



*Create your own lens made of water*

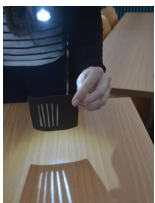
### **Material:**



- one glass
- a torch
- carton (black)
- scissors

### **Instruction:**

Cut a few slops parallel into the carton.



Arrange all the materials like it is shown on the picture. (Torch, carton). Make sure that the light

beams behind the carton are as parallel as possible. (Try to lift the torch or change the distance between torch and carton if the light beams are not parallel.)



Place the glass filled with water behind the carton and watch, how the light beams change.



### Explanation:

We are dividing the bunch of light beams from the torch into a few parallel light beams, by inserting the carton. By inserting the glass with water we are refracting the light. The water inside the glass works like the lenses made of glass, which you know from the [wiki-article "lenses"](#).

The shape of the glass is similar to a convex lens and therefore it focus the parallel light beams to a focal point behind the glass. Check the animation below to find out, which lens is similar to the glass you used.