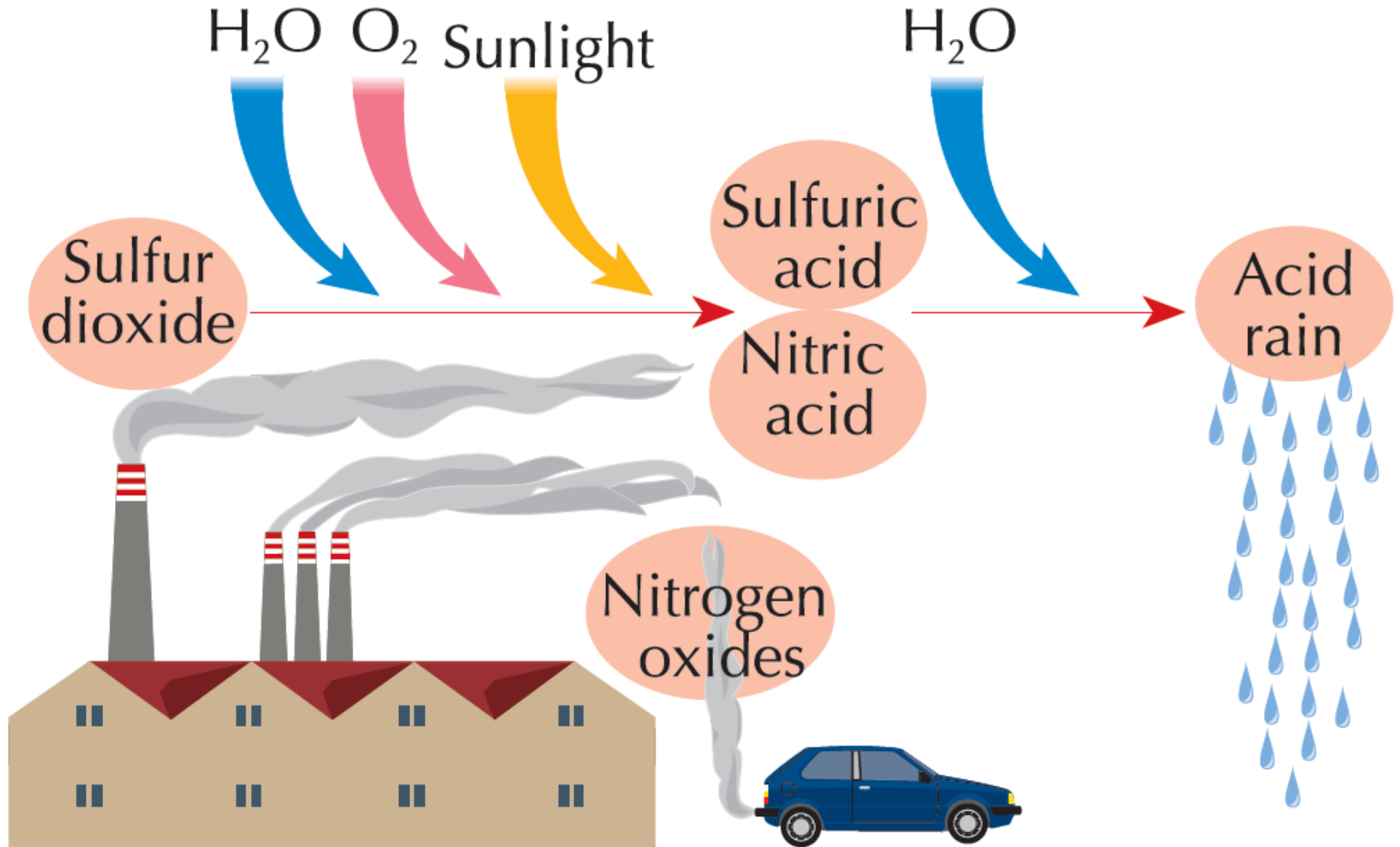


Chapter 36: Chemistry in Everyday Life.

Fossil Fuels. e.g. coal, oil, peat...

- Non-renewable source of energy
- Formed over millions of year from decaying animals and plants.
- Most fossils fuels are made from carbon and hydrogen and produce harmful fumes SO_2 when burned, except methane CH_4 which is a very clean fuel.
- Provides us with most of our energy needs from cooking, driving or just for heat.

Acid Rain.



- Normal rainwater = pH of 5.5, because carbon dioxide is dissolved in it forming a weak acid called carbonic acid.



- Acid rain = pH less than 5.5

Acid rain is caused by sulfur dioxide and nitrogen oxides. It is more commonly found in areas with a lot of industries. The sulfur dioxide dissolves into the rainwater and this makes the rain very acidic.



Dangers of Acid Rain

1. Kills fish.
2. Corrodes Limestone buildings and statues.
3. Damages roots of trees.

Plastics

- Man-made materials made from crude oil.
- Simple chemicals called monomers are formed first.
- Then long chains of molecules called polymers are formed.

Properties of Plastics.

1. Lightweight but strong.
2. Very durable.
3. Waterproof and easy to clean.
4. Easily moulded.
5. Bad electrical conductors.

Types of Plastics.

1. Polythene - used for plastic bags, lunch boxes and buckets.
- very resistant to chemicals.
2. Nylon - carpets and ropes
- strong and hard-wearing.
3. PVC (polyvinyl chloride) - gutters, window frames, raincoats.
- Water proof and long lasting.
4. Polystyrene - food containers, plastic glasses
- strong but brittle
5. Perspex - a replacement for glass – in watches, windows.
- tough and transparent.