

ONE PAGER AKA Reading Chapter Summaries.

A ONE-PAGER is a written and graphic interpretation of a reading presented on a SINGLE sheet of paper. It should highlight the thoughts and understanding of the information. It will be a reference for reviewing the information. ONE ENTIRE SIDE should be covered with information. Use only ONE side of the paper. Your Name, Chapter Title, Subject, Period, and date are written on the BACK of the paper.

Required Information:

1. A title describing the Major Concept
2. The specific Chapter or Unit being covered
3. A prediction based upon the information read - (I think ... because)
 - 1.
4. A **large** DIAGRAM with a BORDER - Multiple Colors must be used to reflect major concepts and key information. The border must reflect aspects of the unit, concepts, vocabulary or real life applications.
5. A TEN WORD caption for the diagram must be written below the diagram. The caption must summarize the diagram's key concept.
6. A quote from the textbook must be written. The quote must pertain to a concept or aspect of the topic. The quote must emphasize a key point to be remembered or used to explain the major concept.
7. A summary of at least ten sentences explaining the major concepts of the reading or unit must be written.
8. At least five key vocabulary terms must be used and highlighted in the summary/explanation.
9. An explanation of a word or idea to demonstrate an understanding of the information must be included.
10. There must be a QUESTION BOX. Inside the Question Box must be at LEAST two (2) higher-level questions for further study (Check your Class Documents for Higher Level Questions). There must be an explanation of WHY each question was selected after each question is written.
11. *Something creative (your choice) showing or explaining how the information relates to some aspect of your life.*

Section Summary Questions.

1. For every chapter section of reading you do there will be section summary questions.
2. To reinforce your learning you will be responsible for doing the section summary questions for each reading assignment.
3. In addition to learning the material you will also learn about how to break down questions and determine the level of question.
4. When you do your section summaries there is a specific way that you set up your pages.
5. You will use cornel style set up.
6. Questions will go on the left
7. Answers will go on the right.
8. For each question you will highlight the key word that identifies the question type.
9. Under the question you will put what level question it is.
10. On the right of the question answer your question in complete sentences.

Let's make an example!

Name:

Class and Block:

Date:

Section Summary Title

1.1 Assessment

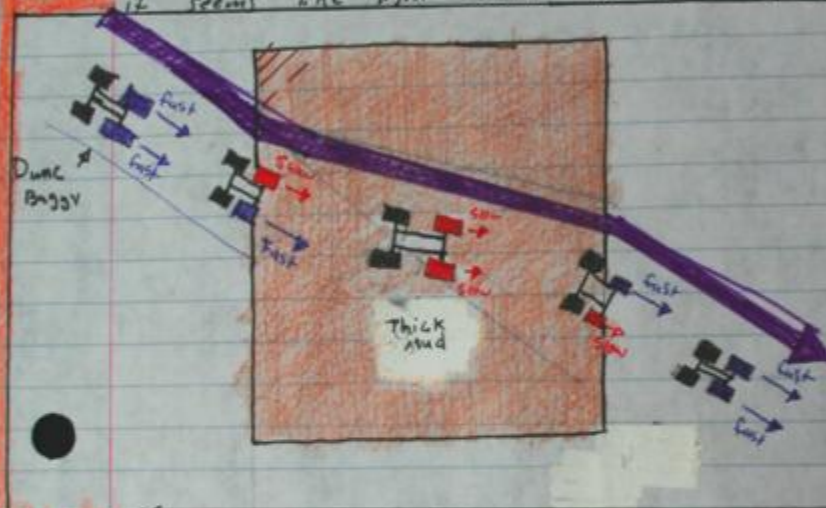
1. How are species
related to the
concept of
biodiversity?

Answer:

REGULAR PHYSICS

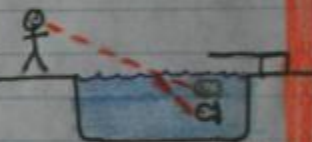
Refraction CHAPTER 2.9

Prediction - I think that light would Refract more in Synthetic oil than water Because oil is thicker than water And it seems like light wouldnt be able to travel through as fast.



Quote from book

• "Waves Bend when 1 Part (side) of the wave is made to travel faster (or slower) than the other Part (side)." 11/11



• The car turns when the mud slows one side down

• Because of refraction, the fish appears to be closer to the surface

• Refraction Happens Because of light traveling at different speeds. Think of the Beam of light like a tank. A tank turns By making one sides Belt move faster OR slower. when light Bends like that, the light is Refracting. N is the symbol for the Index of Refraction. it describes How much light slows down / Refracts / Bends. If you were shooting light from Air into glass, $N = \frac{\text{speed of light in air}}{\text{speed of light}}$

Another equation Relating to N is Snell's law which states $N_1 \sin i = N_2 \sin R$ where $i = \text{Angle of incidence}$ & $R = \text{angle of refraction}$.

Question Box

• What substances make light travel faster OR slower? I chose this b/c it Refracts 11/11

Surfing on Waves to Find Lenses & Mirrors

I predict that if a laser beam was shot in a vacuum shot, the human eye cannot see the laser because there is nothing for the light to bounce off of to go into the eye.

"If it reflects light of all the visible frequencies, like the white part of this age, it will be the same color as the light that shines on it. If a material absorbs all the light that shines on it, it reflects none and is black" (CP 423).

Why do speakers from different companies with the same voltage produce different sounds without taking into account the different materials used? I've always wondered why speakers from certain companies create clear and high quality sounds compared to other brands whose speakers have the exact same voltage.

How are the four colors in an HP cartridge able to produce a ray of different colors? I was always curious how four basic colors in two cartridges can produce a wide range of different colors and different shades of these colors.

If you were to bounce a ball in an empty room, why do the sounds echo? Every time I find myself in an empty room, I've always wondered why the sound echoes compared to a room filled with furniture.

Unit 7 & 8

Mirror, mirror on the wall
I see you and you see me
I see myself upright, and virtual I am
I see the color reflected off my shirt
It absorbs all that I don't see
It absorbs all that you don't reflect
Mirror, mirror on the wall
You always prove to me
The Law of Reflection
You always show me
What I don't always see



A **wavelength** is the length of one full wave where it can be measured from peak to peak (highest energy) or trough to trough (lowest energy). In a wave, the **nodes** (soft sound) are the non-moving part in a wave and the **antinodes** (loud sound) are the moving parts in a wave. **Resonance** is created when a bunch of small waves are combined to make a giant wave which can produce a really loud sound or wave. A mechanical wave moves energy through stuff such as water, strings, or springs. Transverse waves move energy forward by wiggling up and down. The faster the wave moves, the shorter the waves become.

Reflection occurs when a wave hits an object and then it bounces. The incident ray is the ray that goes in towards the barrier and the reflected ray is the ray that leaves the barrier. The law of reflection occurs when the incident angle and the reflected angle are equal to each other. **Diffraction** occurs when a wave or light bends around a barrier and refraction occurs when a wave passes over a boundary.

White light is the combination of **ROYGBIV**. Prisms are used to separate white light that goes into the prism and is refracted. Light refracts when it changes speed and it bends. The light ray will bend towards the normal when it moves to a substance with a bigger index of refraction. The light ray will bend away from the normal if the light moves to a substance with a smaller index of refraction, n . The bigger the index of refraction, the more it bends and the slower it moves. The longer the **wavelength** of a certain color like red, the lower the frequency it produces. The color of the object that people see is the color being reflected because all the other colors are absorbed by the object.

Real images, virtual images, and no images are the three different types of images. A **virtual image** is an image that can't be shown on a screen and it is upright. **Plane mirrors, convex mirrors, and concave mirrors** can produce a virtual image, but on a **concave mirror** you must be close to get a virtual image. **Only a concave mirror can produce a real image** when you stand far away. In order to produce no image or a silver ball, the person needs to stand at the focal point which is the point where all the reflected rays meet.

ADVANCED PHYSICS



Two types of waves and the reflection law are shown.

Sound: The thicker the string of an instrument, it creates a decrease in pitch. These strings have a longer wavelength and a lower frequency. When the strings become thinner, the pitch increases. When the pitch increases, the strings have a shorter wavelength but a higher frequency. People can hear the instruments because constructive interference is taking place. Constructive interference creates a really sound.

