

8Ba(6) Ideas about respiration

- 1 Look at the three historical theories about respiration and select the theory that we think is true today by ticking the correct box:



Heat is produced in the heart and carried around the body.

Aristotle (384 BCE–322 BCE)

The carbon dioxide we breathe out is made during digestion.



Antoine-Laurent de Lavoisier (1743–1794)



Respiration only happens in the blood.

Joseph Louis LeGrange (1736–1813)

- a Today we think that:

- Heat is produced in the heart and carried around the body by blood.
- Heat is taken into our bodies from our surroundings.
- Heat is produced by respiration.
- Heat is produced by our clothes.

- b Today we think that:

- The carbon dioxide we breathe out is made by respiration.
- The carbon dioxide we breathe out is made during digestion.
- We don't breathe out carbon dioxide.
- The carbon dioxide we breathe out is made by photosynthesis.

- c Today we think that:

- Respiration only happens in the heart.
- Respiration only happens in the lungs.
- Respiration only happens in the blood.
- Respiration happens in all living cells.

- 2 Which of these substances do cells use as a source of energy? Circle one.

glucose oxygen carbon dioxide water

- 3 Look at this experiment. Which two of these are possible conclusions for the experiment? Tick two boxes.

- The sparrow is dead.
- The sparrow uses up the oxygen and dies when oxygen runs out.
- The sparrow produces carbon dioxide, which poisons it.
- Sparrows need food and water.

