

UPGRADE to the Bundle

Crash Course - PHYSICS 46 Episode Series Bundle

- ✓ Classroom Ready - Just Print and Go!
- ✓ Active Engagement - Keep Students' Attention
- ✓ Direct Video Link Included

WATCH VIDEO



ALL 46 Episodes with Answer
Keys and Direct Video Link

CLICK HERE



Crash Course Physics #41: Optical Instruments

Name: _____ Date: _____

You can access the video here → <https://youtu.be/SdJRPtcmgOk?si=zYSIFcBLDwpD6eSx>

1. The part of the eye that controls how much light enters is the _____.
2. The _____ changes focal length in the eye to focus on objects at different distances.
3. The _____ is the light-sensitive part at the back of the eye where images are formed.
4. The _____ is the central part of the retina responsible for sharp, focused vision.
5. The _____ is the closest distance at which the eye can focus on an object.
6. A person with _____ (farsightedness) has trouble seeing nearby objects clearly.
7. A person with _____ (nearsightedness) has trouble focusing on distant objects.
8. Farsightedness can be corrected using _____ lenses.
9. Nearsightedness can be corrected using _____ lenses.
10. A _____ image is one that appears larger and is formed on the same side as the object.
11. A lens' _____ power is the ratio of the angle subtended by the image to that subtended by the object.
12. A _____ telescope uses lenses to magnify distant objects.
13. The _____ lens in a telescope collects light and forms a real image.
14. In microscopes and telescopes, the _____ lens magnifies the image formed by the objective.
15. The ability of an optical device to distinguish small details in an image is called _____.

Crash Course Physics #41: Optical Instruments KEY

1. The part of the eye that controls how much light enters is the **iris**.
2. The **lens** changes focal length in the eye to focus on objects at different distances.
3. The **retina** is the light-sensitive part at the back of the eye where images are formed.
4. The **fovea** is the central part of the retina responsible for sharp, focused vision.
5. The **near point** is the closest distance at which the eye can focus on an object.
6. A person with **hyperopia** (farsightedness) has trouble seeing nearby objects clearly.
7. A person with **myopia** (nearsightedness) has trouble focusing on distant objects.
8. Farsightedness can be corrected using **converging** lenses.
9. Nearsightedness can be corrected using **diverging** lenses.
10. A **virtual** image is one that appears larger and is formed on the same side as the object.
11. A lens' **magnifying** power is the ratio of the angle subtended by the image to that subtended by the object.
12. A **refracting** telescope uses lenses to magnify distant objects.
13. The **objective** lens in a telescope collects light and forms a real image.
14. In microscopes and telescopes, the **eyepiece** lens magnifies the image formed by the objective.
15. The ability of an optical device to distinguish small details in an image is called **resolution**.

15 Questions

Answer Key Included

Save 85% per worksheet!