

Guided Human Eye Model Activity 9-10s Science

Model Setup

1. Assemble the model pieces with the paper holder at the back of the base and the riser at the front.
2. Place the ipad in front of the model so that the screen is facing the paper holder.
3. Place the lens holder into a slot that brings the image into focus on the paper.

Activity 1: How does brightness affect the image captured on the retina?

To adjust the brightness on the ipad, slide your finger up from the bottom edge of the ipad and the brightness adjuster will show up on the right side.

Answer using complete sentences in your notebook:

1. What happens to the image when you turn the brightness all the way up?
2. What happens to the image when you turn the brightness all the way down?
3. How does light affect our ability to see?

Activity 2: How does moving the object change the image captured on the retina?

- Place the lens in the 4th slot from the front.
- Bring the image into focus.
- Move the iPad slowly towards the base until it touches the front edge and then away from the base until the image becomes blurry.

Answer using complete sentences in your notebook:

4. What happens to the image as you move the ipad closer to the base?
5. How far away can you move the ipad from the base before the image becomes too blurry?

Activity 3: Colored Filter Exploration

Bring the image back into focus. Place the colored plastic sheets in front of the lens to explore how tinted filters change our ability to see the environment around us.

Make the following table In your notebook and record your observations:

A red filter makes the image	
A blue filter makes the image	

Make a row for each of the colors in your stack.