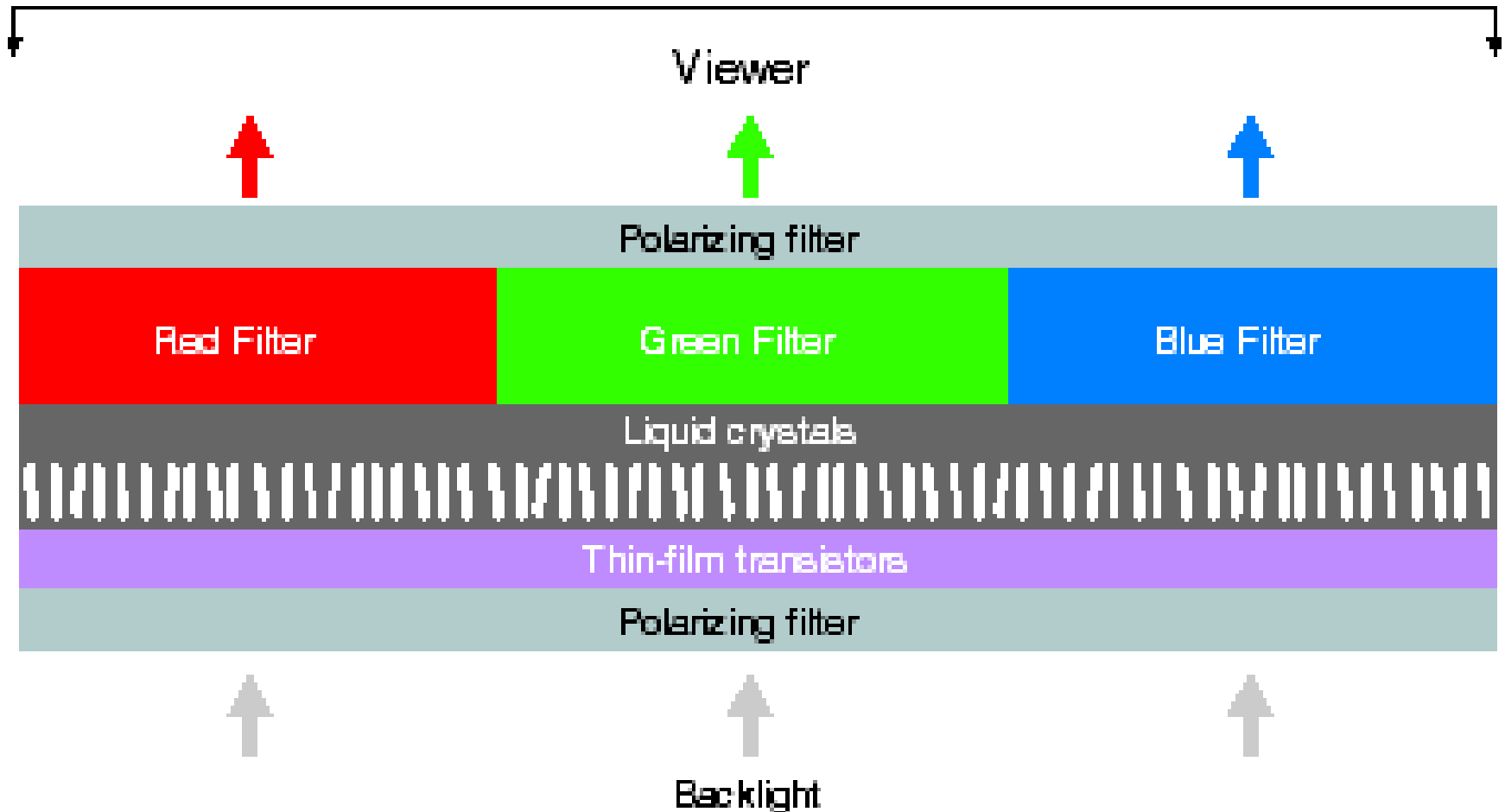


# ***Plasma and LCD\* technology - what's the difference?***

Plasma and LCD\* panels may look similar, but the flat screen and thin profile is where the similarities end.

\*LCD : Liquid Crystal Display

## ONE (LCD) PIXEL

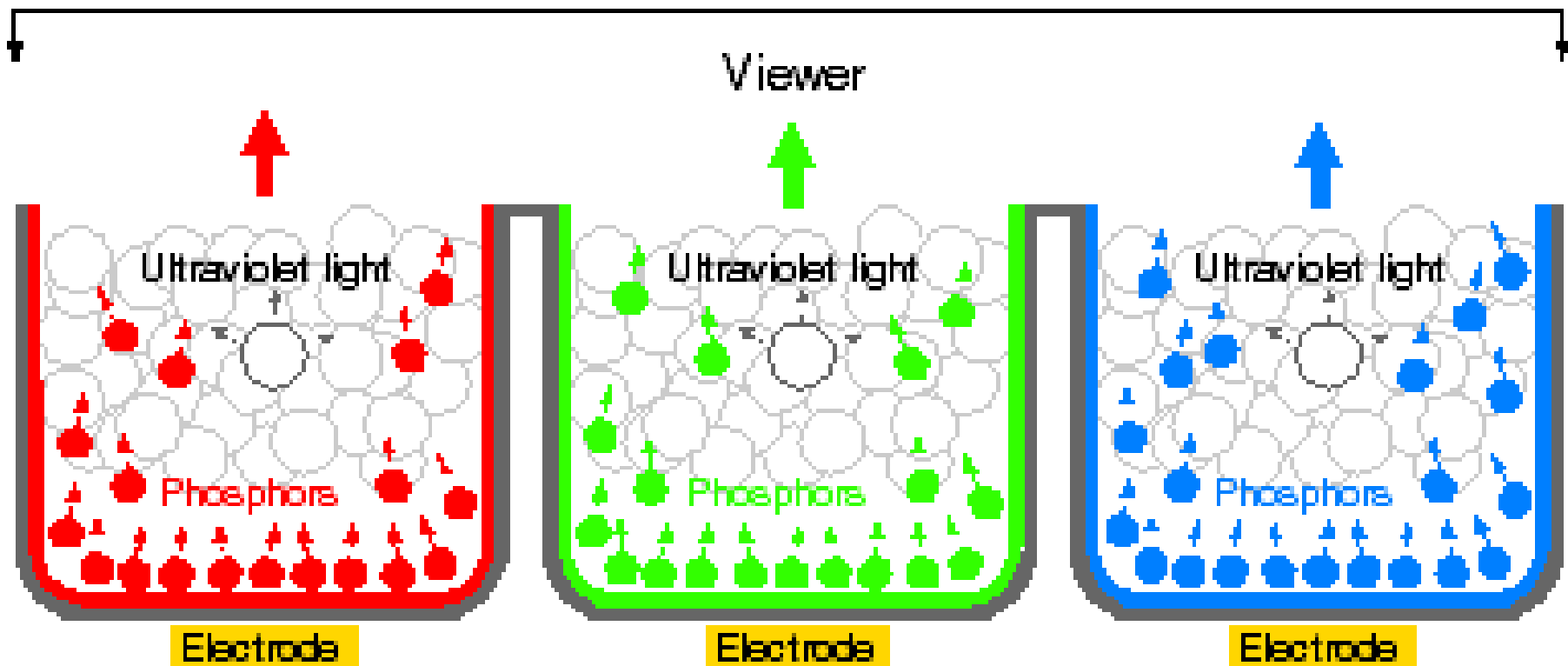


# LCD screens

- The light, called a "back light", passes through a polarizing filter (a filter that aligns the light waves in a single direction).
- The transistor makes the liquid crystals to aligned or not, depending on an electrical signal.
- Once the light is passed through the liquid crystal layer, it then passes through a color filter so that each cell will then represent one of the three primary colors of light.

[http://www.theprojectorpros.com/learn-s-learn-p-lcd\\_how\\_it\\_works.htm](http://www.theprojectorpros.com/learn-s-learn-p-lcd_how_it_works.htm)

## ONE PLASMA PIXEL



Gas-filled cells

# Plasma screens

A pixel is made up of 3 gas filled cells, respectively coated with red, green and blue phosphor.

An electrical signal makes the gas to become ionized : it is a plasma. The ions release ultraviolet photons that interact with the phosphor material coated on the inside of the cell, and this in turn gives off visible light photons.

<http://news.softpedia.com/news/How-Does-Plasma-TV-Work-49776.shtml>

**Present and comment on these documents. Don't forget to focus on at least one physics topic.**