## Sight, Part Two

There are many other parts of our eyes that all work together so we can see. The lens is a transparent and flexible piece of the eye behind the iris that directs light to the retina. The retina is an extremely fragile piece of the eye. It's only about as strong as wet tissue paper, which is why it's deep inside. The retina changes the light we see into electrical signals our brains can process. To do this, it needs two special types of cells: rods and cones.

Rods and cones are cells that are extremely sensitive to light. They allow us to see color and shades of gray, and they allow us to see when there isn't a lot of light. Our retinas have five layers, with different types of cells in each layer. At the back of the retina are ganglion cells. These cells are types of neurons, or nerve cells. The nerve fibers in these cells bundle together to make the optic nerve. There are about one million fibers in the optic nerve! This nerve carries the electrical signals the retina produces to the brain so the brain can understand what is being seen.

In between the front and back areas of the eye is the vitreous body, or sometimes called the vitreous humor. It is about $80 \%$ of the eyeball and is a clear substance that is a little like jelly. It helps control the shape of the eye and the amount of pressure inside the eye.

Follow these instructions to draw a picture of the interior of the eye on the next page like the picture shown below:

- Decide if you want to draw the right half of the picture or the left half of the picture and draw it in one of the first two grids. You can draw both if you'd like.
- Now, using a blank grid from the back of the book, try drawing the whole picture.


|  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



## Questions

1. Which picture shows the interior of the ear? Circle it.


2. Which picture shows a diagram of the skin showing layers? Circle it.

3. Which picture shows a nose? Circle it.

4. Which picture shows a diagram of the tongue? Circle it.

5. Which picture shows the interior of the eye? Circle it.



|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | \| |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Answer Key

1. 


2.

3.

4.

5.

6.
7.

8.

9.

10.

