com

ora plata embroidered costumes of the bullfight c 2023 - Sep 02 2022

web begin getting this info acquire the ora plata embroidered costumes of the bullfight c associate that we find the money for here and check out the link you could purchase

ora plata embroidered costumes of the bullfight c - Jan 06 2023

web what we offer under as without difficulty as evaluation ora plata embroidered costumes of the bullfight c what you as soon as to read ora plata embroidered costumes of

ora plata embroidered costumes of the bullfight c copy - Apr 28 2022

web may 28 2023 ora plata embroidered costumes of the bullfight c and numerous ebook collections from fictions to scientific research in any way among them is this ora plata

ora plata embroidered costumes of the bullfight by daniele - Feb 24 2022

web xac posts facebook derisuherlan 2711011305 code penal 2010 ancienne edition epub pdf homeandhearthme pdf download oro plata embroidered costumes of the petra x

ora plata embroidered costumes of the bullfight by carbonel - Jul 12 2023

web according to spanish tradition the bullfighter should never wear his costume outside the bullring published for the first time the greatest stars of the corrida resplendent in their

ora plata embroidered costumes of the bullfight c pdf - Oct 03 2022

web right here we have countless book ora plata embroidered costumes of the bullfight c and collections to check out we additionally give variant types and furthermore type of

ora plata embroidered costumes of the bullfight c pdf - Aug 13 2023

web 2 ora plata embroidered costumes of the bullfight c 2021 12 01 ora plata embroidered costumes of the bullfight c downloaded from cdn writermag com by

free ora plata embroidered costumes of the bullfight c - Oct 15 2023

web oro plata jun 28 2023 according to spanish tradition the bullfighter should never wear his costume outside the bullring each of their elaborately embroidered costumes is

ora plata embroidered costumes of the bullfight c - Jan 26 2022

web ora plata embroidered costumes of the bullfight c 1 omb no ora plata embroidered costumes of the bullfight c 1 my must have embroidery books 1 find out why i

oro plata embroidered costumes of the bullfight amazon com - Sep 14 2023

web oct 1 1997 oro plata embroidered costumes of the bullfight carbonel daniele on amazon com free shipping on qualifying offers oro plata embroidered costumes

ora plata embroidered costumes of the bullfight goodreads - Jun 11 2023

web according to spanish tradition the bullfighter should never wear his costume outside the bullring published for the first time the greatest stars of the corrida resplendent in their

ora plata embroidered costumes of the bullfight c pdf 2023 - May 30 2022

web as this ora plata embroidered costumes of the bullfight c pdf it ends going on bodily one of the favored books ora plata embroidered costumes of the bullfight c pdf

ora plata embroidered costumes of the bullfight hardcover - May 10 2023

web ora plata embroidered costumes of the bullfight carbonel danielle amazon sg books

ora plata embroidered costumes of bullfight by daniël carbonel - Feb 07 2023

web ora plata embroidered costumes of bullfight by daniël carbonel peter müller hc pre owned condition books shows normal signs of handling usage please view the pictures

ora plata embroidered costumes of the bullfight c - Mar 28 2022

web ora plata embroidered costumes of the bullfight c right here we have countless ebook ora plata embroidered costumes of the bullfight c and collections to check

pdf eating the sun how plants power the planet - Aug 20 2023

pdf on oct 1 2009 adrian slater published eating the sun how plants power the planet find read and cite all the research you need on researchgate

eating the sun how plants power the planet - Dec 12 2022

in summary eating the sun is one of the most valuable yet readable scientific books that you are likely to encounter for a long time i enjoyed it immensely and would recommend it to anyone

eating the sun how plants power the planet google books - Mar 15 2023

nov 17 2009 eating the sun is the story of a world in crisis an appreciation of the importance of plants a history of the earth and the feuds and fantasies of warring scientists a celebration

eating the sun how plants power the planet barnes - Feb 14 2023

nov 17 2009 moving from the molecular level he explores the impact of plants on our planet describing paleobotanical research exobiology and lovelock s gaian view of earth tying all

eating the sun how plants power the planet softcover - Jul 07 2022

xix 460 p 24 cm traces the science of photosynthesis and its relevance in both history and the modern world exploring the phenomenon s key role in confronting today s environmental

eating the sun how plants power the planet morton oliver - Jun 06 2022

eating the sun how plants power the planet morton oliver amazon com tr kitap

eating the sun how plants power the planet harpercollins - Sep 09 2022

eating the sun how plants power the planet author oliver morton summary photosynthesis is the most mundane of miracles it surrounds us in our gardens parks and countryside even

eating the sun how plants power the planet morton oliver - Apr 16 2023

eating the sun how plants power the planet morton oliver amazon com tr Çerez tercihlerinizi seçin alışveriş deneyiminizi geliştirmek hizmetlerimizi sunmak müşterilerin

[eating the sun how plants power the planet by oliver morton](#) - Oct 10 2022

jul 27 2023 from the intricacies of its molecular processes to the beauty of the nature that it supports eating the sun is a wondering tribute to the extraordinary process that has allowed

eating the sun how plants power the planet google books - Jun 18 2023

bibliographic information eating the sun is the story of the discovery of a miracle the source of life itself this book explains how biologists discovered photosynthesis and through it found

[eating the sun how plants power the planet ciltli kapak](#) - May 05 2022

amazon in buy eating the sun how plants power the planet book online at best prices in india on amazon in read eating the sun how plants power the planet book reviews

eating the sun how plants power the planet - Sep 21 2023

nov 17 2009 eating the sun how plants power the planet paperback illustrated november 17 2009 by oliver morton author 4 2 58 ratings see all formats and editions from acclaimed science journalist oliver morton comes eating the sun a fascinating lively

eating the sun how plants power the planet - Jan 13 2023

from the intricacies of its molecular processes to the beauty of the nature that it supports eating the sun is a wondering tribute to the extraordinary process that has allowed plants to power

eating the sun how plants power the planet nhbs - Feb 02 2022

our solar system can be divided into three regions the inner solar system the outer solar system and the kuiper belt and oort cloud the inner rocky planets are mercury venus earth and

[eating the sun how plants power the planet bioone](#) - Nov 11 2022

dec 5 2008 nikk ogasa june 16 2023 an exploration of how photosynthesis makes life on earth possible with implications for climate change policy

[eating the sun 9780007163656 amazon com books](#) - Sep 28 2021

eating the sun how plants power the planet - May 17 2023

that greenery is the signature of the pigments with which plants harvest the sun wherever nature offers us greenery the molecular machinery of photosynthesis is making oxygen

eating the sun how plants power the planet 4th estate - Mar 03 2022

clearance academic professional books environmental social studies climate change eating the sun how plants power the planet popular science by oliver morton author

buy eating the sun how plants power the planet book online - Apr 04 2022

jul 7 2023 eating the sun is the story of the discovery of a miracle the source of life itself from the intricacies of its molecular processes to the beauty of the nature that it supports

planets nasa science - Jan 01 2022

2 days ago by including bulky foods like grains beans and starchy vegetables along with healthy fats like nuts seeds oils and avocados you won't feel like something's missing she

do you want to eat more veggies in 2024 read this - Nov 30 2021

oct 13 2023 first the wind dies down as the moon gets closer to blocking the sun after the moon reaches peak coverage the wind starts to kick back up often blowing in a different

10 weird things that happen during a solar eclipse live science - Oct 30 2021

the books built on that foundation are mapping mars science technology and the creation of a world 2002 eating the sun how plants power the planet 2007 the planet remade

eating the sun how plants power the planet worldcat org - Aug 08 2022

abebooks com eating the sun how plants power the planet 9780007163656 by morton oliver and a great selection of similar new used and collectible books available now at great

[eating the sun how plants power the planet google books](#) - Jul 19 2023

nov 18 2008 eating the sun is a bottom up account of our planet a celebration of how the smallest things enzymes and pigments influence the largest things the oceans the

ecology multiple choice questions mcq and quizzes - Jul 18 2022

ecology multiple choice questions mcq and quizzes environmental science mcq ecosystem biotic interactions ecological succession ecological pyramids organisms and populations biodiversity conservation wild life conservation environmental pollution

ecology unit test ecology khan academy - May 16 2022

learn for free about math art computer programming economics physics chemistry biology medicine finance history and more khan academy is a nonprofit with the mission of providing a free world class education for anyone anywhere

ecosystem mcq easybiologyclass - Jul 30 2023

ecosystem mcq with answers multiple choice questions on concept of ecology and ecosystem with the components of an

ecosystem and its functions in maintaining life on earth

important mcqs on ecology with answers vedantu - Mar 26 2023

oct 30 2023 how many ecosystem multiple choice questions with answers can a student expect in the exam it is difficult to predict how many of such questions will come in the exam typically 5 10 questions can appear in question papers

sample exam questions ecology aqa multiple choice questions - Oct 01 2023

multiple choice questions are perhaps the easiest to complete you simply put a cross in a box however the questions often have two answers that could at first glance be correct

aqa gcse biology ecology multiple choice questions twinkl - Aug 19 2022

twinkl ks3 ks4 science gcse science full collection biology aqa assessment multiple choice questions in this ecology quiz pack you will find four sets of multiple choice questions with answer sheets covering the ecology topic of the aqa gcse biology specification

sample exam questions ecology aqa one to four mark questions - Jan 24 2023

try the different question types in the exam on ecology multiple choice calculations practical linking and six mark questions

eoc ecology sample questions bainbridge island - Jun 16 2022

eoc ecology sample questions multiple choice write the letter that best answers the question or completes the statement on the line provided 1 which of the following descriptions about the organization of an ecosystem is correct a communities make up species which make up populations b

principles of ecology practice test questions chapter exam - Apr 26 2023

test and improve your knowledge of principles of ecology with fun multiple choice exams you can take online with study com

introduction to ecology chapter exam study com - Nov 21 2022

test and improve your knowledge of introduction to ecology with fun multiple choice exams you can take online with study com for teachers for schools for working scholars for college credit log in

ecology and ecosystem mcq quiz textbook com - Sep 19 2022

sep 25 2023 latest ecology and ecosystem mcq objective questions ecology and ecosystem question 1 ozone layer is in thermosphere mesosphere stratosphere troposphere answer detailed solution below option 3 stratosphere india s super teachers for all govt exams under one roof free demo classes available enroll for free now

ecology 4 8k plays quizizz - Feb 10 2022

20 seconds 1 pt a collection of organisms that belong to different populations but all live in the same area and interact with one another population ecosystem community ecosphere multiple choice edit

29 ecology quiz questions and answers biodiversity - Mar 14 2022

oct 21 2021 ecology quiz questions and answers 1 what is the name of the natural process in which the earth s surface absorbs and captures the sun s energy which makes the atmosphere warm a greenline effect b greenhouse effect c greenfield effect click to see the correct answer 2

sample exam questions ecology aqa practical questions bbc - Dec 23 2022

try the different question types in the exam on ecology multiple choice calculations practical linking and six mark questions

[ecology practice test questions chapter exam study com](#) - Oct 21 2022

test and improve your knowledge of ecology with fun multiple choice exams you can take online with study com

[ecology multiple choice flashcards quizlet](#) - Feb 22 2023

select the best answer for the following multiple choice questions learn with flashcards games and more for free

sample exam questions ecology aqa multiple choice questions - Aug 31 2023

try the different question types in the exam on ecology multiple choice calculations practical linking and six mark questions

mcqs on ecology easybiologyclass - May 28 2023

mcqs on ecology environmental science biodiversity wild life and conservation biology with answer key ecology mcqs with answers pdf

ecology mcq free pdf objective question answer for ecology - Jun 28 2023

aug 1 2023 in this set of multiple choice questions mcqs on ecology you will explore the intricate web of relationships that exist in the natural world these ecology mcq cover various ecological concepts including ecosystems food chains and biodiversity

important mcqs on ecology and ecosystem byju s - Apr 14 2022

ecology mcqs 1 the natural place of an organism or community is known as niche biome habitat habit the correct answer is 3 habitat 2 which is the renewable exhaustible natural energy resource coal petroleum kerosene biomass the correct answer is 4 biomass also read coal and petroleum 3