Mandatory experiment 7.1

To compare the carbon dioxide levels of inhaled and exhaled air

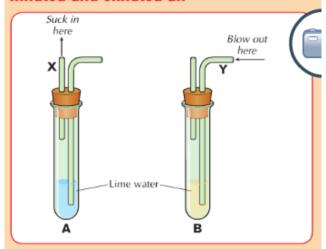


Fig. 7.3 To compare the carbon dioxide levels of inhaled and exhaled air.

Chemical required: limewater

Note: Limewater turns a milky colour when carbon dioxide is passed through it.





Method

- 1. Set up the apparatus as in Fig. 7.3.
- 2. Hold tube *A* in one hand and tube *B* in the other.
- 3. Suck in through *X* of test-tube *A* (this represents inhaled air).
- 4. Hold this breath and then breathe out through *Y* of test-tube *B* (this represents exhaled air).
- 5. Repeat steps 3 and 4 until the limewater in one of the tubes goes milky.
- Record in which tube the limewater goes milky first.

Result

The limewater in test-tube *B* turns milky quicker than the limewater in *A*.

Conclusion

The level of carbon dioxide in exhaled air is greater than the level of carbon dioxide in inhaled air.