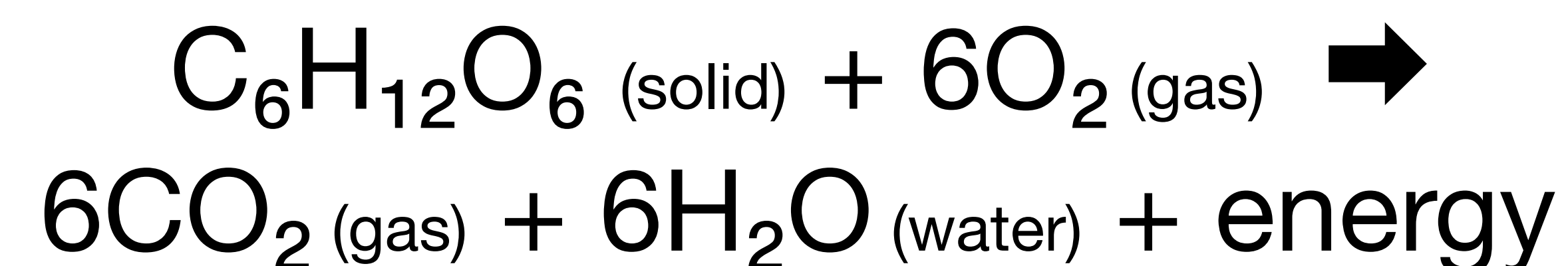


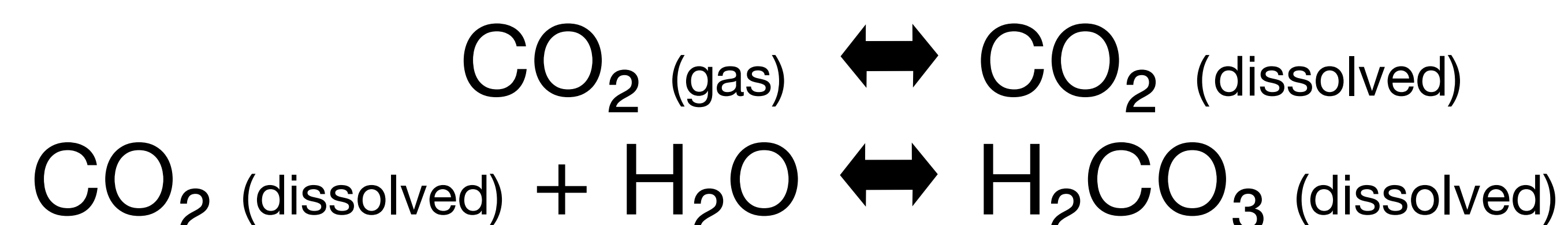
CO₂ CHEMISTRY

The combustion of fossil fuels and organic substances produces CO₂. Such combustion also happens within our bodies. We emit CO₂ with the air we exhale. CO₂ in the air is an important greenhouse gas.



CO₂ IN WATER

If CO₂ is dissolved in water it forms carbonic acid (H₂CO₃).



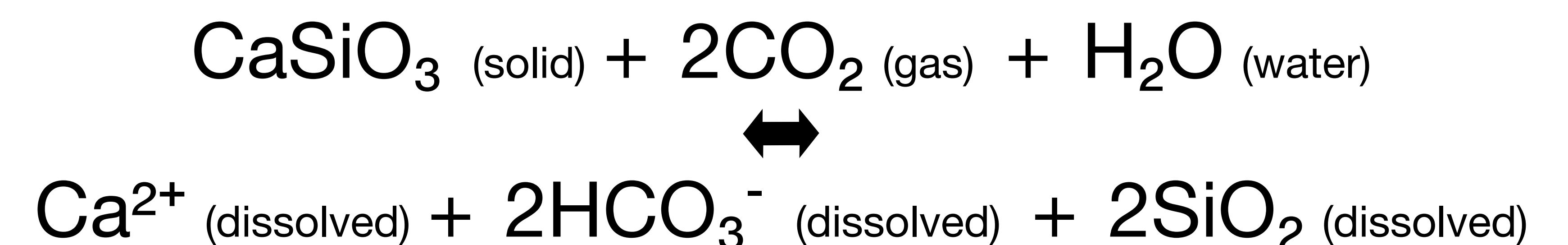
Increased absorption of CO₂ in the oceans accounts for around one-quarter of human-made CO₂ emissions. H₂CO₃ is an acid that releases protons.



This causes the water to become more acidic (lower pH) and we get ocean acidification.

CO₂ IN SOILS

The concentration of CO₂ is much higher in soils than in the air. This causes the weathering of stones (CaSiO₃).



This process is important for regulating the CO₂ concentration in the air, but it is far too slow to have any significant effect on the increase of CO₂ concentration in the atmosphere.

Limestone is easily dissolved and can be used to show the effect of increased CO₂ on weathering.

