

Number • Opportunities for counting games • Laying out grids in paving slabs • Creating playing surfaces for number games • Counting to large numbers • Estimating quantities and checking them (e.g. daisies in a metre² or bricks) • Create an abacus using improvised materials, such as a stone = units, stick = 10s, shells = 100s • Making equations with sticks or chalk on the ground [$3 \times 4 =$]; other students then have to answer the sum	Estimating • Heights / lengths/ weights which can't easily be measured or are inaccessible, such as trees, buildings, feathers, seeds, lamp-posts • Distances around the grounds, then measuring with rope, trundle wheel or tyre • Estimate age of trees [also looking at tree-rings on stumps to compare; links well to History] • Areas and volumes, before measuring them
Following and giving directions • Create a route around the grounds for others to follow [pupils need to give accurate instructions so partner reaches hidden treasure?] • Coordinate grids on school grounds [use OS map, Google maps or GIS?], using x and y axes • Following routes on giant grids • Using compass bearings • Create a orienteering course in local area [good for cross-curricular work such as PE, Science and Geography]	Time • Timing running, hopping or walking over given distances [links to PE] • Timing toy cars down different ramps • Rates of growth of plants, trees in varied conditions [links to Science] • Monitoring rainfall for a day/week/month • Observing seasonal change through photography, written records, etc • Make an accurate sundial • Make a weather-vane, wind-sock or a wind-speed monitor; record wind over a week [links to D&T]
Measurement • Learning to measure with paces, foot-lengths, non-standard and standard units, ropes, sticks, arm-lengths, etc • Learning to measure with increasing accuracy • Deciding on appropriate measuring devices for different distances • Measuring very tall or very small items • Create a bird-hide or bird box [measuring quantities of wood & nails required]	Shape and pattern • Find patterns, angles and symmetry in brickwork, tiling, buildings, windows and in nature • Create a shape trail or shape hunt • Look at ways of drawing shapes, large circles or angles using string • Create geometric patterns using sand, chalk or salt [links to Art] • Create a maths picture using only 20 objects
Data collection • School gate parent, traffic or nature survey [maybe link to local bird surveys?] • Sampling species / mini-beasts etc with quadrats on school grounds • Devise and calibrate instruments to measure, monitor and record weather or plant growth • Ordering children in birthday line-up or by height	Scaling • Recipes and cooking in the school kitchen • Following a drawing or plan of the school grounds • Create scale models of structures, buildings, local park or playground • Give children the task of designing a new wild-life area for the school grounds [plan it, draw it, cost to out, etc]