

EYESIGHT INSIGHT Common Visual Disorders and Diseases

Do you have trouble seeing things close up or far away? Do things look fuzzy or wiggly sometimes? Few people have perfect eyesight, but one way to help is to add a lens in front of your eye.

In fact, eyeglasses work by combining the focusing power of two kinds of lenses: the ones in your glasses and the ones inside your eyes. If the lens in your eye isn't curved quite right, or if the shape of your eyeball makes it hard to focus light at exactly the right place, then your glasses (or contact lenses) help by bending the light before it gets into your eye.

The information and activities in this section let you experiment with lenses and reflectors, see what happens when you bend light, and find the lenses and reflectors that are around you every day.

Activity: Waterdrop Lenses

What you Need

- Clear plastic wrap (or clear plastic container lid)
- Newspaper
- Water

What to Do

1. Put a sheet of plastic wrap (or clear lid) on top of a sheet of newspaper.
2. Use your finger to drip water in random spots on the plastic wrap or clear lid.
3. Look at the words of the newspaper through the drops. Do the words appear bigger through the drops?
4. Look at the drops of water from the side, and notice that they curve out.

What's Happening?

You just made a bunch of tiny convex lenses, the same kind of lens used in magnifying glasses. Drops of water naturally curve outward, just as convex lenses do. (Concave lenses do the opposite: they curve inward.) Convex lenses make things look larger. Concave lenses make things look smaller.

EYE SAFETY Taking Care of Vision

The best way to maintain strong vision throughout life is to take good care of your eyes. Protect your eyes, eat healthy foods, and get enough rest and exercise. Research has found that vitamins and protein are essential to healthy eyes.

While knowing a lot about the eyes and how they work will help someone keep their own eyes healthy, there is no substitute for an expert opinion. Regular eye exams by an Optometrist or Ophthalmologist are essential, especially if there is any concern about eyecare or health.

Questions? Call Educational Services,

The Oklahoman 405-475-4046.

Mail or fax order form to:

The Oklahoman, Educational Services,

P.O. Box 25125, Oklahoma City, OK, 73125 FAX: 405-475-3733.

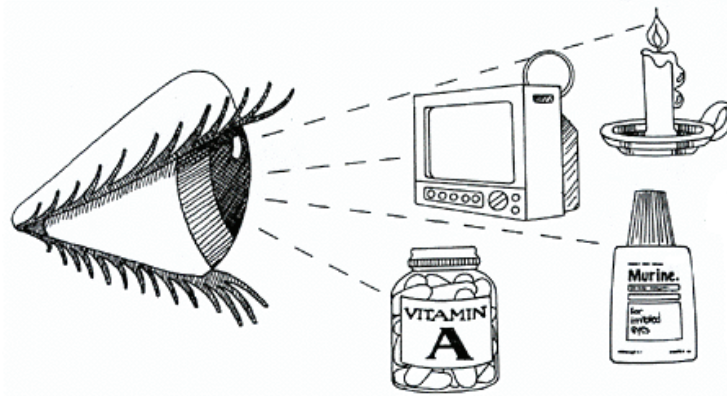


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Your Eye-Q Test

If your eyes are functioning up to par they will bring you clear images of the world around you. But to do so, they need your help and understanding. The statements below are designed to give you an idea of how well you understand your eyes. Check the True or False box next to each statement. After you are finished, look at the bottom of the page and read the correct answers. Grade yourself as follows: 19-20, I understand my eyes very well; 17-18, my view of my eyes is pretty clear; 15-16, my concept of my eyes is a little fuzzy; 13-14, the way I see my eyes could use a little correcting; and 12 or under, my eyes need much more understanding.



True	False	Questions
		1. At a distance of ten inches, my eyes can detect an object as small as four thousandths of an inch in size.
		2. My eyes can distinguish only four colors.
		3. My eyes can see a candle 14 miles away.
		4. Ten percent of what I know comes through my eyes.
		5. Reading in dim light can put a strain on my eyes.
		6. When viewing the TV, I should sit a distance equal to twice the width of the screen.
		7. A lack of vitamin A in my diet can cause reduced night vision.
		8. Dilation of the pupils allows my doctor to see a better view of the inside of my eyes.
		9. The best color for sunglasses is blue.
		10. Tears contain substances that slow down bacterial growth.
		11. My eyelids work much like a car's windshield wipers.
		12. Sunglasses will allow me to look directly at the sun.
		13. Many prescriptions for eyeglasses are identical.
		14. Smoking can affect my vision.
		15. If I have 20/20 vision, I don't have any eye problems.
		16. Air pollution affects only my lungs and breathing.
		17. If I am nearsighted, I see near objects more clearly than distant ones.
		18. If I am farsighted, I see distant object more clearly than near ones.
		19. Glaucoma is a serious eye disease that can cause blindness.
		20. Regular eye examinations can help protect my eyes and general health.

ANSWERS: 1.T. 2.F. 3.T. 4.F. 5.F. 6.F. 7.T. 8.T. 9.F. 10.T. 11.T. 12.F. 13.F. 14.T. 15.F. 16.F. 17.T. 18.T. 19.T. 20.T.