2nd floor – SIGHT

The sense of sight is our most important sense, because we take in about 80% of all sensory stimuli with our eyes. About 10 million pieces of information per second reach us through the eye. This means that we take in far more information through vision than our brain processes. In cooperation with the brain region responsible for vision, we filter out what is unimportant and supplement the current image with learned routines. In the case of identical objects of different sizes, we assume on the basis of our experience that the smaller object is further away. This is why the eye-brain system can also be tricked by optical illusions.

We humans have lenticular eyes, while insects have compound eyes. By changing the lenses, we can "focus".

For colour vision, we have about 6 million cones per eye as receptors, which can distinguish between blue, green and yellow in three different "designs". Our brain calculates the actual colour from the different signals of the different cones. A healthy

eye can recognise about 20,000 colour gradations. Due to genetic make-up, there are women who can recognise up to 200 million colours. Some animals see colours only to a limited extent or, in the other case, even an extended colour space into the infrared or ultraviolet range.

We recognise light and dark through 120 million rods embedded in the retina. Because these have no colour receptors, all cats are grey to us at dusk. Nevertheless, the rods are also very efficient. In complete darkness, with healthy eyes, you can still see a match light up at a distance of about 80km.

Spatial vision is something special in the animal kingdom. In many animals, the eyes are so_far apart that the visual range of the eyes does not overlap. In humans, the visual axes of the two eyes are only 60-70mm apart. So we see in "stereo". This is how we have learned to orientate ourselves spatially very well.

Vision is our most important sense. When we take in ten pieces of information, eight of them come through the eyes.

3D-pictures

Direct your gaze straight ahead and relax your eyes so that you look through the 3D image into the distance. You will only perceive the surface of the image as blurred. Do not try to focus the image. After a while you will recognise structures in the depth of the image and suddenly you will see a three-dimensional space in front of you... What can you see?

Turntable

Turn on a disc and stand in front of it at a distance of 3-4 metres. Look at the centre of the spiral and count slowly to 20. Then look into your open palm or close your eyes.. **What do you see?**

Grafenhausen-searching game

Look through the eyes of the deer (binoculars) through the window into the village of Grafenhausen. Can you find the colourful pictures that have been placed in the landscape? You can pin the motifs to the right place on the photo with the small magnetic boards.

How many pictures did you find?

Ball in an air stream Switch on the unit at the back. Then try to place the ball gently in the air stream. Is it floating in the air?













Room of mirrors The endless room How many times can you see yourself?

3D vision Look through the eyepieces at the figures of Schlühüwana Park in 3D

Schlühüwanavisions - Anne Deutsch





Invisible light

Look through the lenses into the yellow tower What do you see? And what do you see when you put your hand through the opening? Light is invisible. Only when it is reflected can you see that a light source is present Spot the deer -Anne Deutsch

Optical Illusions

Be careful! Optical Illusion THE FACE / THE FLOWER / THE STAR / THE HOUSE Look in the mirror. Now you see the subject. You may only look at the motif and your hand in the mirror! Now draw the face/the flower/the star/the house with the pencil. Don't get confused!

Hollow mask

Look at the wall with the faces. Do you notice anything?

Walk slowly up and down in front of the picture at a distance of three metres and look at the face in the middle.

The gaze follows you. This is because the face is not curved forwards but backwards (concave). This gives the impression that the head is following you with its eyes.

Zebra picture

Let the picture rock slightly back and forth. Look at the rocking picture from about 3 metres away. Then stand on one leg.

What happens?









Everything art

Anne Deutsch was born in London in 1956. She is a painter, photographer and digital artist. Many travels and especially stays in America shape her unconventional and poppy professional art style. In 2012, she founded the art factory "Planet Scharzwald - Alles Kunst". All her works revolve around her love of the Black Forest and its present artistic implementation, both spatially and scenically. An example of this is in the "Seeing" area in the "Black Forest House of the Senses" in Grafenhausen. Here, art, play and information for indoors and outdoors have been realised in an exciting way.

Further information under <u>www.planet-schwarzwald.de</u> and <u>www.anne-deutsch.de</u>