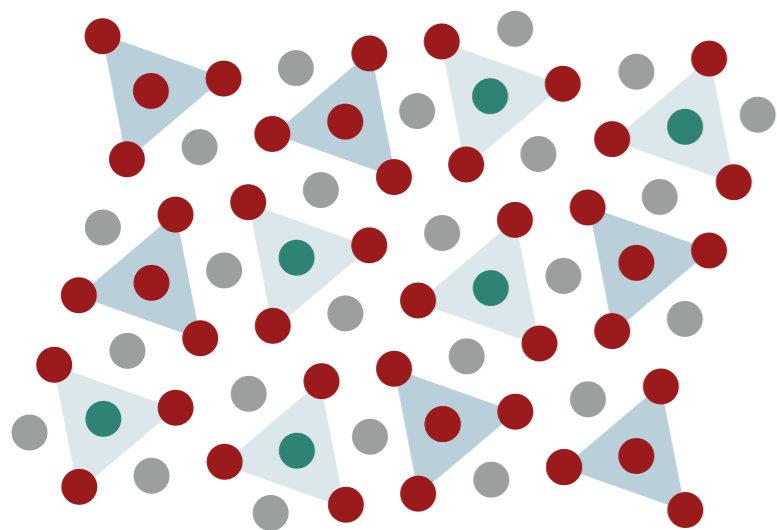
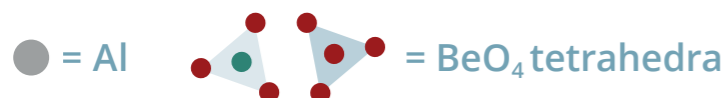


# THE COLOUR OF ALEXANDRITE



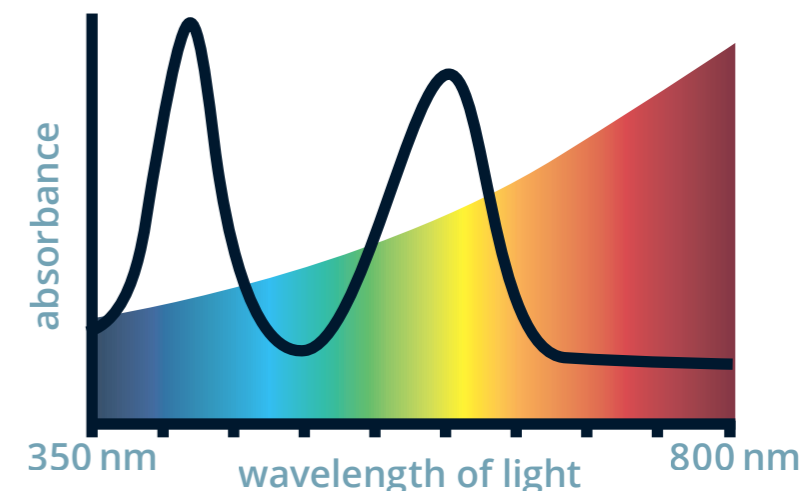
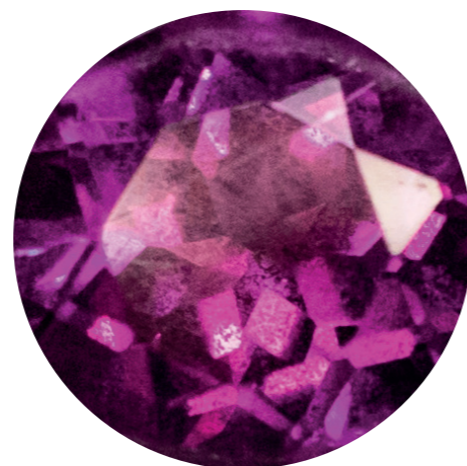
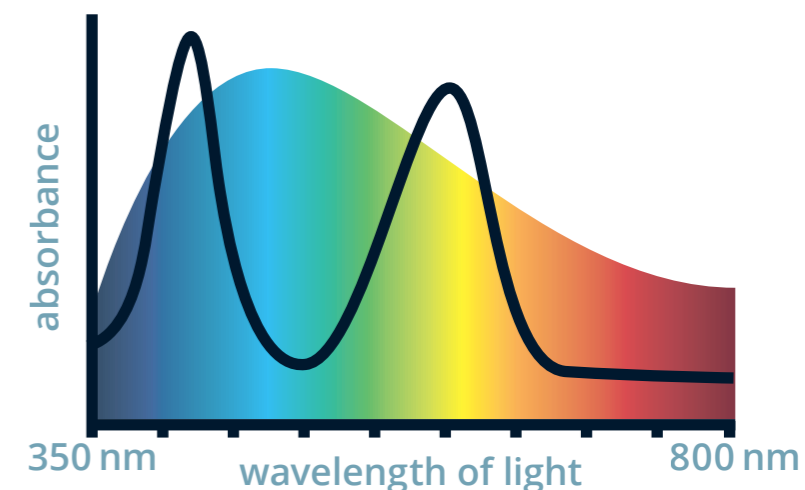
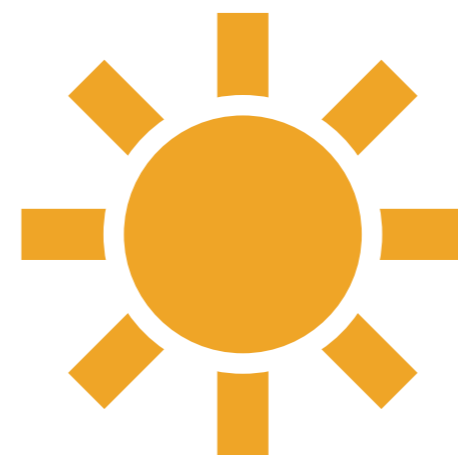
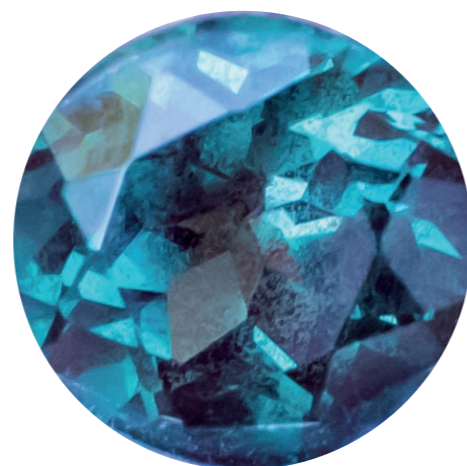
## ALEXANDRITE STRUCTURE

chemical formula:  $\text{Al}_2\text{BeO}_4$



(occurs in <0.5% of aluminium sites)

Alexandrite's colour is due to small amounts of chromium impurities. These cause it to absorb some colours of light while others pass through.



## ALEXANDRITE

formula:  $\text{Al}_2\text{BeO}_4$

## LIGHT TYPE

## LIGHT SPECTRUM

solid line: alexandrite absorbance

Alexandrite appears blue-green in sunlight because not much blue or green light is absorbed. In incandescent light, alexandrite appears purple-red; this is because incandescent light contains a greater amount of red light than sunlight, as well as much less blue and green light.

