

## Laser light II – Spectrum

### Apparatus

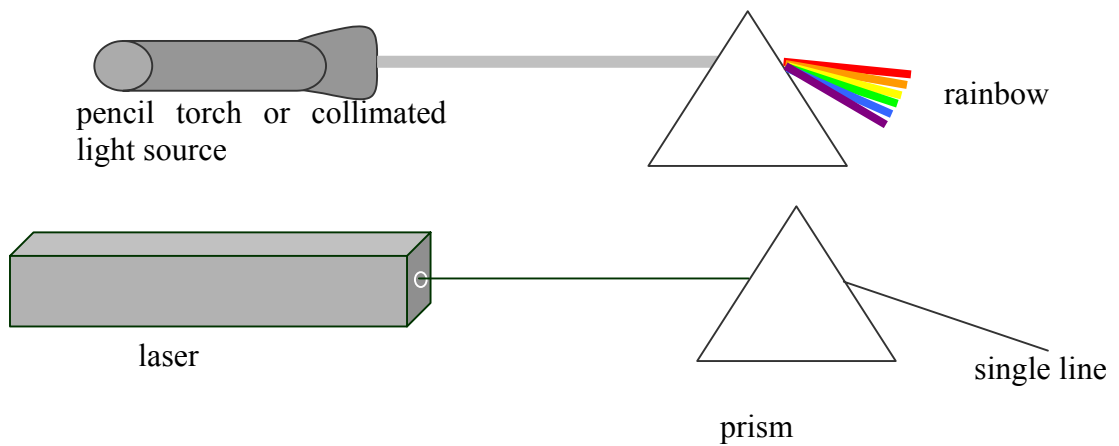
laser, “white light” collimated source (or a torch), prism

### Action

The students observe the resulting spectrum when light from each of the sources is passed through the prism.

### The Physics

The incandescent light source will produce a rainbow because it acts as a blackbody and produces a continuous spectrum. The laser produces almost monochromatic light due to electron transitions.



### Accompanying sheet:

#### Laser Light II – Spectrum

Shine the white light through a prism to observe its spectrum.

What do you observe?

Now shine the laser beam through the prism.

What do you observe this time?

Why are the spectra of the two light sources so different?