

8 Transport in mammals – Part 2 — Answers

Answers

Work through these after trying the questions yourself.

8.1 (a) the atria \ (b) the ventricles.

8.2 The left ventricle pumps blood all the way round the body, while the right only pumps to the nearby lungs, so the left needs a thicker, more powerful wall to make more pressure.

8.3 The sinoatrial node (SAN).

8.4 It lets the atria finish emptying their blood into the ventricles before the ventricles contract.

8.5 (a) it loads oxygen and becomes almost fully saturated \ (b) it unloads (releases) its oxygen for the cells.

8.6 When carbon dioxide rises (in active tissues), haemoglobin releases oxygen more easily, so the dissociation curve shifts to the right.

8.7 The extra carbon dioxide from the exercising muscles causes the Bohr shift — the dissociation curve moves right, so haemoglobin unloads its oxygen more readily at the muscles. This delivers more oxygen exactly where the demand is highest.