

## From field to food quiz

- 1) **What is silage?**  
Silage is grass or another crop which is left to ferment, producing a moist and palatable food source.
- 2) **Why can cattle digest tough fibre which pigs, chickens and humans can't?**  
Because they are ruminants (or 'they chew the cud').
- 3) **How many litres of water can the rumen (the first part of the stomach) hold?**  
100 litres
- 4) **Cattle have four stomachs (True/ False)**  
False! It has four compartments, but technically only has one stomach.
- 5) **Which greenhouse gas do cows produce in their burps?**  
Methane
- 6) **What percentage of the energy input into feeding cattle ends up in beef?**  
Only 4%
- 7) **Out of these three methods of raising cows in the UK, which one requires the highest proportion of 'pellets' (concentrated plant-material) to be fed to cattle?**
  - Intensive Beef Production
  - 18 month Beef Production
  - Grass Beef Production
- 8) **What is a carbon footprint measured in?**  
Carbon Dioxide Equivalents, which is the equivalent concentration of the CO<sub>2</sub> needed to cause the same atmospheric damage as a corresponding unit of another gas, such as methane.
- 9) **List three processes that contribute to the carbon footprint of beef:**  
*Making pesticides and fertilisers for growing crops for feed*  
*Transport of crops, feed, animals, meat*  
*Farm machinery*  
*Methane emissions from burps*  
*Processing, refrigeration and cooking of meat*

## Bonus Questions!

- 10) **Cows can have best friends (true/ false)**  
True! Studies carried out by scientists at Northampton University showed that cows that were separated from another cow they recognise had a higher heart rate than when they were placed with their friends within a herd. Stress levels and levels of a hormone known as cortisol were seen to significantly decrease once more when the cow was kept with his herd companion.

<http://www.theguardian.com/commentisfree/2011/jul/07/cows-best-friends>

**11) Cows can walk up and down stairs (true/ false)**

False! Cows can indeed walk up stairs but cannot come down them again- their knees don't have the ability to bend that way.

<http://www.dairymoos.com/interesting-facts-about-cows/>

**12) Cows don't have fingerprints, they have nose prints instead (true/ false).**

True, cows can be identified using their nose prints.

<http://www.express.co.uk/fun/top10facts/393776/Top-10-facts-about-cows>

**13) What is the highest number of calves produced by one cow?**

The answer is 39, produced by a cow known as Big Bertha throughout the course of her lifetime.