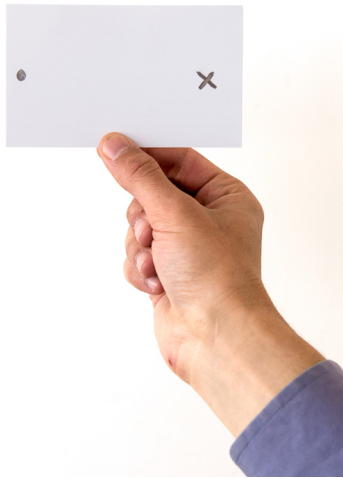


Natural Science Year 6

The Blind Spot



Vocabulary

Environment: Everything around us.

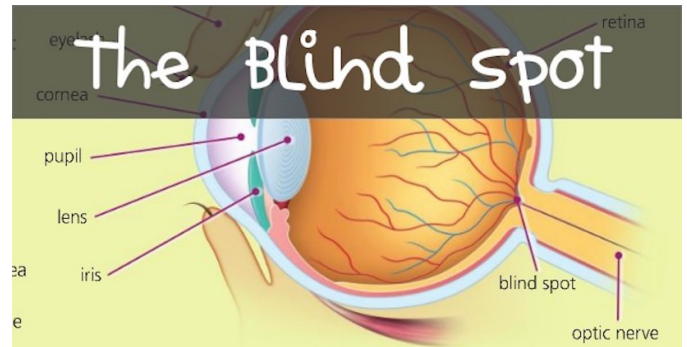
Interaction: Characteristic of living things that allows them to act and respond to stimuli from their environments.

Sensory neurons: Specialized nerves that carry information from the sense organs to the brain.

Optic nerve: A nerve that transmits visual information from the retina to the brain.

Blind spot: A part of the field of vision that is invisible.

Thanks to our nervous system, sense organs and locomotor system, we are able to interact with our environment. Our sense organs detect information from the environment and our sensory neurons transmit this information to our brain.



Aim: The aim of this investigation is to demonstrate that there is an area where the optic nerve leaves the eye that is called a blind spot because it doesn't respond to light.

Question: Do our eyes have a blind spot?

Materials: We need a white card, a black felt-tip, a pencil, a long ruler and scissors.

Hypothesis: What do you think? Tell your classmates.

- a. I think that both eyes have a blind spot
- b. I think that all parts of our eyes respond to light

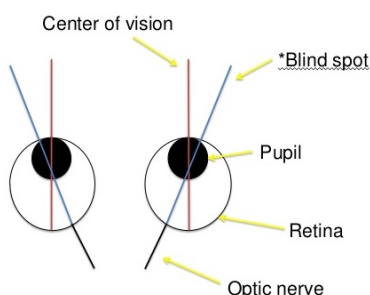
Method: We have to prepare a blind spot tester. First we have to cut a strip of card 25 by 5 centimetres. Then we mark a small cross on the right side of the strip. Then we measure 20 centimetres from the cross and mark a small dot on the left.

Then we hold the tester 50 centimetres from our face. Then we close our left eye and look at the cross with our right eye. Then we slowly bring the tester closer as we look at the cross. Finally we repeat but now closing our right eye and looking at the dot with our left eye.

In groups, make sure you keep notes to record your observations! Compare your results with other groups.

Record:

Distance	Eyes	See the dot?
50cm	Left eye closed/Right eye open	Yes/No
	Left eye closed/Right eye open	Yes/No
50cm	Right eye closed/Left eye open	Yes/No
	Right eye closed/Left eye open	Yes/No



Conclusion:

The dot disappears while looking at the cross when the strip is very close. And the cross disappears while looking at the dot when the strip is very close. Both our eyes have a blind spot. Not all parts of our eyes respond to light. But when we use both eyes we don't notice the blind spot.