

What's Your EYE-Q? (6th – 8th Grade Curriculum) Summary

Introduce Yourself

- Share any personal connection you may have with the school. Briefly explain what an eye doctor does.
- Tell students that you are passing out a true/false questionnaire that you will work through together during the presentation. Encourage questions throughout the presentation.

Section One – How the Eye Works

- Ask the students if they know how we see? After a couple students answer say, ***“I have a friend that may be able to help with that question. Let’s check in with Matt in the vision lab and see if he can help us learn how the eye works. As you watch this video, fill out the blanks on the diagram at the bottom of your page with the correct parts of the eye.”***
- **Play video 1.** While video is playing, pass out Vision Simulator Cards.
- Using **EYE-Q WS** read through each question in Section 1 and ask students whether they think the statements are true or false. Give the correct answers and explanations. Pass around the small eye replica for students to feel the size.
 1. *My eyes can distinguish only three colors.* FALSE
 2. *When I see “red eye” in a photograph, I’m seeing blood from the retina.* TRUE
 3. *The eye can be transplanted.* FALSE
- **Lab Activities:** Penlight Activity, Blind Spot Activity, Peripheral Vision Demonstration (see script for full descriptions)

Section Two – Eye Diseases

- Ask students to pick up their **Vision Simulator Cards**. Go through each disease having students describe what they are like as they look through the window.
- **Macular Degeneration**—loss of central vision; experienced by older adults; symptoms include blurred central vision, distorted vision or dark spots; there is *no cure*. Smoking and UV exposure can increase risk.
- **Lab Activity:** Macula demonstration
- **Diabetic Retinopathy**—diabetes damages the tiny blood vessels in the retina; related to poor control of blood glucose levels over time; there is *no cure*.
- **Glaucoma**—chronic eye disease in which normal fluid pressure increases within the eye, leading to optic nerve damage and a gradual loss of peripheral vision; there is *no cure*. Eye injuries can increase risk.
- **Cataract**—clouding of the eye’s lens that causes vision problems, most performed surgery in America, explain cataract removal surgery.
- Ask how many students have been to an eye doctor for an exam. Stress the importance of regular exams, especially to help with early detection of these diseases. Don’t wait until you have the symptoms!
- **EYE-Q WS**
 4. *One-half of all Americans age 65 and older have a cataract.* TRUE
 5. *The most effective way to detect glaucoma in its early stages is to watch TV sitting sideways.* FALSE
 6. *The signs or symptoms of diabetes, hypertension, cardiovascular disease, cancer, and multiple sclerosis can all be detected during a comprehensive eye exam.* TRUE

Section Three – Eye Safety (EYE-Q WS)

7. *I am able to close my eyes before something flying out of a lawn mower would hit them.* **Play Video 2.**
8. *It is OK to share contact lenses with another person as long as you clean them in sterile solution first.* FALSE
9. *Sharing eye make-up can lead to an infection.* TRUE
10. *Smoking, drinking alcohol, and rubbing the eyes can all be harmful to the eyes.* TRUE
11. *If you get bug repellent or a chemical in your eye, you should flush the eye for several minutes.* TRUE
12. *Your eyes are exposed to more damaging sunlight while snow skiing on a cloudy day than relaxing at the beach on a sunny day.* TRUE
13. *It’s the darkness of the lens that is most important when buying sunglasses.* **Play Video 3.**

Section Four – Vision Disorders

14. *On average, if 100 kids went to the eye doctor, 25 of them would have an eye problem.* TRUE
 15. *80% of learning takes place through vision under normal circumstances.* TRUE
 16. *If I am nearsighted, I see close objects more clearly than distant ones.* **Play Video 4.**
- **(OPTIONAL) Lab activity:** Lens demonstration. Have students look at an object near and far away to feel their lens move.

Conclusion

- Ask for questions and be sure to give the students their tattoos and remind the teacher of the evaluation and give them any handouts provided. Encourage students to go over information on the handout with adults at home. Remind them there are more fun activities and information on the back.