The Response of Seedlings to Light

Seedlings growing on a windowsill will often bend towards the window. This bending is called a tropism. But what exactly are the seedlings responding to? This technique will help you to investigate this tropic response.

Read these instructions carefully before you start.

1. Use black film cans which have a grey or black lid.
2. Make 2 holes in the sides of the can, opposite each other, and about 10 mm below the rim.
3. Cut 1 cm squares of photographic filters, e.g. red, green and blue.
4. Use "Scotch" tape to stick a filter over each hole. You could use various combinations e.g. red/blue, blue/green, red/green, etc.
5. Put about 1 cm depth of compost or soil in each can.
6. Add a little water. The compost should be moist, but not waterlogged.
7. Place 3 seeds in the can. Use any small seed, e.g. brassica, white mustard, cress, etc. then put the lid on the can.

8. Label the cans and put them under a light bank.

9. After 3 - 4 days, remove the lid and see what has happened to the seedlings.