Esters, fats and oils

- How can we identify esters?
- How can we name esters?
- How can we make esters?
- How can we break esters?
- What are the properties of esters?
- What do we use esters for?
- How can we break esters apart?
- How can we make fats?
- What are the differences between fats and oils?
- Why do fats and oils have different melting points?
- How can we convert an oil into a fat?
- Why are fats and oils important?

Chemistry of cooking

- What are the shapes of proteins?
- What happens when we cook proteins?
- How can we identify aldehydes and ketones?
- What functional group do we find in aldehydes an ketones?
- How can we name aldehydes and ketones?
- How can we use experiments to tell the difference between aldehydes and ketones?
- How does the functional group affect the properties of a substance?

Oxidation of Food

- How can we identify primary, secondary and tertiary alcohols?
- How can we name alcohols?
- How does hydrogen bonding affect the properties of alcohols?
- How can we name diols and triols?
- What happens when we oxidise alcohols?
- How can we name carboxylic acids?
- What kind of reactions do carboxylic acids undergo?
- What is an antioxidant?
- How can we recognise an antioxidant from an ion-electron equation?

Soaps, detergents and emulsions

- How can we produce soaps?
- What are the structures of soap ions?
- How do soaps and detergents work?
- Why are detergents useful in hard water areas?
- What is an emulsion?
- What is an emulsifier?
- What are the structures of emulsifiers?

Fragrances

- What is an essential oil?
- What is an isoprene unit?
- What is a terpene?
- How can we identify the isoprene units in a terpene?

Skin Care

- What is a free radical?
- How are free radicals formed?
- What reactions do free radicals undergo?
- What is a “chain reaction”?
- What is a “free radical scavenger”?