**Science 8 Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Electromagnetic Radiation 8 - Human Eye Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Light enters your eye through the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an opening that appears dark because light passes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ it without reflecting back.
   2. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the coloured circle of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ surrounding the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is what we refer to when we speak about the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of someone’s eye



* + 1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ controls the amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ entering the eye.
       1. In \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ light, the iris \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or expands, the pupil to allow \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ light to enter
       2. In \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ light, the iris \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the pupil to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the amount of light entering the eye
  1. Covering the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a transparent tissue called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
     1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is made of cells that are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ enough to let \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pass through, yet tough enough to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the eye together.
  2. Surrounding the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an opaque tissue called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
     1. We see the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ region surrounding the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Behind the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a flexible \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lens.
   1. The light rays pass through the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and are focussed on a screen at the back of the eye called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, where an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is formed.
   2. Special \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ -sensitive cells in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ detect the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   3. Other cells in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ convert the light rays into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ signals that are sent to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ through a thick nerve called the optic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.



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1. Focussing the light
   1. Light rays pass through a focussing system involving the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and spaces in the eye filled with a watery \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      1. The fluid between the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ supports both the cornea and the lens,
         1. The fluid is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ humour
         2. The fluid also provides \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the cornea, which does not have any \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ vessels.
      2. The fluid \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the lens gives \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the eye and supports the lens.
         1. This material is thicker and called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ humour
   2. Light rays begin to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ as soon as they pass into the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      1. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ provides most of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ done by our eyes.
      2. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ does the remaining focussing.
   3. The lens has the ability to fine-tune our \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by automatically changing its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      1. When certain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the eye contract, there is less \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on the lens, allowing the lens to become \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
         1. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lens can focus on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ objects.
      2. When you look at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ objects, these same muscles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, increasing tension on the lens and making it \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.



* 1. All the light rays that enter the eye from one spot on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of an object come together again in one place at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the retina.
     1. All the light rays that enter the eye from a spot at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of an object come together at one place at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the retina.
        1. The image formed by the lens is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
        2. Your \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ interprets the image as being \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.



1. The Blind Spot
   1. The area where the optic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ enters the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ does not have any light-sensing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
      1. This area is known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ spot.