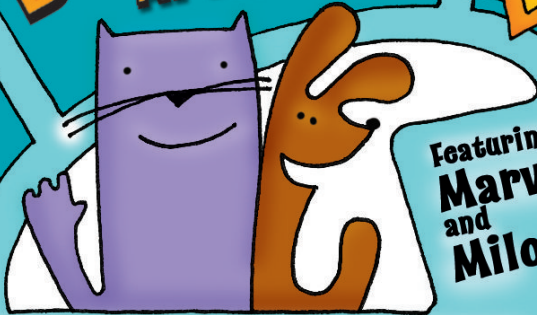


DO ~~IT~~ TRY THIS AT HOME

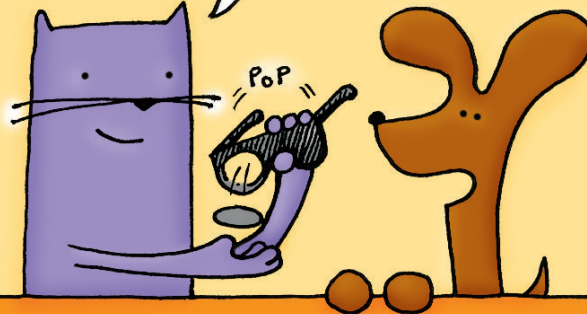
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Featuring: **Marvin and Milo**

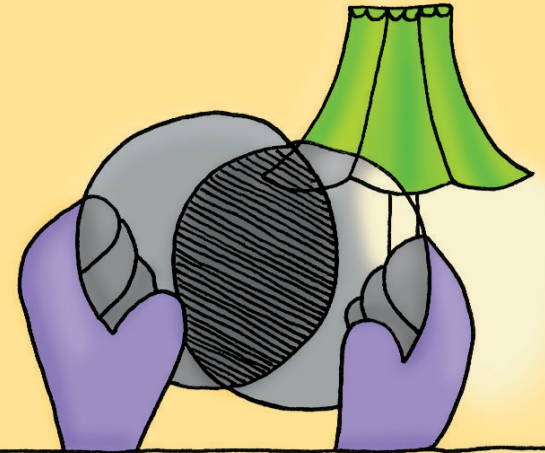


What you need: • Two "polarisers" - pieces of polarising plastic (or two old sunglass lenses) • A bright lamp • Transparent sticky tape • Piece of clear plastic

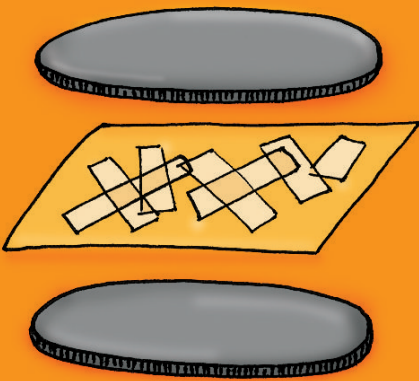
Milo, sorry but I need your sunglasses. I want to use them for a trick with light.



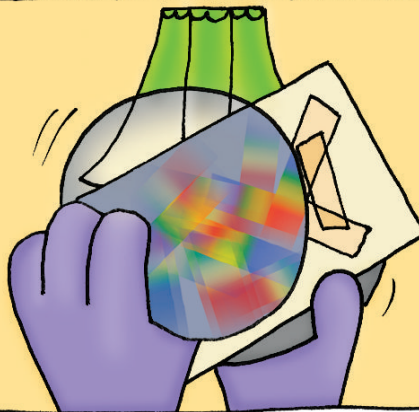
View the lamp through two polarisers at once. Rotate one of them until you can block the light.



Now stick strips of tape on the clear plastic, criss-crossing them. Sandwich the plastic between the two polarisers.



Look at the lamp through the "sandwich". Rotate the polariser closest to you - you should see a kaleidoscope of coloured patterns.



Light travels in one direction but vibrates at right-angles to this - sideways and up and down. Polariser let only the horizontal or vertical part through, so you can combine them to block light. In the "sandwich" the stretched tape slows down and rotates the polarised light, shifting the different wavelengths (ie colours) of light by different angles. As these hit the second polariser, different wavelengths get through as you rotate it, making coloured patterns.



Vic Le Billon