

Physics I Honors: Chapter 14 Practice Test - Refraction of Light

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- ____ 1. Refraction is the bending of a wave disturbance as it passes at an angle from one ____ into another.
a. glass
b. medium
c. area
d. boundary
- ____ 2. Which is an example of refraction?
a. A parabolic mirror in a headlight focuses light into a beam.
b. A fish appears closer to the surface of the water than it really is when observed from a riverbank.
c. In a mirror, when you lift your right arm, the left arm of your image is raised.
d. Light is bent slightly around corners.
- ____ 3. When light passes at an angle to the normal from one material into another material in which its speed is lower,
a. it is bent toward the normal to the surface.
b. it always lies along the normal to the surface.
c. it is unaffected.
d. it is bent away from the normal to the surface.
- ____ 4. When a light ray moves from air into glass, which has a higher index of refraction, its path is
a. bent toward the normal.
b. bent away from the normal.
c. parallel to the normal.
d. not bent.
- ____ 5. When a light ray passes from zircon ($n = 1.923$) into fluorite ($n = 1.434$) at an angle of 60° , its path is
a. bent toward the normal.
b. bent away from the normal.
c. parallel to the normal.
d. not bent.
- ____ 6. A beam of light in air is incident at an angle of 35° to the surface of a rectangular block of clear plastic ($n = 1.49$). What is the angle of refraction?
a. 12°
b. 23°
c. 42°
d. 57°
- ____ 7. Carbon tetrachloride ($n = 1.46$) is poured into a container made of crown glass ($n = 1.52$). If a light ray in the glass is incident on the glass-to-liquid boundary and makes an angle of 30.0° with the normal, what is the angle of the corresponding refracted ray with respect to the normal?
a. 25.6°
b. 28.7°
c. 31.4°
d. 64.4°
- ____ 8. What type of image is formed when rays of light actually intersect?
a. real
b. virtual
c. curved
d. projected
- ____ 9. In what direction does a parallel ray from an object proceed after passing through a diverging lens?
a. The ray passes through the center of curvature, C .
b. The ray continues parallel to the principal axis.
c. The ray passes through the center of the lens.
d. The ray is directed away from the focal point, F .
- ____ 10. In what direction does a focal ray from an object proceed after passing through a diverging lens?
a. The ray passes through the focal point, F .
b. The ray passes through the center of the lens.
c. The ray exits the lens parallel to the principal axis.
d. The ray intersects with the center of curvature, C .

Holt Physics Chapter 1refraction Test

Rosina Ehmann



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web jan 13 2020 3 describe the 7 different types of quadrilaterals along with diagrams 4 discern the derivative of $f(x)$ 5 fill in the blanks with appropriate numbers x 2 3 dok level 3 connect the highlighted points and calculate the areas of all the triangles rectangles and squares that are possible

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web level 3 strategic thinking requires reasoning planning using evidence and a higher level of thinking than the previous two levels in most instances requiring students to explain their thinking is a level 3 activities that require students to make conjectures are also at this level the cognitive demands at level 3 are complex and abstract

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and prompts that ask students to synthesize information from multiple sources or works are great ways to get at level 4 dok skills in multi paragraph work students demonstrate synthesis and analysis of complex ideas or themes

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web dok 3 use information or conceptual knowledge two or more steps etc students have practiced these skills with assistance from kindergarten to second grade and on their own since third grade questions that lie at dok 1 necessitate only memorization and recall and so do not promote

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web if there is a question regarding which of two levels a standard addresses such as level 1 level 2 or level 2 level 3 it is appropriate to assign the highest level as the dok ceiling for the task but also provide opportunities at the lower dok levels as an instructional progression e g summarizing a text dok 2 before

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web aug 8 2022 level 1 dok despite a question s simplicity you can still provide your class with many activities having them finish a range of products depending on the question s purpose students can paraphrase a passage or chapter of a book outline and re iterate the main points of a recent lesson

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web dok 1 recall and reproduce dok 2 basic application of skills and concepts dok 3 strategic reasoning dok 4 extended reasoning the questions you can ask in each strand are easy to

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web dok level 4 extended thinking this is the most advanced stage of the depth of knowledge framework and involves students making a significant cognitive effort it encourages students to gather information from multiple resources to solve a specific problem it also motivates them to know the how and why of things

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web 1 how will you plan to use this in your classroom during whole group or small group instruction and why 2 when do you see the need to use dok question level 3 and dok question level 4 in your classroom 3 looking at your content and standard s objectives create 3 4 questions using dok level 3 and dok level 4

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web mitosis iron hematoxylin an onion root tip is a rapidly growing part of an onion and thus many cells will be in different stages of mitosis an onion cell possesses 8 chromosomes whereas human cells possess 46 chromosomes examine the following cells in different stages of mitosis observe the cell at the center of each view

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web dec 28 2013 the root meristem contains a high proportion of cells in mitosis 1 3 plant systems had a major part in early investigations of the genetic changes caused by mutagenic chemicals and radiation one of the most suitable plants for detecting different types of xenobiotics is allium cepa l

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web onion root mitosis allium root tip by joseph c rossi it is common to see photomicrographs of onion root cells when demonstrating how cell division takes place in plants onions have larger chromosomes than most plants and stain dark the chromosomes are easily observed through a compound light microscope

mitosis in an onion root the biology corner - Oct 06 2022

web procedure you will be given a slide of allium which is an onion root tip growth occurs when cells divide so the root tips should have several cells in the process of cell division view the root tip under the microscope and search for organized blocks of cells where nuclei are plainly visible

allium root tips mitosis prepared microscope slide hbarsci - Nov 07 2022

web prepared slide with allium root tips longitudinal section showing cells in all stages of mitosis with dna stained to clearly show chromosomes useful for exploring structure function connections as per ngss standards expertly prepared and labeled for easy identification available in single slide 10 pack and 25 pa

