

The Growing Game

This is an activity you can do with 8-40 people. All ages can play, but it's probably most suitable for primary school children or families with 5-11 year olds. It illustrates how plants take up nutrients, pass them up from the roots to the shoots and produce food.

Props

Download the pack and print out the sheets. These include:

- Leaves and grass (vegetative growth)
- Wheat, potatoes, strawberries (produce)
- Fertiliser and manure stickers (nutrients)
- Sun, rain, ice (weather symbols)

You will need to cut out the shapes and may wish to laminate them as well. You will need to print the fertiliser and manure sheets on to labels (18 per sheet, 63.5x46.6mm). It is also useful to have a sample of fertiliser and manure in jars.



Instructions

1. Set everyone up in a line, that will represent a plant. With a group of more than 16, you may want to have a double row.
2. One person will stand at the side and represent the weather, holding up the weather symbols.
3. Decide which half will be roots, which half shoots, and mark the 'soil surface' by placing a stick on the ground halfway down your line.
4. Decide what sort of plant it will be and scatter vegetative growth on the ground near the roots. For potatoes or strawberries use leaves. For wheat or grass, use the grass shoots.
5. The plant needs to put on vegetative growth, so ask the roots to take up the leaves/grass and pass them up the line to the shoots.



6. But it's winter, so instruct the weather agent to hold up ice and ask the group to go slowly.
7. Now it's warming up as we get into spring (sun comes out) and everyone needs to go faster.
8. Once the shoots have the vegetative growth, ask them to hold it up and wave it in the air.
9. If it is grass, you can now put the cows/sheep out to pasture. Graze by taking the grass from the shoots.
10. We now need more grass, or the plant needs to bring on its produce, so scatter this back at the roots.
11. For potatoes the produce will be travelling down the plant, so needs to be scattered near the shoots.
12. But the plant needs more energy. Ask the group where this will come from. Nutrients, of course!
13. So as the farmer you can provide this with manure or fertiliser – hold up your samples.
14. Ask the roots which they'd like and give them each the appropriate sticker.
15. Once fed, we need sun and rain (weather agent), and the roots are ready to take up the produce, and pass it up to the shoots.
16. You can then 'harvest' the crop or put the animals out to pasture again.
17. End with a round of applause.



Variations

- Adapt it to the produce type most suited to your farm
- With a large group you may wish to allocate some as sheep/cows doing the grazing, or some representing your harvester/fruit pickers
- You may wish to give your shoots stickers too – perhaps they could have weather stickers
- For small children it may work better if they each individually grow into a plant, starting off crouched down and slowly standing/stretching up
- You can add some fun by flicking a little water at the group to represent rain
- Consider rewarding your group with some samples of real produce or food