

Chromatography – Learn Chemistry resources

This table accompanies [Chromatography](#), from *Education in Chemistry*, March 2017, where Dorothy Warren and Kay Stephenson discuss ways to engage and enthuse your students through practical work in chromatography

There are a number of chromatography resources on Learn Chemistry. Some provide further background information, such as how to link chromatography with particle theory and how chromatography is used in the workplace. Others are experiments ready to use with your students, for example the chromatography of leaves or sweets.

| Learn Chemistry Resource | Type of activity | Comments |
|--|--|--|
| Crime scene chromatography rsc.li/2jKyMia | Primary children use chromatography to explore a range of different types of black pens. | This activity provides an idea to what goes on at primary level. |
| Chromatography of sweets rsc.li/2kGjedu | Students investigate the dyes used in brightly coated sweets such as M&M's and Smarties. Teacher and technician notes included. | A good investigation starter, eg 'Do different brands of sweets use the same coloured dyes?' |
| Chromatography of leaves rsc.li/2jKL6yF | Students use chromatography to separate the pigments in a leaf. Teacher and technician notes included. | A good investigation starter, eg 'Do all green leaves contain the same pigments?' or 'Are the pigments found in red or white leaves similar to those found in green leaves?' |
| Chemistry for the gifted and talented: Chromatography rsc.li/2kLK1Ev | Chromatography worksheet. Teacher notes included. | This activity extends students' understanding of chromatography. It links chromatography with the particle theory and develops the tools of analogy and modelling |
| The interactive lab primer – thin layer chromatography rsc.li/2k98Vip | Videos, animations, apparatus guide and tutorials showings how to use the technique. | Great for supporting the development of practical skills. |
| Analytical chemist at the National Gallery rsc.li/2kKuOrd | A video that focuses on separation using chromatography. It takes a look at paint binders and shows how the technique can tell us about the age of a painting. | A great context and opportunity to see chromatography in action in the workplace. |
| Paracetamol rsc.li/2kQaCo2 | Post-16 resource with full experimental details for the synthesis of paracetamol. With teacher and technician notes. | Includes how to investigate and monitor the synthesis reactions by thin layer chromatography. |

| | | |
|--|---|--|
| Aspirin rsc.li/2kfR5u4 | Post-16 resource on the synthesis, purification and analysis of aspirin. Includes teacher and technician notes. | Describes how to investigate the reaction using thin layer chromatography. |
| How hot are chilli peppers? rsc.li/2kUjpbB | The chemistry of capsaicinoids and the properties they give to chillies. Suitable for post-16 students. | Includes information and questions on using high performance liquid chromatography (HPLC) to measure how hot chilli peppers are. |
| The chemistry of flavour rsc.li/2kUbFze | Videos and worksheets on the chemistry of flavour. Suitable for post-16 students. | Contains information and questions on using gas chromatography-mass spectroscopy (GCMS) to investigate the flavour compounds of soft drinks. |
| Chemistry at the races rsc.li/2jUdEmY | Post-16 resource looking at detecting drugs in racehorses | Describes the process of testing for drugs in racehorses using chromatography. Contains student questions, including some chromatogram analysis. |