

UNIT TEST

STD : 11 (SCIENCE STREAM)

SUB : PHYSICS (054)

TIME : 1 : 00 HOUR

MARKS : 25

Section A

- Do as directed. Question no. 1 to 7. [Each carries 1 Mark]

[07]

- A body is falling freely under the action of gravity alone in vacuum. Which of the following quantities remain constant during the fall ?
(A) Kinetic energy (B) Potential energy
(C) Total mechanical energy (D) Total linear momentum
- A body is initially at rest. It undergoes one-dimensional motion with constant acceleration. The power delivered to it at time t is proportional to
(A) $t^{\frac{1}{2}}$ (B) t (C) $t^{\frac{3}{2}}$ (D) t^2
- The potential energy of a satellite is -8×10^9 J, then what is its binding energy ?
- Mention dimensional formula of $\left(\frac{G}{g}\right)$
- If the resultant external force is zero then $a_{cm} = \dots\dots$ and $v_{cm} = \dots\dots$
- If $|\vec{A} \times \vec{B}| = |\vec{A} \cdot \vec{B}|$ then angle between $\vec{A}$ and $\vec{B}$ is $\dots\dots$
- If torque acting on a rigid body is zero, then angular momentum will remain constant. True / False

Section B

- Write any 02 (two) answers from the question no. 8 to 10 given below. [Each carries 2 mark] [04]

- Derive the work energy theorem for a variable force exerted on a body in one dimension.
- Derive an expressions for the kinetic energy on an inclined plane of inclination θ for the body rolling without sliding.
- Derive the equation for variation of g due to height from the surface of earth.

Section C

- Write any 03 (three) answers from the question no. 11 to 15 given below. [Each carries 3 mark] [09]

- A rain drop of radius 2 mm falls from a height of 500 m above the ground. It falls with decreasing acceleration (due to viscous resistance of the air) until at half its original height, it attains its maximum (terminal) speed, and moves with uniform speed thereafter. What is the work done by the gravitational force on the drop in the first and second half of its journey ? What is the work done by the resistive force in the entire journey if its speed on reaching the ground is 10 ms^{-1} ?
- Explain the torque acting on a particle.
- The angular speed of a motor wheel is increased from 1200 rpm to 3120 rpm in 16 seconds. (i) What is its angular acceleration, assuming the acceleration to be uniform? (ii) How many revolutions does the engine make during this time ?
- Obtain an equation of orbital time-period of a satellite revolves around the earth.

Scope Of Paper Physics Grade 11

SJ Ball



Scope Of Paper Physics Grade 11:

Paper Technology and Industry ,1977 **Manitoba School Journal** ,1955 **Paper and Timber** ,2007
Resources in Education ,1999-04 **Paper Trade Journal** ,1919 *Data India* ,1977 Nuclear Science Abstracts
,1974 Electrical Engineering ,1957 Vols for 1931 46 include the preprints of the Transactions of the American Institute of
Electrical Engineers ISSN 0096 3860 *The Edinburgh University Calendar* University of Edinburgh,1963 Scientific
American ,1911 **Students' Edition of a Standard Dictionary of the English Language ...** James Champlin
Fernald,1907 Graduate Work in Mathematics in Universities and in Other Institutions of Like Grade in the United States
Arthur Coleman Monahan,George Drayton Strayer,International Commission on the Teaching of Mathematics,William Carl
Ruediger,Wilson, Louis N.,1911 **Ice and Cold Storage** ,1923 **Research in Education** ,1974 **Transactions of**
the American Institute of Electrical Engineers ,1957 New South Wales Government Gazette ,1914 *University of*
Glasgow Calendar University of Glasgow,1963 *Report* Michigan. Department of Public Instruction,1892 **Documents**
Accompanying the Journal of the House Michigan. Legislature,1892 Joint Documents of the State of Michigan
Michigan,1892

Fuel your quest for knowledge with Authored by is thought-provoking masterpiece, Dive into the World of **Scope Of Paper Physics Grade 11** . This educational ebook, conveniently sized in PDF (PDF Size: *), is a gateway to personal growth and intellectual stimulation. Immerse yourself in the enriching content curated to cater to every eager mind. Download now and embark on a learning journey that promises to expand your horizons. .

https://crm.avenza.com/results/detail/HomePages/Repair_Guide_For_A_20chevy_Impala.pdf

Table of Contents Scope Of Paper Physics Grade 11

1. Understanding the eBook Scope Of Paper Physics Grade 11
 - The Rise of Digital Reading Scope Of Paper Physics Grade 11
 - Advantages of eBooks Over Traditional Books
2. Identifying Scope Of Paper Physics Grade 11
 - 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 Scope Of Paper Physics Grade 11
 - User-Friendly Interface
4. Exploring eBook Recommendations from Scope Of Paper Physics Grade 11
 - Personalized Recommendations
 - Scope Of Paper Physics Grade 11 User Reviews and Ratings
 - Scope Of Paper Physics Grade 11 and Bestseller Lists
5. Accessing Scope Of Paper Physics Grade 11 Free and Paid eBooks
 - Scope Of Paper Physics Grade 11 Public Domain eBooks
 - Scope Of Paper Physics Grade 11 eBook Subscription Services
 - Scope Of Paper Physics Grade 11 Budget-Friendly Options

6. Navigating Scope Of Paper Physics Grade 11 eBook Formats
 - ePub, PDF, MOBI, and More
 - Scope Of Paper Physics Grade 11 Compatibility with Devices
 - Scope Of Paper Physics Grade 11 Enhanced eBook Features
7. Enhancing Your Reading Experience
 - Adjustable Fonts and Text Sizes of Scope Of Paper Physics Grade 11
 - Highlighting and Note-Taking Scope Of Paper Physics Grade 11
 - Interactive Elements Scope Of Paper Physics Grade 11
8. Staying Engaged with Scope Of Paper Physics Grade 11
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Scope Of Paper Physics Grade 11
9. Balancing eBooks and Physical Books Scope Of Paper Physics Grade 11
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Scope Of Paper Physics Grade 11
10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
11. Cultivating a Reading Routine Scope Of Paper Physics Grade 11
 - Setting Reading Goals Scope Of Paper Physics Grade 11
 - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Scope Of Paper Physics Grade 11
 - Fact-Checking eBook Content of Scope Of Paper Physics Grade 11
 - 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

Scope Of Paper Physics Grade 11 Introduction

In today's digital age, the availability of Scope Of Paper Physics Grade 11 books and manuals for download has revolutionized the way we access information. Gone are the days of physically flipping through pages and carrying heavy textbooks or manuals. With just a few clicks, we can now access a wealth of knowledge from the comfort of our own homes or on the go. This article will explore the advantages of Scope Of Paper Physics Grade 11 books and manuals for download, along with some popular platforms that offer these resources. One of the significant advantages of Scope Of Paper Physics Grade 11 books and manuals for download is the cost-saving aspect. Traditional books and manuals can be costly, especially if you need to purchase several of them for educational or professional purposes. By accessing Scope Of Paper Physics Grade 11 versions, you eliminate the need to spend money on physical copies. This not only saves you money but also reduces the environmental impact associated with book production and transportation. Furthermore, Scope Of Paper Physics Grade 11 books and manuals for download are incredibly convenient. With just a computer or smartphone and an internet connection, you can access a vast library of resources on any subject imaginable. Whether you're a student looking for textbooks, a professional seeking industry-specific manuals, or someone interested in self-improvement, these digital resources provide an efficient and accessible means of acquiring knowledge. Moreover, PDF books and manuals offer a range of benefits compared to other digital formats. PDF files are designed to retain their formatting regardless of the device used to open them. This ensures that the content appears exactly as intended by the author, with no loss of formatting or missing graphics. Additionally, PDF files can be easily annotated, bookmarked, and searched for specific terms, making them highly practical for studying or referencing. When it comes to accessing Scope Of Paper Physics Grade 11 books and manuals, several platforms offer an extensive collection of resources. One such platform is Project Gutenberg, a nonprofit organization that provides over 60,000 free eBooks. These books are primarily in the public domain, meaning they can be freely distributed and downloaded. Project Gutenberg offers a wide range of classic literature, making it an excellent resource for literature enthusiasts. Another popular platform for Scope Of Paper Physics Grade 11 books and manuals is Open Library. Open Library is an initiative of the Internet Archive, a non-profit organization dedicated to digitizing cultural artifacts and making them accessible to the public. Open Library hosts millions of books, including both public domain works and contemporary titles. It also allows users to borrow digital copies of certain books for a limited period, similar to a library lending system. Additionally, many universities and educational institutions have their own digital libraries that provide free access to PDF books and manuals. These libraries often offer academic texts, research papers, and technical manuals, making them invaluable resources for students and researchers. Some notable examples include MIT OpenCourseWare, which offers free

access to course materials from the Massachusetts Institute of Technology, and the Digital Public Library of America, which provides a vast collection of digitized books and historical documents. In conclusion, Scope Of Paper Physics Grade 11 books and manuals for download have transformed the way we access information. They provide a cost-effective and convenient means of acquiring knowledge, offering the ability to access a vast library of resources at our fingertips. With platforms like Project Gutenberg, Open Library, and various digital libraries offered by educational institutions, we have access to an ever-expanding collection of books and manuals. Whether for educational, professional, or personal purposes, these digital resources serve as valuable tools for continuous learning and self-improvement. So why not take advantage of the vast world of Scope Of Paper Physics Grade 11 books and manuals for download and embark on your journey of knowledge?

FAQs About Scope Of Paper Physics Grade 11 Books

What is a Scope Of Paper Physics Grade 11 PDF? A PDF (Portable Document Format) is a file format developed by Adobe that preserves the layout and formatting of a document, regardless of the software, hardware, or operating system used to view or print it. **How do I create a Scope Of Paper Physics Grade 11 PDF?** There are several ways to create a PDF: Use software like Adobe Acrobat, Microsoft Word, or Google Docs, which often have built-in PDF creation tools. Print to PDF: Many applications and operating systems have a "Print to PDF" option that allows you to save a document as a PDF file instead of printing it on paper. Online converters: There are various online tools that can convert different file types to PDF. **How do I edit a Scope Of Paper Physics Grade 11 PDF?** Editing a PDF can be done with software like Adobe Acrobat, which allows direct editing of text, images, and other elements within the PDF. Some free tools, like PDFescape or Smallpdf, also offer basic editing capabilities. **How do I convert a Scope Of Paper Physics Grade 11 PDF to another file format?** There are multiple ways to convert a PDF to another format: Use online converters like Smallpdf, Zamzar, or Adobe Acrobats export feature to convert PDFs to formats like Word, Excel, JPEG, etc. Software like Adobe Acrobat, Microsoft Word, or other PDF editors may have options to export or save PDFs in different formats. **How do I password-protect a Scope Of Paper Physics Grade 11 PDF?** Most PDF editing software allows you to add password protection. In Adobe Acrobat, for instance, you can go to "File" -> "Properties" -> "Security" to set a password to restrict access or editing capabilities. Are there any free alternatives to Adobe Acrobat for working with PDFs? Yes, there are many free alternatives for working with PDFs, such as: LibreOffice: Offers PDF editing features. PDFsam: Allows splitting, merging, and editing PDFs. Foxit Reader: Provides basic PDF viewing and editing capabilities. How do I compress a PDF file? You can use online tools like Smallpdf, ILovePDF, or desktop software like Adobe Acrobat to compress PDF files without significant quality loss. Compression reduces the file size, making it easier to share and download. Can I fill out forms in a PDF file? Yes, most PDF viewers/editors like Adobe

Acrobat, Preview (on Mac), or various online tools allow you to fill out forms in PDF files by selecting text fields and entering information. Are there any restrictions when working with PDFs? Some PDFs might have restrictions set by their creator, such as password protection, editing restrictions, or print restrictions. Breaking these restrictions might require specific software or tools, which may or may not be legal depending on the circumstances and local laws.

Find Scope Of Paper Physics Grade 11 :

repair guide for a 20chevy impala

repair manual 9yamaha exciter ii

repair manual for 98 mitsubishi eclipse spyder

repair manual for 2015 yaris

repair manual chevrolet aveo 2015

~~repair manual e12~~

repair guide chevy uplander

~~rendre la justice~~

repair manual 1960 18hp evinrude fastwin

repair manual for 1996 mercury sable

~~repair manual 2001 nissan frontier~~

~~repair manual bmw e46~~

~~repair book for a 2008 dodge caliber~~

repair manual for 98 ford mustang

repair manual for 2015 ford explorer sport trac

Scope Of Paper Physics Grade 11 :

existential threat definition and meaning collins english - Jul 20 2023

web nov 18 2023 existential threat definition existential means relating to human existence and experience meaning pronunciation translations and examples

why do some people call climate change an existential threat - Jun 19 2023

web nov 7 2023 why do some people call climate change an existential threat the phrase can refer to a literal threat to humanity s existence but also to the danger that unchecked climate change can pose to our ways of life and place in the

natural world updated november 7 2023

frontiers how is existential threat related to intergroup conflict - Mar 16 2023

web dec 5 2016 an existential threat put simply is a threat to survival may et al 1958 but this narrow definition does not suffice because the survival of a person or a group is not only defined by their physical existence but also by their ability to maintain their identity their sense of self

the covid 19 pandemic as an existential threat evidence on - Feb 15 2023

web oct 12 2023 while existential threat was the least pronounced threat component overall being particularly low among baby boomers its higher prevalence among younger cohorts is alarming existential threat means a loss of identity meaning and the ability to project oneself in the years to come

existential threat meaning pop culture by dictionary com - Sep 22 2023

web dec 2 2019 an existential threat is a threat to something s very existence when the continued being of something is at stake or in danger it is used to describe threats to actual living things as well to nonliving thing things such as a country or an ideology recommended videos

the five biggest threats to human existence the conversation - May 18 2023

web may 29 2014 the real threat is nuclear winter that is however natural pandemics are unlikely to be existential threats there are usually some people resistant to the pathogen

the meaning of existential britannica dictionary - Oct 23 2023

web an existential threat is a threat to a people s existence or survival the second phrase existential questions references existentialism a 20th century philosophy concerned with questions about how and whether life has meaning and why we exist [global catastrophic risk wikipedia](#) - Aug 21 2023

web existential risks are defined as risks that threaten the destruction of humanity s long term potential the instantiation of an existential risk an existential catastrophe would either cause outright human extinction or irreversibly lock in a drastically inferior state of affairs

earth s existential threats inequality pandemics and climate change - Apr 17 2023

web published february 23 2021 1 16pm est want to write write an article and join a growing community of more than 173 800 academics and researchers from 4 792 institutions register now the us

[ai is an existential threat just not the way you think](#) - Jan 14 2023

web jul 12 2023 ai is an existential threat just not the way you think some fear that artificial intelligence will threaten humanity s survival but the existential risk is more philosophical than apocalyptic

i jahresabschlüsse aufbereiten nwb datenbank - Jul 12 2023

web 5 vor jahresabschluss aufbereiten und auswerten inhaltsverzeichnis vorwort i

5 vor bilanzbuchhalterprüfung komplettpaket nwb verlag - Feb 07 2023

web perfekt vorbereitet in die bilanzbuchhalterprüfung die bilanzbuchhalterprüfung zählt zu

5 vor jahresabschluss aufbereiten und auswerten nwb - Sep 14 2023

web 5 vor jahresabschluss aufbereiten und auswerten inhaltsverzeichnis vorwort i jahresabschlüsse aufbereiten ii jahresabschlüsse mithilfe von kennzahlen und cashflow rechnungen analysieren und interpretieren iii zeitliche und betriebliche vergleiche von

5 vor jahresabschluss aufbereiten und auswerten nwb - May 10 2023

web 5 vor die schnelle und effiziente vorbereitung auf die prüfung die 5 vor reihe deckt

5 vor jahresabschluss aufbereiten und auswerten endspurt zur - Mar 08 2023

web 5 vor jahresabschluss aufbereiten und auswerten endspurt zur

weber 5 vor jahresabschluss aufbereiten und auswerten - Aug 13 2023

web weber 5 vor jahresabschluss aufbereiten und auswerten 7 aktualisierte auflage

5 vor jahresabschluss aufbereiten und auswerten pdf - Jun 11 2023

web 5 vor jahresabschluss aufbereite inhaltsverzeichnis 5 vor jahresabschluss

5 vor jahresabschluss aufbereiten und auswerten nwb - Apr 09 2023

web 5 vor jahresabschluss aufbereiten und auswerten 4 aufl 2017 isbn der online

5 vor jahresabschluss aufbereiten und auswerten ebook pdf - Oct 03 2022

web 5 vor jahresabschluss aufbereiten und auswerten ebook pdf endspurt zur

5 vor jahresabschluss aufbereiten und auswerten weber martin - Apr 28 2022

web 5 vor jahresabschluss aufbereiten und von weber martin jetzt online bestellen

5 vor jahresabschluss aufbereiten und auswerten e 2023 - May 30 2022

web 5 vor jahresabschluss aufbereiten und auswerten e 3 3 bietet aufgaben und

5 vor jahresabschluss aufbereiten und auswerten thalia - Dec 05 2022

web beschreibung perfekt vorbereitet in die bilanzbuchhalterprüfung die

5 vor jahresabschluss aufbereiten und auswerten endspurt zur - Sep 02 2022

web 5 vor jahresabschluss aufbereiten und auswerten endspurt zur

5 vor jahresabschluss aufbereiten und auswerten e 2022 - Feb 24 2022

web 5 vor jahresabschluss aufbereiten und auswerten e 3 3 deutsch abstract

i jahresabschlüsse aufbereiten nwb datenbank - Jan 26 2022

web 5 vor jahresabschluss aufbereiten und auswerten inhaltsverzeichnis vorwort i
[5 vor jahresabschluss aufbereiten und auswerten e](#) - Mar 28 2022

web 5 vor geschäftsvorfälle erfassen und zu abschlüssen führen making monitoring and
5 vor jahresabschluss aufbereiten und auswerten thalia - Jan 06 2023

web beschreibung perfekt vorbereitet in die bilanzbuchhalterprüfung die
[5 vor jahresabschluss aufbereiten und auswerten e book](#) - Aug 01 2022

web e book 5 vor jahresabschluss aufbereiten und auswerten martin weber
martin weber 5 vor jahresabschluss aufbereiten und auswerten - Nov 04 2022

web 5 vor jahresabschluss aufbereiten und auswerten ebook pdf von martin weber bei
5 vor jahresabschluss aufbereiten und auswerten online version - Dec 25 2021

web mit der reihe 5 vor bereiten sie sich als angehender bilanzbuchhalter oder angehende
so analysieren sie einen jahresabschluss in acht schritten - Jun 30 2022

web jul 6 2018 probieren sie es aus analysieren sie einen jahresabschluss und finden
[section 20 3 plantlike protists unicellular algae quizlet](#) - Jul 18 2023

web study with quizlet and memorize flashcards containing terms like plantlike protists are commonly called what is the following sentence true or false algae include only multicellular organisms in the process of photosynthesis what substances trap the energy of sunlight and more

protists and fungi study guide b biology - Feb 01 2022

web section 1 diversity of protists 1 eukaryotes 2 protists may be single celled colonial or multicellular 3 no the size of protists range from microscopic to very large 4 all protists can reproduce asexually some protists can reproduce both asexually and sexually 5 heterotroph 6 single celled 7 plantlike protist 8 autotroph

section 20 3 plantlike protists unicellular algae - Feb 13 2023

web section 20 3 plantlike protists unicellular algae this is likewise one of the factors by obtaining the soft documents of this section 20 3 plantlike protists unicellular algae by online you might not require more become old to spend to go to the book initiation as skillfully as search for them

[brgs6203 sample activities name class date section 20 3 plantlike](#) - Jul 06 2022

web section 20 3 plantlike protists unicellular algae pages 506 509 key concepts what is the function of chlorophyll and accessory pigments in algae what are the distinguishing features of the major phyla of unicellular algae introduction page 506 plantlike protists are commonly called is the following sentence true or false

[biology 20 3 plant like protists unicellular algae quizlet](#) - Apr 15 2023

web start studying biology 20 3 plant like protists unicellular algae learn vocabulary terms and more with flashcards games and other study tools

section 20 3 plantlike protists unicellular algae quizlet - Aug 19 2023

web plantlike protists are commonly called what false is the following sentence true or false algae include only multicellular organisms chlorophyll and the accessory pigments trap the energy of sunlight in the process of photosynthesis what substances trap the energy of sunlight water absorbs much of the light s energy

20 3 plantlike protists unicellular algae the biology corner - Oct 09 2022

web 20 3 plantlike protists unicellular algae 1 there are major phyla of algae classified according to a variety of characteristics 2 list the four phyla that are unicellular 3 one of the key traits used to classify algae is the pigments they contain 4

20 3 plantlike protists unicellular algae flashcards quizlet - Mar 14 2023

web start studying 20 3 plantlike protists unicellular algae learn vocabulary terms and more with flashcards games and other study tools

section 20 3 plantlike protists unicellular algae pages 506 509 - Aug 07 2022

web section 20 3 plantlike protists unicellular algae pages 506 509 introduction page 506 1 plantlike protists are commonly called 2 is the following sentence true or false algae include only multicellular organisms chlorophyll and accessory pigments pages 506

20 3 plantlike protists unicellular algae flashcards quizlet - May 16 2023

web compounds that absorb light at different wavelengths of light than chlorophyll accessory pigments accessory pigments are commonly accessory pigments euglenophytes phylum is euglenophyta plantlike protists that have 2 flagella but no cell wall euglenophytes helps euglena find sunlight for photosynthesis

section 20 3 plantlike protists unicellular algae hazleton area - Dec 11 2022

web section 20 3 plantlike protists unicellular algae pages 506 509 key concepts what is the function of chlorophyll and accessory pigments in algae what are the distinguishing features of the major phyla of unicellular algae introduction page 506 1 plantlike protists are commonly called 2

chapter 20 3 plantlike protists unicellular flashcards quizlet - Sep 08 2022

web study with quizlet and memorize flashcards containing terms like plantlike protists are commonly called is the following sentence true or false algae include only multicellular organisms in the process of photosynthesis what substances trap the energy of sunlight and more

21 3 the ecology of protists weebly - Apr 03 2022

web 3 how do protists help maintain homeostasis in coral reef ecosystems they are at the base of the food chain the protists called red algae support coral reefs by providing much needed nutrients for coral animals red algae also produces minerals corals need to form reefs 013368718x ch21 325 340 indd 9 1 5 09 12 33 20 pm

section 20 3 plantlike protists unicellular algae - Jun 05 2022

web april 28th 2018 section 20 3 plantlike protists unicellular algae algae chapter 20 protists how do plantlike protists make much of the diversity of aquatic life possible orientation sutd edu sg 1 4

all solutions studyhippo - Mar 02 2022

web euglenophytes are plantlike protists that contain two flagella chloroplasts and eyespot these species do not have a cell wall rather it has an intricate cell membrane call

20 3 plantlike protists unicellular algae - Jun 17 2023

web 20 3 plantlike protists unicellular algae slide 3 of 33 copyright pearson prentice hall the four phyla of unicellular algae are euglenophytes chrysophytes diatoms dinoflagellates

section 20 3 plantlike protists unicellular algae pdf download - Dec 31 2021

web section 20 3 plantlike protists unicellular algae pdf introduction section 20 3 plantlike protists unicellular algae pdf download only

section 20 3 plantlike protists unicellular algae - Jan 12 2023

web this section explains the function of chlorophyll and accessory pigments in algae it also describes the distinguishing features of the major phyla of unicellular algae introduction page 506 1 plantlike protists are commonly called 2 is the following sentence true or false algae include only multicellular organisms

20 3 section assessment flashcards quizlet - Nov 10 2022

web study with quizlet and memorize flashcards containing terms like what do chlorophyll and accessory pigments do in algae what are the four phyla of unicellular plantlike protists how do most unicellular algae get food how does this differ from the way most animallike protists get food and more

plantlike protists unicellular algae the biology corner - May 04 2022

web plantlike protists unicellular algae contain chlorophyll and carry out photosynthesis commonly called algae four phyla euglenophytes chrysophytes diatoms dinoflagellates accessory pigments help absorb light give algae a variety of colors