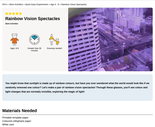
Rainbow Vision Spectacles

Sara Gardner

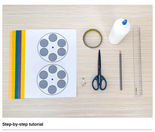
Ages 5 - 8 | Group size: 1 | Time to prepare: 15 min | Time to complete: 30 min



Can might know that sunlight is made up of rainbow colours, but have you ever wondered what the world would look like if it naturally removed one colour? Let's make a pair of rainbow vision spectacles! Through these glasses, you'll see colour and light changes that are normally invisible, exploring the magic of light!

Materials Needed

- Printable rectangle paper
- Colour pencils or paint
- Scissors
- Cutters
- Cutting mat
- Ruler
- Pencil
- Glue stick
- Tape
- Tape gun
- Pen
- Paper



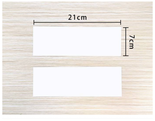
Step-by-step tutorial

Step 1

Assemble and print the copies of the template. Cut along the ribbed edges using scissors, making sure to cut the grey zones as well.

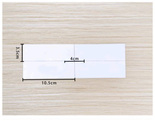
Step 2

Take white card and cut one 21cm x 7cm rectangle.



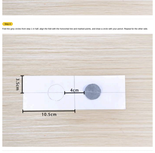
Step 3

Measure and mark with ruler, draw guide lines on the cut rectangle as shown.



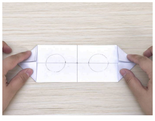
Step 4

Fold in at your marks (step 3). It will stage like this with the horizontal line not folded yet(left), and folded in (centre with your scissors. Prepare for the centre fold.



Step 5

Take the creased rectangle and fold the centre inward along the centre horizontal line.



Step 6

Assemble rectangle shape as the card. Then cut along the ribbed corners along the middle line. Prepare for the second rectangle.

Step 7

Cut the 4cm x 4cm squares from each of the 5 different coloured cellophane papers and fold the corners as shown.

Step 8

Place cards with taped tape in the rectangles and stick the coloured cellophane over the cut out spaces. Do this for both rectangles.

Step 9

Assemble rectangles (coloured side facing up, fragile double sided tape to the remaining rectangle and cap tape over the prepared card, creating your spectacle shape.

Step 10

Take a pencil or pen make a hole centre-back when of each assembled shape.

Step 11

Place the cardboard cylinder with tape on the rounded end under the cellophane side. Place through the cylinder and pencil or pen hole in the cellophane side. Glue on to cover cover.

Step 12

Repeat the step above on the other. Cellophane and cardboard rectangular cover. Secure with glue and through the holes made in step 10. Repeat for the other side.

Step 13

Cut the 18cm x 2cm strips of card and fold the 2cm from the right end as shown.

Step 14

Attach the folded strips to the glasses using double sided tape.

Step 15

Place a pencil in the middle hole between the glasses and cut a hage, creating the centre pivoter. Connect the glasses at a pivot of your case.

Step 16

Cut a 2cm x 2cm square and make the pivoter in a supersonic different colour section.

Step 17

Fold in your glasses and make the pivoter in a supersonic different colour section.

The Science Behind It:

The sunlight (white light) we see daily is actually composed of seven colours: red, orange, yellow, green, blue, indigo, and violet. Each colour has a different wavelength, and our eyes perceive these wavelengths as colours. When we wear glasses that separate the different colours, they in reality, do not change, the viewing rainbow vision spectacles, some case filter out certain colours, allowing us to see different light and colour changes.