

# Chromatography

Biology

Separating a mixture, and calculating Rf.

**Rf is the ratio of the distance moved by the spot to the distance moved by the solvent front.**

**Rf = distance moved by spot ÷ distance moved by solvent**

**Spot 3 cm, front 12 cm**

**Rf = 0.25**

**More soluble in the solvent**

**Higher Rf**

Travels further.

**More attracted to the paper**

**Lower Rf**

## THE COMMON MISTAKE

✗ **Starting the pencil line below the solvent**

✓ **The origin must sit above the solvent level**

If the spots are submerged they dissolve into the solvent instead of travelling up the paper.

**Rf is only comparable under identical conditions: same solvent, same paper, same temperature.**