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| Hydrolysis | Condensation |
| Alkene | Alcohol |
| Carboxylic acid | Ester |
| Aldehyde | Ketone |
| Amino acid | Amide (or peptide) link |
| Polypeptide | Protein |
| Soap | Fatty acid |
| Glycerol | Reduction |
| Emulsion | Oxidation |

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| Joining together two smaller molecules,  releasing water in the process | Breaking up a compound,  such as an ester or protein,  using water |
| An organic compound  with a hydroxyl group (-OH)  bound to a saturated carbon | A hydrocarbon including a double bond  between two carbon atoms.  Linear form has the formula CnH2n |
| An organic compound formed by joining  an alcohol and a carboxylic acid.  They are more-or-less non-polar,  with all the physical properties that implies. | An organic compound with a -COOH group  (that is, a carbonyl + a hydroxyl) |
| An organic compound with a carbonyl group,  formed by oxidising a secondary alcohol  (by removing two hydrogen atoms).  Cannot easily be oxidised. | An organic compound with a carbonyl group,  formed by oxidising a primary alcohol  (by removing two hydrogen atoms).  Can be oxidised to a carboxylic acid. |
| A link between two amino acids  formed by a condensation reaction between  the carboxyl of one and the amine of the next | An organic acid featuring two functional groups:  a carboxyl group and an amine group  (-COOH and -NH2) |
| A large biological molecule  containing at least one polypeptide. | A polymer consisting of several amino acid units  linked by peptide bonds. |
| A carboxylic acid with a hydrocarbon chain.  One of the components of triglycerides (fats). | An emulsifying chemical  formed by action of an alkali on oil or fat  (hydrolysis followed by neutralisation) |
| Removal of oxygen or addition of hydrogen  (a decrease in the oxygen:hydrogen ratio).  More generally, addition of electrons. | The alcohol that joins fatty acids to make fat  (or, with only 1 or 2 fatty acids, an emulsifier).  Systematic name: propan-1,2,3-triol. |
| Addition of oxygen or removal of hydrogen  (an increase in the oxygen:hydrogen ratio).  More generally, loss of electrons. | A suspension of one liquid in another.  Usually facilitated by a molecule  with a polar and a non-polar end. |