



THE MODERN FARMER

Today's farmers rely on their smartphones as much, if not more, than we do! Soil analysis results, calving alerts, vet reports on herd health testing and the farming weather reports can all reach them directly wherever they are on the farm. Wifi, broadband and satellites are as essential to the modern farmers as their trusty tractors.



1. Read the text below and match the words from the following list with the numbered spaces.

cultivator – combine harvester – plough – planter

The tractor is the farmer's workhorse and is at the heart of the farm's operation. Modern tractors may be quite hightech with GPS systems and sensors, but they still provide the power by which most other machines work. One of the many attachments used with a tractor is a set of curved blades to slice through and turn over the soil, the ①..... Once the soil is prepared, a ②..... feeds several rows of seed at equal spacing and specific depths, then its rear wheels close up the furrow. Once the crop is growing, a ③..... is used to tend the soil, moving above the plants, softening the soil to make room for water, oxygen and growing shoots. On grain and cereal farms it is the ④..... that cuts the stalk a few centimetres from the soil, detaches the grain from the stalk and then separates the grain from the chaff, which is not for consumption. The grain is then transported to the store silo for various products for humans or as animal feed.





2. The EU helps its farmers learn from modern science and technology to meet the challenges and opportunities the future brings. Specifically, it helps farmers to:

- ▶ produce more in a sustainable way;
- ▶ produce more with less (less water, less energy, fewer fertilisers).

This is vital as by 2050 the world's population will have grown to 9 billion people — all in need of a secure food supply. As well as boosting production, harnessing new technology and tools can also help a farmer increase their farm's revenue by opening up new markets and opportunities.

One tool is a strip tillage drill which is pulled by a powerful tractor and uses a third of the energy and seed, and disturbs the land as little as possible, compared to the traditional process.



Read the article on strip tillage below and explain how this type of attachment for a tractor can help a farmer use more sustainable farming practices.

Strip tillage creates a seedbed but only where it is needed rather than across the entire field. The reduction in soil movement retains moisture and organic matter, and makes significant savings in energy as seed and fertiliser are applied with precision. Natural soil structure is encouraged, increasing worm activity and soil fertility over time. It avoids unnecessary cultivation, eliminates any need for rolling, with no need to enter the field again until spraying. Time, labour, money, fertiliser and the environment all saved with one machine ... provided it suits a farmer's land, crops and budget!

