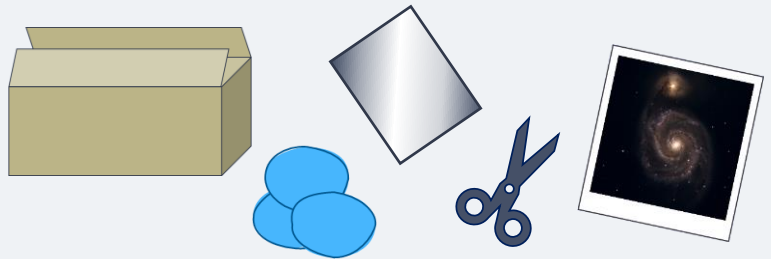


CHALLENGE: change the path of light to reveal a hidden object!

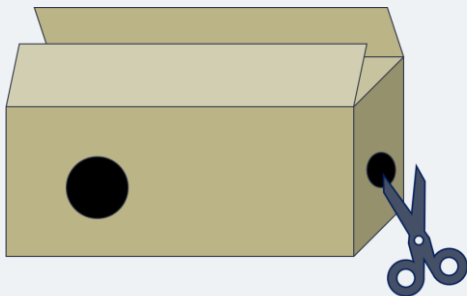
YOU WILL NEED

- A cardboard box.
- A mirror that will fit in the box.
- Some sticky tack.
- Scissors to cut holes in the box.
- A photo or picture of something (this will be your hidden object).



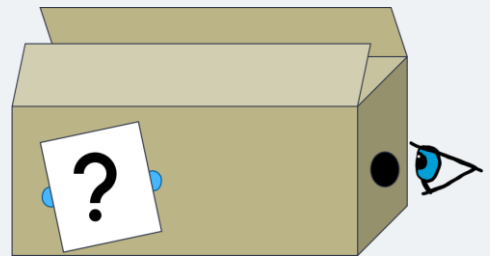
STEP 1

- Cut 2 holes in your box as shown in the picture
- Be careful! You may need to ask an adult to help cut the holes.
- Make sure the lid of the box is open so that light can get in.



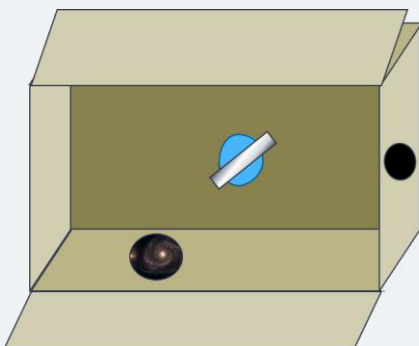
STEP 2

- Use some sticky tack to attach your picture over one of the holes. – make sure the image faces into the box!
- Look through the other hole (or ask a friend to). Can you see the picture?



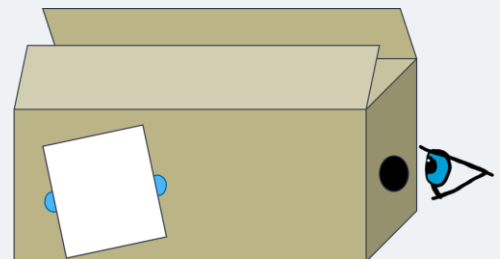
STEP 3

- Think about which direction the light reflected from the picture will travel.
- Where should the mirror go to direct the light out of the eyehole?
- Place the mirror in the box. Stick it to the base of the box using sticky tack to make sure it stays upright and still.



STEP 4

- Look through the hole again.
- If you can't see the hidden object, you may need to adjust the position of the mirror.
- If you've chosen carefully, you should be able to see the hidden object!



EXTRA CHALLENGE! Why not try putting another eyehole in a different place. Where should the mirror go now?