

★ **HIGHER TIER ONLY** content is highlighted in blue. Foundation students — focus on the un-highlighted sections.

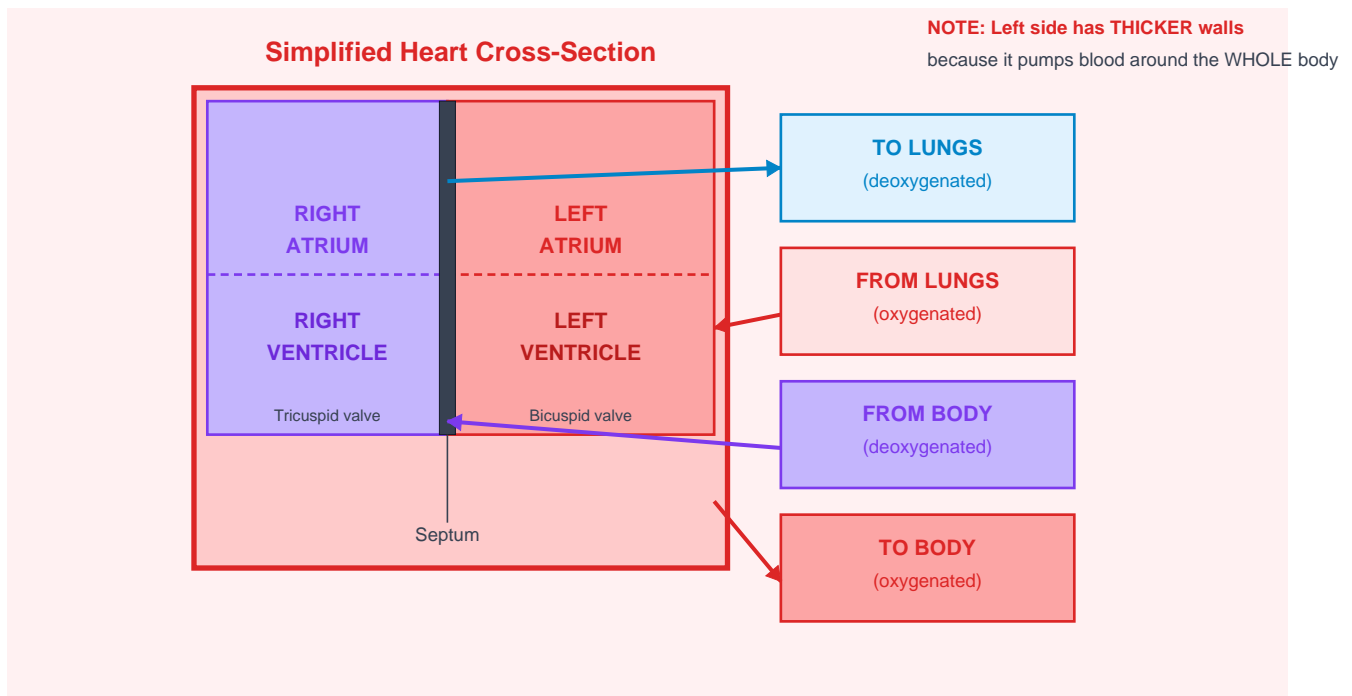


Fig: Simplified heart diagram — the right side pumps to lungs, left side pumps to body

■ **Exam Tip:** The left ventricle has the **THICKEST** walls — it pumps blood all the way around the body. The right ventricle only pumps to the nearby lungs.

## Transpiration

### What affects transpiration rate?

- Higher temperature → MORE transpiration (water evaporates faster)
- More light → MORE transpiration (stomata open wider)
- Lower humidity → MORE transpiration (bigger concentration gradient)
- Higher wind speed → MORE transpiration (water vapour blown away)

### Xylem

Carries **WATER** and minerals from roots upwards — dead cells, no cytoplasm

### Phloem

Carries dissolved **SUGARS** (sucrose) to all parts of plant — living cells

### Transpiration

Loss of water vapour from leaves through stomata