

Date: _____

Name: _____

Diagnose Anna's Eyes (page 1 of 2)

This activity was created by Brandi.

Anna has been struggling with her sight lately. Help figure out the problem by reading what is going on from her point of view, familiarizing yourself with the signs and symptoms of some common vision problems, and reviewing a scan of her eye.

I used to be an all-star goalie for my highschool soccer team, but now they've benched me. Probably because lately I can't really pick out where the ball is until it is right in front of me and I get scored on. Sometimes I'm ready to grab the ball in the air and I miss it by an inch even though it looked like it was going right into my hands. Also, my family and I go to the beach a lot on the weekends, which is fun, but now my eyes are sensitive to the sun and I always sit in the shade. My mom always tried to make me wear sunglasses or else I'd hurt my eyes, but I never did... maybe she was right."



DEFINITIONS ←

Refractive Errors: The shape of the eye bends (refracts) light so that it stops before or after the retina instead of on, causing blurred vision.

Nearsightedness (myopia): A refractive error in the eye that causes issues seeing far away, but objects up close are clear. Night myopia occurs when someone has trouble seeing while driving at night.

Farsightedness (hyperopia): A common refractive error in the eye that causes objects near to them to appear blurry, but those further away are clear.

Astigmatism: The eye cannot properly focus images near or far which occurs when either the lens or the cornea is curved like an egg instead of a ball. When one of these is curved, the eye creates two slightly different pictures instead of just one, resulting in a distorted or warped view.

Cataracts: Vision becomes cloudy and/or sensitive to light and glare. Often occurs in those ages 60 and older, but can occur in younger people because of eye injuries, diabetes, smoking, family history or exposure to ultraviolet light.

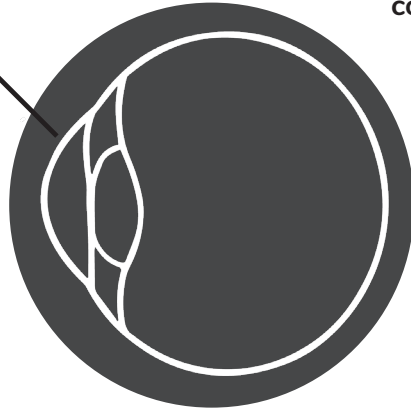
Turn the page to continue this activity!

SLO: 8-2-12, 8-2-13, 8-2-14

Date: _____

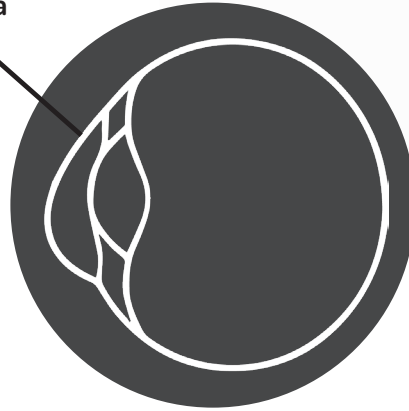
Name: _____

cornea



HEALTHY EYE

cornea



ANNA'S EYE

Diagnosis for Anna:

Esiw here! Thanks so much for helping Anna figure out what is wrong with her vision. In case you weren't aware, you used deduction, logical reasoning, and decomposition to do so. You took the bigger problem of "Anna can't see well" and broke it down to solve the problem. Good job!

