

Week	General Course activity	Poster	Activities	week	title
0	Garden preparation	Project intro: food security, growing food	Garden dig		
1	Seedling distribution	Healthy eating	Fun in the garden, planting and seeds	1	Counting – spacing, grouping, sets
2	Seedling distribution	maintaining the garden	Responsibility, planting and the lizard island.	2	Measurement
3	Seed distribution	photosynthesis	Maintaining soil quality	3	Geometry I – area, shape (2D)
4	Home planting I	grow your own food	Double digging	4	Geometry II – volume, shape (3D)
5	Home planting II	improve your environment	Insects, insect hunt and insect house	5	Representation
6	in-school sustainability	getting to know indigenous plants	Indigenous trees & ask gogo, Uses of plants	6	Mechanics 1: design
7	((After break))	plant life cycle: seed - seed	Seeds, propagation, distribution & more	7	Mechanics 2 – building and testing
8	Expanding around the school I	harvesting seeds	Getting seeds from the fruit and veg you buy	8	Games & Formal logic - if, and, or, nor
9	Expanding around the school II	harvesting food	Find out what food different people (groups) eat	9	Probability II - success rates
10	Expanding around the school III	community, gardens & the environment	What to do with food; taste, harvesting, yield	10	Estimation and division
11	Expansion into community I	community & food security	Identifying needs and space to plant – getting help	11	Revision I - geometry & calculus for planning
12	Expansion into community II	preparing the garden for re-planting	Planning, expanding, replanting and checking the soil	12	Revision II - probability and systems
					Statistics and causation
					Probability
					'Esoteric' maths

Practical activity	Sample puzzle	maths
	How many people are in the class and school? How should the class be split? How much food would be generated from the garden if everyone did it?	set theory, theory of groups, classification, set membership. – estimation, multiplication and division
Estimating distance & speed by eye	How big is the school, classroom, how far are objects on the horizon	measurement, triangulation; Euclid. Symmetry.
	River crossing	Mathematical isomorphism and non-Euclidean geometry as the lead in to modern physics, conceptualisation of statistical reasoning.
	How to build a lie out of a graph by fixing axes, breaks, correlation as causation	Formal logic, counterfactual reasoning. . (Intro to economics) – truth tables, flow charts, etc
building a bridge, other structure	how can you do this activity with just drinking straws?	
Playing dice, checkers, blackjack, rummy	How likely is it that you'll get 2-5, 6-9, 10-12 at dice; the knight's tour	
Apply knowledge properly within out of school spaces		Classical computation.
Food: harvest, yeild, taste and more		
Revision: Soil, seeds, plants, the environment and food		
Applying knowledge in setting up garden beds for growing		
Statistical fallacies (the gambler's fallacy, etc.).	Which graph tells the truth? Which would you use if you were in	Statistics - how much do we need to ensure x? 'What's important?' – picking sets.
	Calculating survival rates for aids, poverty, etc.	natural, imaginary & irrational numbers, base notations, infinity- success rates Statistical inference, leading to Bayes' Theorem.
	Why can't you go faster than light or back in time?	Probability (as it applies in other science disciplines)