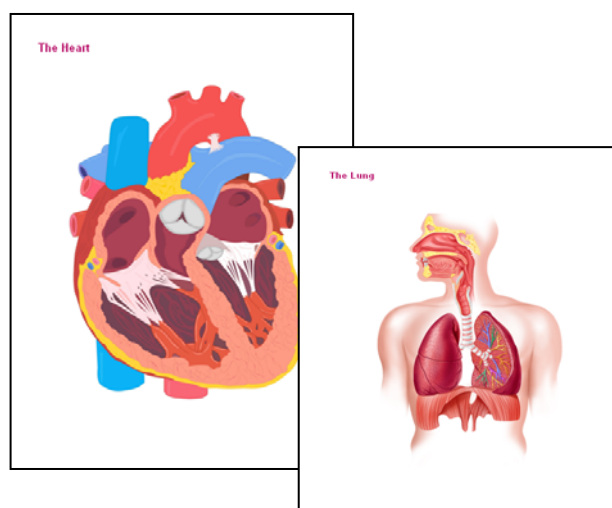


## Unit 1 – Principles of anatomy and physiology in sport

### The Heart, Lungs and Oxygen

#### *Instructions and answers for Teachers*

*These instructions should accompany the OCR resource 'The Heart, Lungs and Oxygen', which supports the OCR Level 3 Cambridge Technical in Sport Unit 1 – Principles of anatomy and physiology in sport*



Associated files:  
The Heart, Lungs and Oxygen  
Heart A4  
Heart A3  
Lung A4  
Lung A3

Task 1 – approx 20 minutes  
Task 2 – approx 20 minutes  
Task 3 – approx 30 minutes

'The Heart, Lungs and Oxygen' is a range of tasks that allows learners to identify parts of the heart and lung and answer some questions about oxygen.

This resource comprises of three tasks.



## Task 1 – The Heart

Identify the different parts of the heart by placing the name on the correct location.

### Notes to teacher

Print the names of the parts of the heart on one A4 sheet and cut along the dotted lines for one set of bone names. One set per pair (or group) of learners.

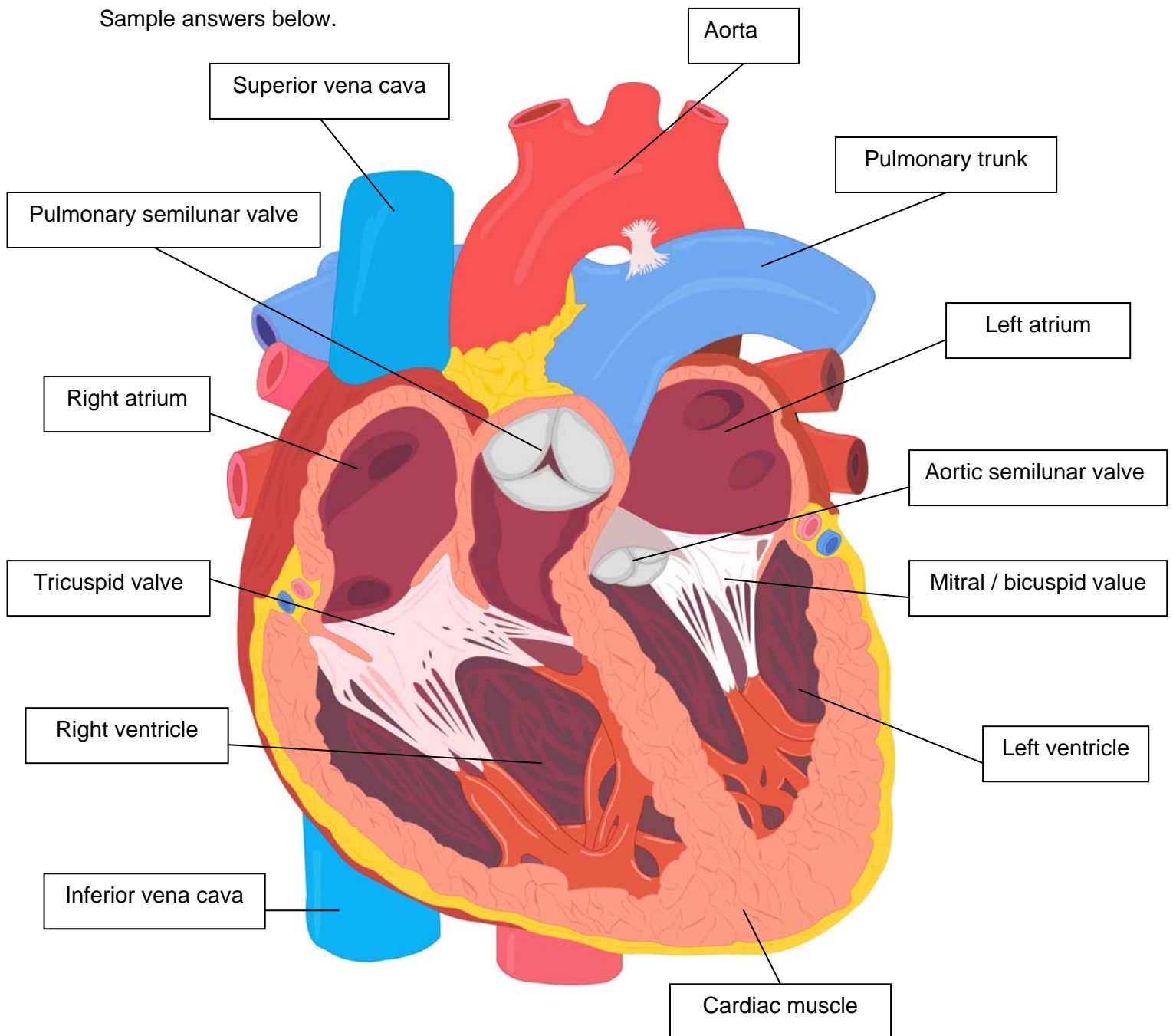
Print the heart, one per pair (or group) of learners. There are two heart files, one set to print A4 the other A3.

### Parts of the heart

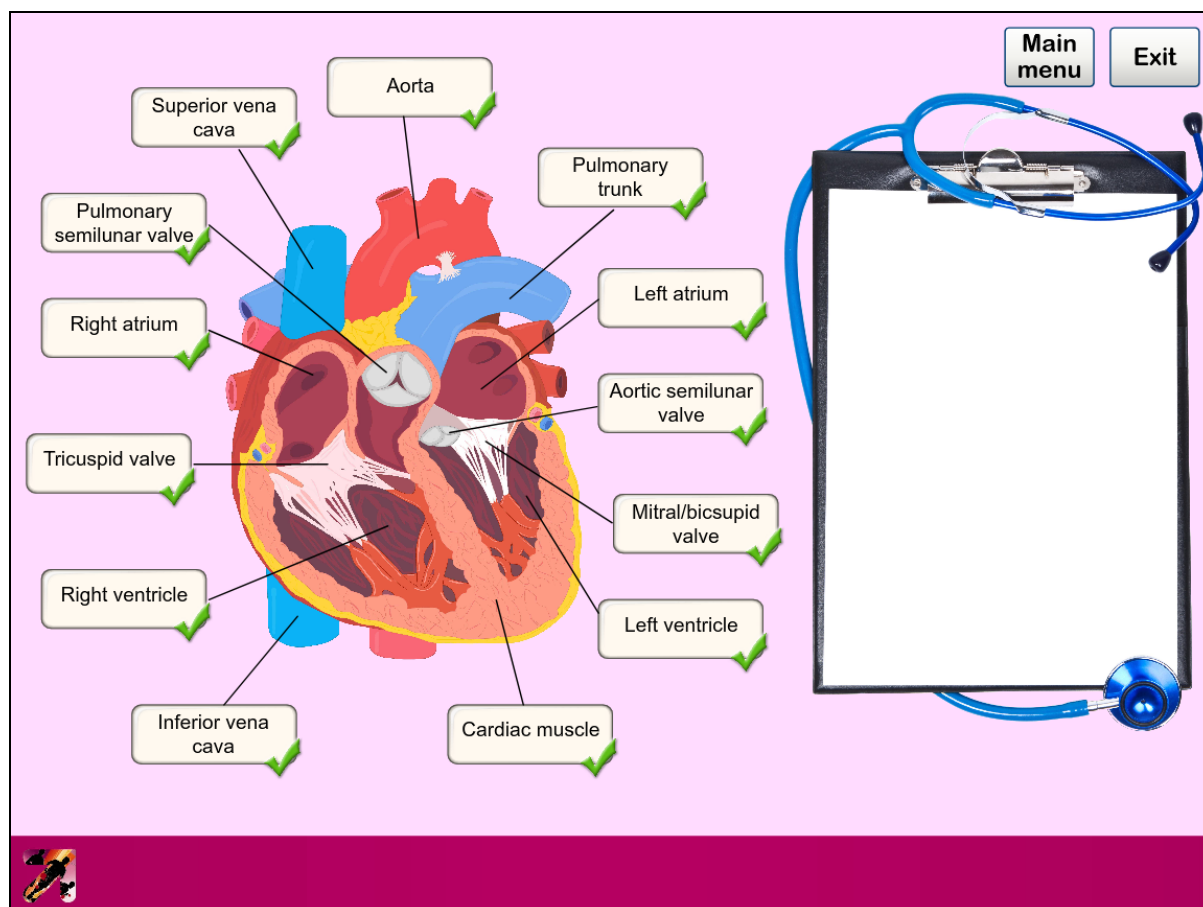
Aorta	Pulmonary semilunar valve
Aortic semilunar valve	Pulmonary trunk
Cardiac muscle	Right atrium
Inferior vena cava	Right ventricle
Left ventricle	Superior vena cava
Left atrium	Tricuspid valve
Mitral / bicuspid	



Sample answers below.



## Task 1 – The Heart (on-screen version)



## Task 2 – The Lungs

Identify the different parts of the lung by placing the name on the correct location.

### Notes to teacher

Print the names of the parts of the lung on one A4 sheet and cut along the dotted lines for one set of bone names. One set per pair (or group) of learners.

Print the lung, one per pair (or group) of learners. There are two heart files, one set to print A4 the other A3.

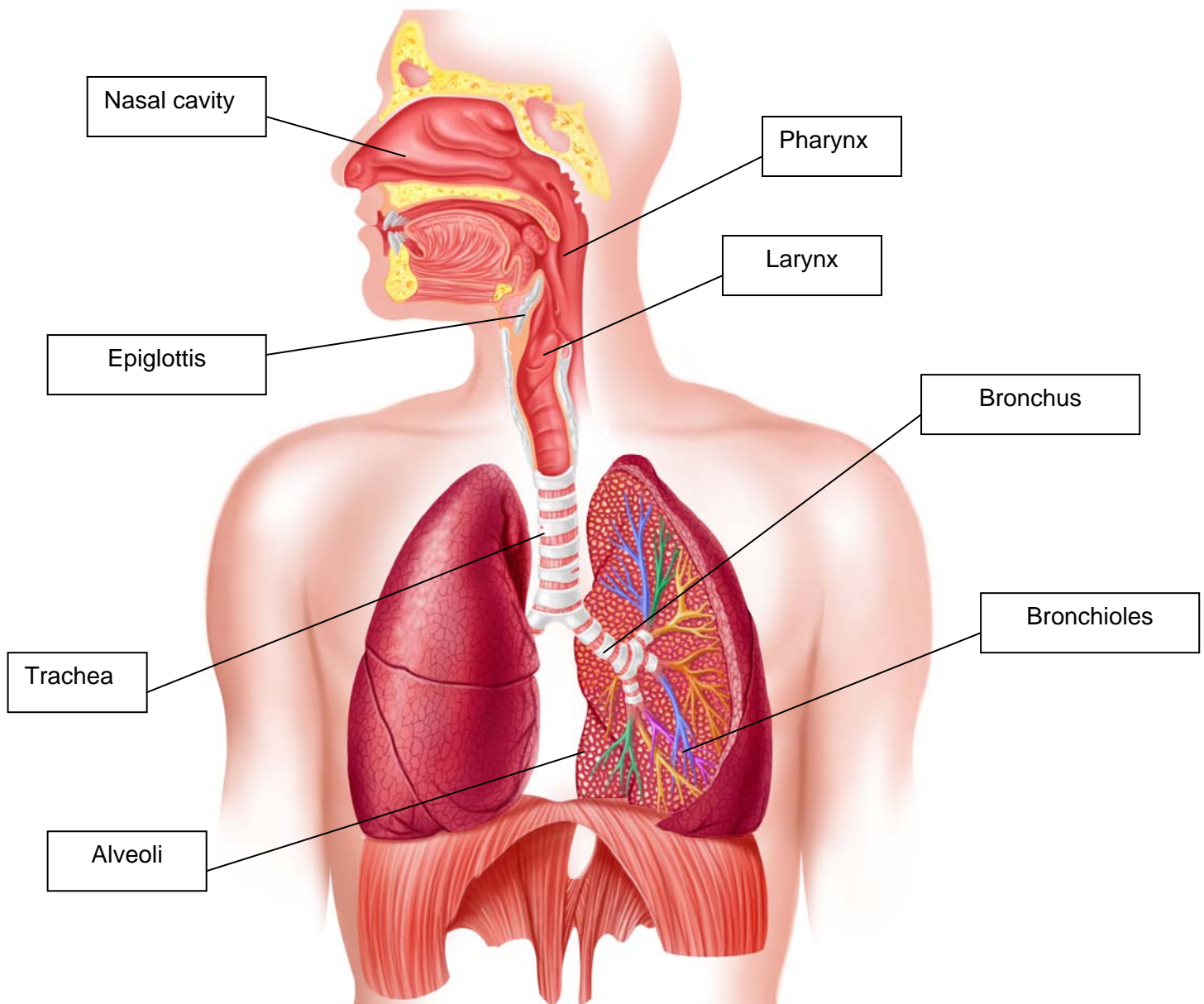
### Parts of the lung

Alveoli	Larynx
Bronchioles	Nasal cavity
Bronchus	Pharynx
Epiglottis	Trachea

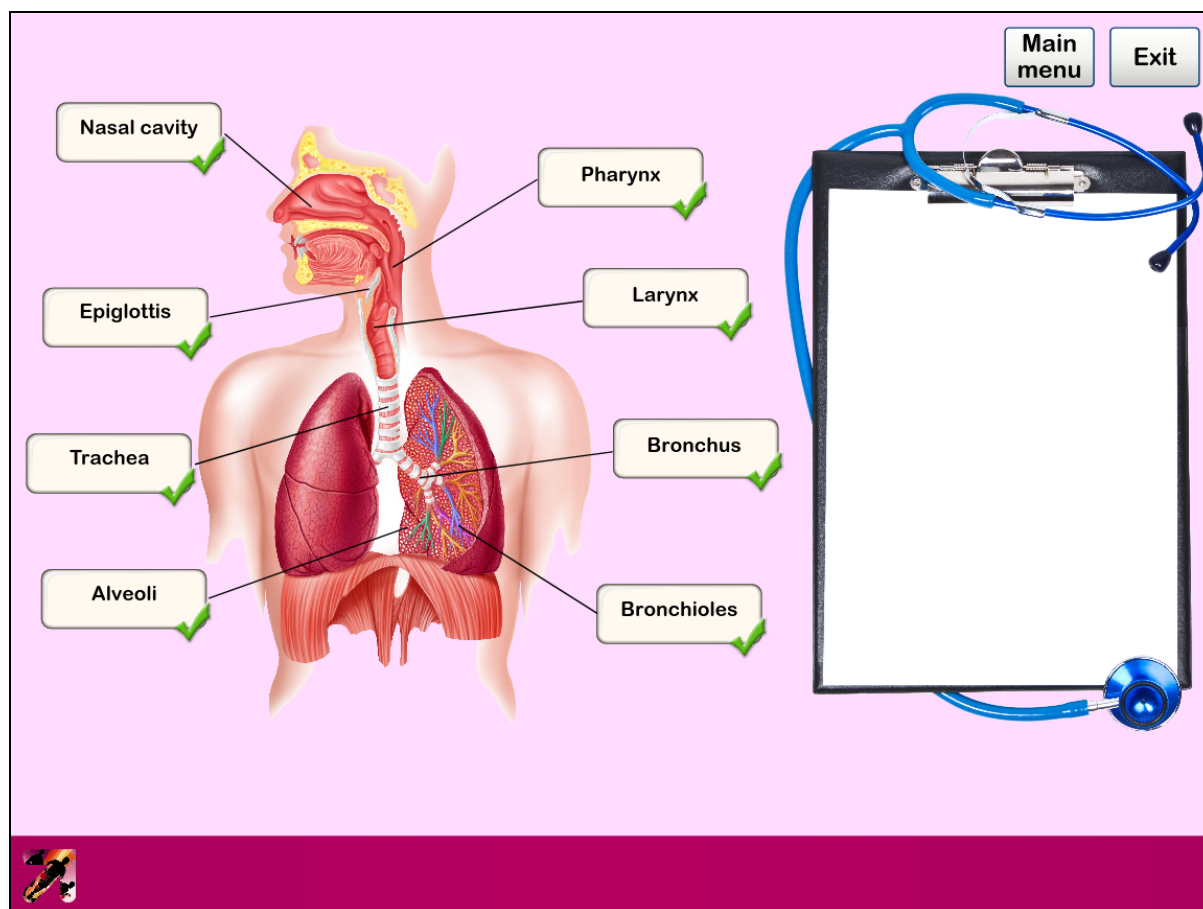




Sample answers below.

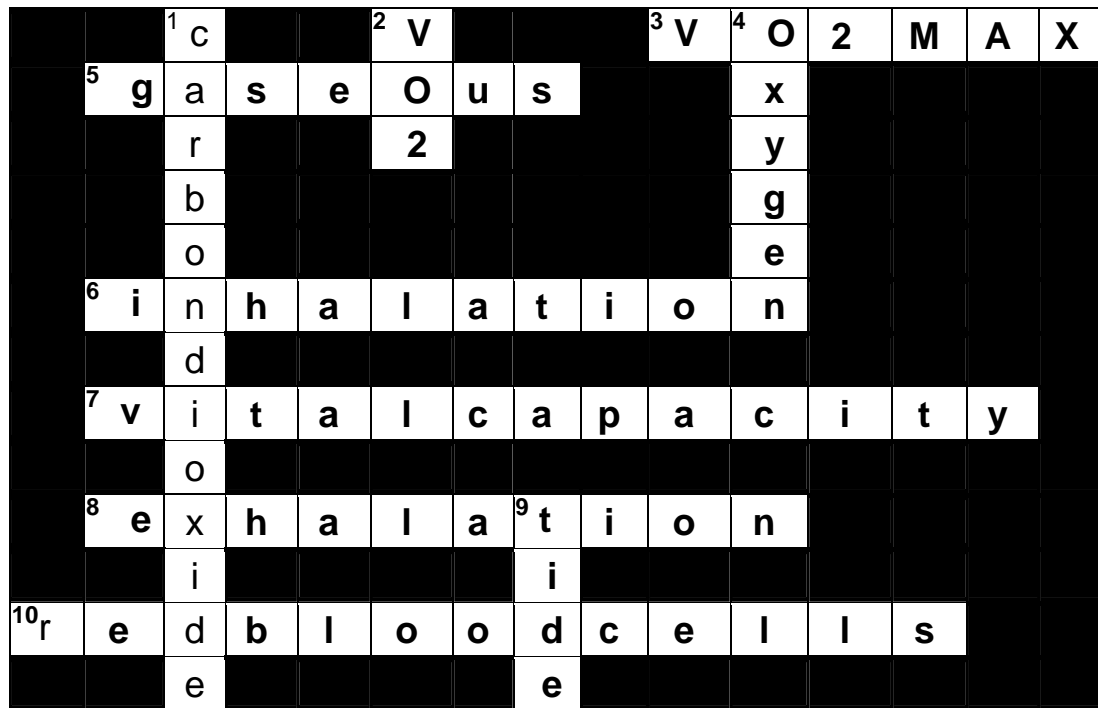


## Task 2 – The Lungs (on-screen version)



## Task 3 – About Oxygen

Complete the crossword below.



Sample answers below

### Across:

- 3 The MAXIMUM amount of oxygen the body is able to use in one minute.
- 5 The type of 'exchange' which takes place when blood moves between the lungs and the blood vessels.
- 6 Technical word for 'Breathing In'
- 7 The total amount of air the lungs can hold
- 8 Technical word for 'Breathing Out'
- 10 Haemoglobin carries oxygen - these contain haemoglobin

### Down:

- 1 Breathed out in quantities of approximately 4%
- 2 The volume of OXYGEN the body actually uses in one minute (not just how much air is breathed in)
- 4 Breathed in quantities of about 21% and breathed out in quantities of 16% - more of this is needed by the muscles when exercising.
- 9 The VOLUME of air breathed in and out in one breathing cycle





*These activities offer an opportunity for English skills development.*

## LESSONElements

**The building blocks you need to construct informative and engaging lessons**

To give us feedback on, or ideas about, the OCR resources you have used email [resourcesfeedback@ocr.org.uk](mailto:resourcesfeedback@ocr.org.uk)

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