

EYE ON SCIENCE

Opticianry is an exciting field of vision science. Opticians are eye care specialists who fill eye prescriptions and help people select proper eyeglass frames, contact lenses, or other corrective eyewear as prescribed by an optometrist or ophthalmologist.

PART 1: EYE SCIENCE

Watch *The Visual System: How Your Eyes Work* at youtube.com/watch?v=TY1giZgddAs to find out how light is processed through the eye and how the brain makes sense of patterns from that light to help us understand what we see.

PART 2: LABEL THE EYE

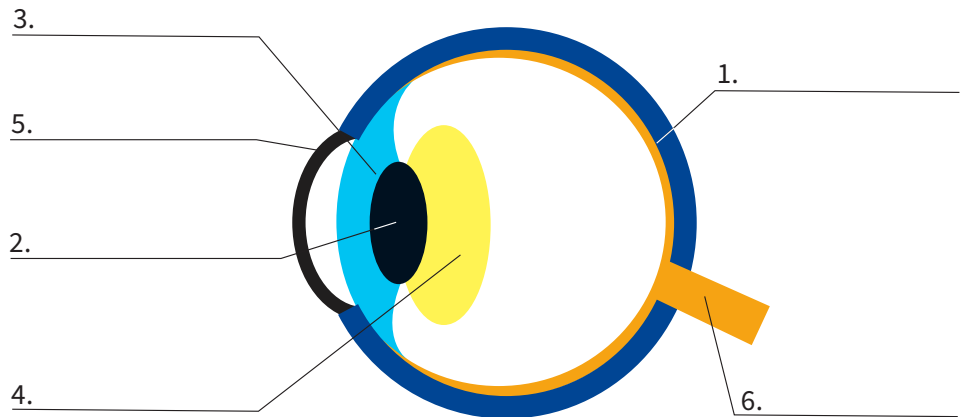
Read the prompts below to determine which eye part is being described. Then find the part on the model and write its name on the matching numbered line. Use colored pencils to lightly color each eye part a different color of your choice.

EYE PARTS:

cornea iris lens
optic nerve pupil retina

WHAT AM I?

1. I receive light patterns that trigger millions of photoreceptor cells to send messages to your brain that detect light and dark as well as color.
2. I am the dark round circle in the colored part of your eye. I am actually an opening that lets light through. The iris adjusts my size to control the amount of light that passes through your eye.
3. I am the colored part of your eye that surrounds the pupil. In bright light I automatically narrow the pupil, while in dim light I make the pupil wider.
4. I am located behind the iris. I bend and focus light to create a sharp image on the retina.
5. I am clear and dome-shaped. I am what could be called front and center because I cover the front of your eye.
6. I am like a cable or wire that connects the retina to your brain. I take in sensory information from light patterns and send them to your brain to “make sense” of it. Each of your eyes has one of me.



OPTICIAN CAREER SPOTLIGHT

“Every day as an optician, I rely on all the sciences — and even a touch of art. From calculating lens decentration for precise pupil alignment to styling frames with the right color and shape, the entire STEAM framework is essential to my success.”

— Ric Peralta, Lab/Frame Manager, Focal Point Optometry; Educator/Consultant, OpticalJedi

