

Numeracy Key stage 2

Open Futures Resources
Raising attainment through bringing learning to life
More resources at www.openfutures.com



Ma2 - Number

- Further development of counting skills, eg counting in multiples using plants with compound leaves (more than 1 leaflet), such as strawberries.
- Number patterns can be applied when spacing out seeds / plants using the measuring sticks, eg every 5, 10, 15, 20 cm.
- Fractions, percentages and ratios, eg calculating how much of the garden is used for growing different groups of crops, such as roots, cabbages, peas, beans, and salad crops. Graphs and plans can be drawn to illustrate the different groups.
- Healthy eating: ask pupils to keep a food diary for a day / week, break down their food consumption into different food groups (carbohydrates, protein, dairy, fruit and vegetables), and work out the percentage for each group. This could then be illustrated as a pie-chart.
- Mental maths, eg how many plants / seeds are needed to fill an area, based on different planting distances for different crops.
- Money, eg seed ordering from seed catalogues (booklets or on-line as a link to ICT), then totalling cost of choices or using a set budget from which to choose seeds.

Ma3 – Shape, space and measures

- Calculating area and volume of shapes in the garden, eg how much compost is required to fill a cuboid bed, measuring layout and understanding the aspect of the site (linked to geography).
- Measuring and recording change in the garden, eg from tiny seeds, through stages of plant growth, to final harvest. Measuring the garden using trundle wheels / tapes / metre sticks / footsteps.
- Weighing, eg potatoes when planted vs potatoes when harvested, calculating increase as a percentage, different varieties and sizes of apples and calculating the average weight.
- Units of time, eg recording how long different crops take between seed sowing and harvest, ranging from a few weeks (radishes) to many months (garlic).
- Estimating- KS1 suggestions can also be adapted and applied.

Ma4 - Handling data

- Measurements can be used to produce scale plans of the garden, which can in turn be used for garden tours at school fairs.
- Graphs & diagrams can be used to illustrate many aspects of the garden, eg plant growth, harvest weights, tasting preferences, weather records during the year (linked to geography). Spreadsheets could be used, linking with ICT.