Map of the module: Colour by Design

This shows the relationship between the Chemical Storylines, the Activities and the Chemical Ideas. To aid planning, laboratory-based practical work is indicated by (P), activities involving IT skills are indicated by (IT) and those developing study skills by (S).

Chemical Ideas references in *italics* are covered in earlier modules and are included in synoptic learning outcomes for this module in the specifications. Emphasis in teaching and learning should be on the **new** (non-italicised) sections of Chemical Ideas. The degree to which revisited Chemical Ideas are studied will depend on the needs of individual students.

ACTIVITIES	CHEMICAL STORYLINE	CHEMICAL IDEAS
CD1 Changing colours chemically (P)	**CD1** WAYS OF MAKING COLOUR	***6.7*** *Where does colour come from?*
CD2 Seeing colours (P)	**CD2** COLOUR BY ACCIDENT	***5.1*** *Ions and solids in solution (section on ionic precipitation)* **6.9** Chemistry of colour (introduction and section on coloured inorganic compounds)
CD3.1 Using reflectance spectra to identify pigments **CD3.2** The structures of fats and oils (IT) **CD3.3** Investigating paint media **CD3.4** Finding a perfect match	**CD3** CHEMISTRY IN THE ART GALLERY	**6.8** Ultraviolet and visible spectroscopy **13.6** Oils and fats **7.3** Chromatography (section on g.l.c.) ***6.1*** *Light and electrons*
CD4.1 Comparing hydrocarbons (P) **CD4.2** Electrophilic substitution reactions	**CD4** AT THE START OF THE RAINBOW	**12.3** Arenes **12.4** Reactions of arenes
CD5.1 Making azo dyes (P) **CD5.2** Reactions of aromatic compounds	**CD5** CHEMISTS DESIGN COLOURS	**13.10** Azo compounds **6.9** Chemistry of colour (section on chromophore and coloured ionic compounds)
CD6 Different dyes for different fibres (P)	**CD6** COLOUR FOR FABRICS	***3.1*** *Chemical bonding (sections on electronegativity and bond polarity)* ***5.3*** *Bonds between molecules: temporary and permanent dipoles* ***5.4*** *Bonds between molecules: hydrogen bonding*
CD7 Check your knowledge and understanding (S)	**CD7** SUMMARY	