**Chromatography (colour-writing) with felt-tip pens and sweets**

1. Put a spot of felt tip pen about the size of a pea in the centre of the filter paper (avoid yellow or orange as the colours don’t show up well)
2. Make a parallel cut to each side of the spot and fold down the strip of paper
3. Place the filter paper like a lily pad onto a full cup of water and observe

*Filter paper should be dipping into the water and the circle of felt-tip pen is just on the edge of where the cut is folded.*

Cut filter paper in cup (bird’s eye & side view)

1. Observe the water spreading across the filter paper, moving the ink particles

*The colours should separate – smaller particles move more quickly*

**Questions**

How many can you see? Compare different felt-tip pens

Which felt-tip pen contains the most colours and which the fewest?

Which colour moves fastest – and slowest?

What does that suggest about the colours in the felt-tip pen?

**Chromatography (colour writing) with sweets**

1. Put an M&M (NO NUTS) or similar coloured sweet in the centre of a piece of filter paper balanced on a paper cup (avoid yellow/orange as the colours don’t show up well)
2. Carefully add small drops of water at 30-second intervals using a pipette

*(Waiting 30 seconds for each drop allows for better colour separation)*

1. Observe the water spreading across the filter paper
2. The colours should separate

**Questions:**

How many can you see?

Which M&M contains the most colours and which the fewest?

Which colour moves fastest – and slowest?

What does that suggest about the colours in the sweet?

Are there similarities or differences between sweets and felt-tip pens?