

Key questions

What is satellite imagery?
What information can satellite images provide to farmers?
How can satellite imagery help farmers?

Instructions

A satellite is a moon, planet or object that has been launched into space. Satellites orbit planets. Some satellites provide useful information for farmers which helps them make decisions to improve efficiency. This data can be images called satellite imagery,

- Objects for observation game
 - Satellite imagery Powerpoint
 - Google Earth

Discuss with pupils why they think having a bird's eye view of land could be helpful? Share the Satellite imagery PowerPoint and discuss how satellite imagery helps farmers to decide what the crops need, like water, or pest control. Farmers can decide what action to take also where in the field to do it rather than just doing the whole field. This is called precision agriculture and can help farmers by using less resources, time, and money to grow their crops. It also helps farmers to farm with nature, taking unproductive land out of food production to create new habitats as well as monitoring existing habitats.

You could also...

Watch this video about <u>other uses for satellite information on farm</u> (watch from 0.23 to 1.10). Note the different uses of satellite data and think about how this helps farmers farm more precisely and why this is good for the farmer, the crops, and the environment.

Make it simpler

Pupils think about why seeing something from above might be better than looking at it from the ground level. Play an observation game. Pupils look at a tray of objects side on at eye level and remember what they saw, then repeat but looking at it from a bird's eye view. Could they see more, less or the same? Why would a farmer looking at their farm find having a bird's eye view helpful?

Make it harder

Another use of satellite imagery is to work out what the land is being used for. Is it farmland, woodland, housing? Using Google Earth, zoom in on your local area, can you use the satellite

imagery to work out the land use of the local area and annotate the map to show what the uses are.?

Find out more

<u>Science on the Farm - Technology Poster – activities</u>

<u>What does the future of food production look like? - video</u>



