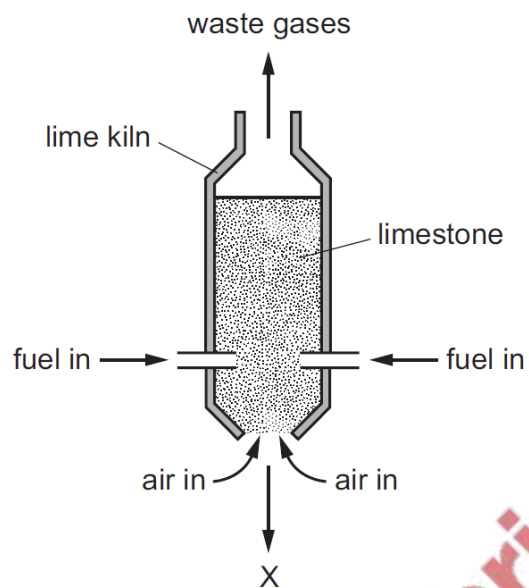


Carbonates – 2019 June

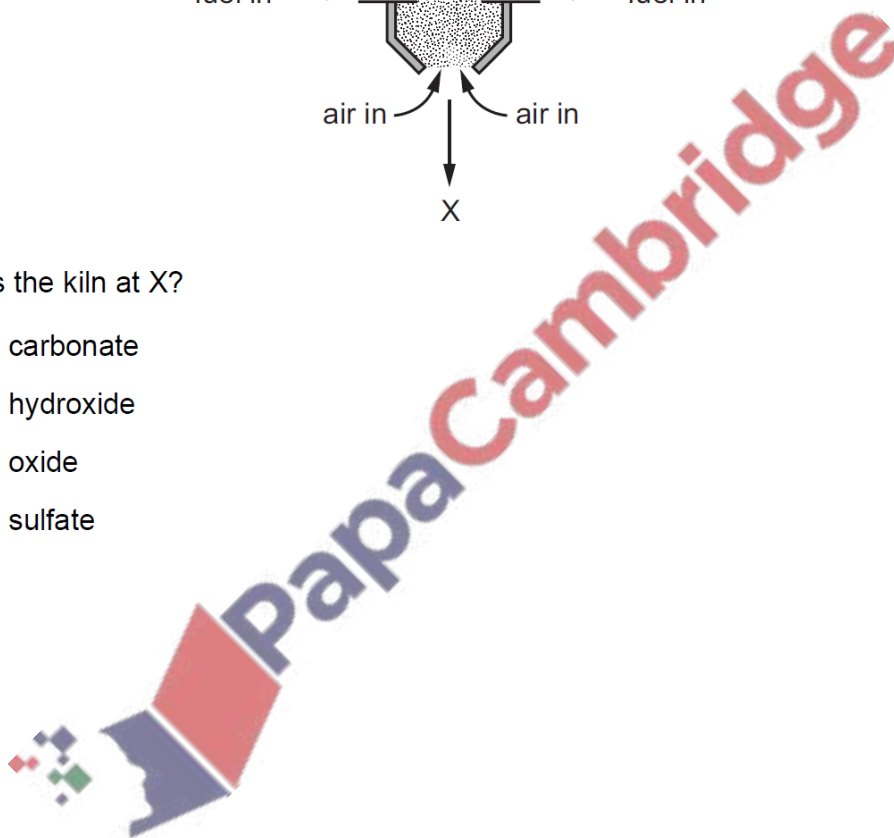
1. 0620/11,12,13,21,22,23/M/J/19/No.33,34

The diagram represents a lime kiln used to heat limestone to a very high temperature.

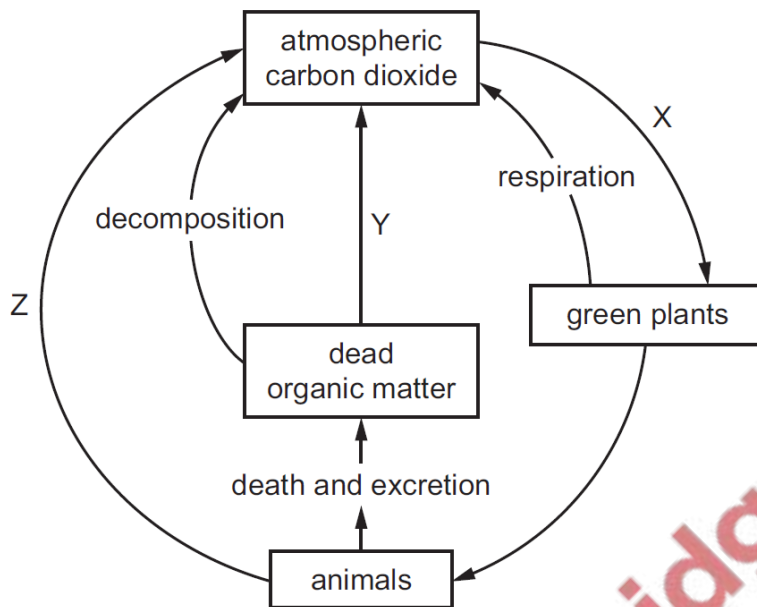


What leaves the kiln at X?

- A calcium carbonate
- B calcium hydroxide
- C calcium oxide
- D calcium sulfate



2. 0620/21/M/J/19/No.32
The carbon cycle is shown.



Which row describes processes X, Y and Z?

	X	Y	Z
A	respiration	combustion	photosynthesis
B	respiration	photosynthesis	combustion
C	photosynthesis	combustion	respiration
D	photosynthesis	respiration	combustion

3. 0620/12/F/M/19/No.34
Lime is made by heating limestone.

Which equation represents this reaction?

- A** $\text{CaCO}_3 \rightarrow \text{Ca} + \text{O}_2 + \text{CO}$
- B** $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
- C** $\text{CaCO}_3 + \text{H}_2\text{O} \rightarrow \text{CaO} + \text{H}_2\text{CO}_3$
- D** $\text{CaCO}_3 + \text{H}_2\text{O} \rightarrow \text{Ca}(\text{OH})_2 + \text{CO}_2$

4. 0620/22/F/M/19/No.34

Which process removes carbon dioxide from the Earth's atmosphere?

- A combustion
- B heating limestone
- C photosynthesis
- D respiration

