



Objectives

1. The student will investigate the basic principle of colour mixing.

Apparatus

- Experiments Board (Simple-2)
- Newton disc
- Jumpers
- 1xAA Battery Holder w/AA battery
- Electric Motor
- 2xAA Battery Holder w/AA batteries
- Switch

Procedure & Conclusions

1. Build a simple circuit consists of 1.5V battery, a switch and an electric motor with Newton disc, as shown in the photo.
 - The seven colors in Newtons optical spectrum are: 1 2 3
4 5 6 7
2. Press the switch button and watch the color of the Newton disc.

- When you press the switch button, the disk is rotated, and the colors fade to ... white / black / other colors ...
- 3. Use 3V battery instead of the 1.5V, press the switch while watching the Newton disc.
- The faster you spin the disc, the ... more / less ... white light you see.

Note: A Newton disc is a disc with segments in rainbow colours. When the disc is rotated, the colors fade to white.

Discussion

1. Discuss the visible and invisible light spectrum.