• The concentration of NaCl used in intravenous drips is 150 mM. Explain why this particular concentration is used and what the consequences would be for a patient if pure water were used instead.

150 mM is used because this corresponds to the NaCl concentration in extracellular fluids and thus prevents any change in osmotic conditions in the blood. If water were used, water would flow into the red blood cells causing them to swell up and possibly burst. This may have fatal consequences for the patient.