

Dispersive Power

1. **How many colours?** Our eyes can differentiate uncountable hues.
2. Yes. Colourless light means ultraviolet light or infrared.
3. Yes. An increase means colour separation increases.
4. $P_i - A$
5. Light photons have less energy than the band gaps available in glass.
6. Truly monochromatic light should have zero band width. A single photon can be theoretically truly monochromatic. But light waves originating from a real source cannot.
7. Dispersion is used to separate colours. It can be used to check spectral characteristics of terrestrial or celestial materials. It can be used to increase efficiency of solar cells.
8. Household items like a bowl of water and a small mirror can be used. For knowing angles, pen refills or drinking straws can be used.
9. In this case the rays would be the same, but the prism would be inverted, having its vertex at the bottom.