

Science Experiments: Biology

Find Your Blind Spot



Materials:

- Paper
- Scissors
- Pen
- Ruler

Experiment:

1. Use a ruler to draw two straight lines across a sheet of paper.
2. Make a cross shape on one side of the paper strip.
3. Make a circle shape on the other side of the paper.
4. Cut out the paper strip. You should end up with something like this:



5. Hold the paper strip up to your face, so that the cross is in front of your right eye.
6. The picture of the circle should be to the right of your face.
7. Close your left eye.
8. Keep looking at the cross, as you slowly move the paper away from your face.
9. As you move it away from your face, you should notice that at some point you can't see the circle anymore, it is like it has disappeared; you've found where your blind is.
10. Try different lengths of paper strip – does this make a difference?

What is happening?

The blind spot occurs because of the structure of the eye.

When light from an object (that's how we see) travels through to the back of the eye, it hits a group of cells called the retina. In the middle of the retina is an area called the fovea. Unlike the rest of the retina, the fovea is made up of blood vessels. As there are no cells that can detect light within the fovea, there is a natural 'blind spot' created in your field of vision. Luckily your eye adjusts for this blind spot by moving slightly several times a second.

Did you know an octopus doesn't have a blind spot!