- Provides more available reactants
- $CaCO_3(s) + 2\ HCl(aq) = H_2O(l) + CO_2(g) + CaCl_2(aq)$
- Large surface area for medicine to allow them to be absorbed into bloodstream more quickly

5. Catalysts
   - Chemicals that speed up reactions without using up themselves
   i. Reduce the amount of energy required to convert reactants to products (create new energy pathway to reduce activation energy)
   ii. Make it easier for reactant molecules to collide and reactant to form products (reactants attached to the surface of a catalyst lead to more collisions)
6. Enzymes
   - Biological catalysts – speeding up reactions inside or outside living cells
   - Hold reactant molecules together until they rearrange
   - Digestion uses amylase (in saliva) & others, to break down starches in complex carbohydrates

Enzymes	**Function – helps digest and utilise**
Cellulase	Cellulose in fruits, vegetables, grains and seeds
Lipase	Fats
Lactase	Lactose (milk sugar)

Measuring Reaction Rates

- Change in volume
- Titration – analysing concentration
- Mass of a substance
- Volume of a gas (with gas syringe)
- Time between start of reaction to the formation of a precipitate to an extent
- Gas produced – collected in a syringe and volume determined
  i. Hydrogen gas – pop test
  ii. Oxygen gas – placing a glowing splint in oxygen test tube and it will reignite

General Information

Physical Change: