Incorporating NUMBERGYM into daily planning

Years 1 & 2 *(6-7 year olds)*	Blocks A, D, E **Counting, Partitioning, Calculating**

Short activities (e.g. Starters)

		User Guide page
Guess my Number	*Two main ways of using this activity:* • *On IWB, dividing class into 2 groups – one pupil to perform on board with group support* • *As a longer activity, pupils in pairs focusing on a particular number line.*	*NG 18*
Ordering Data	*Set A (Integers) focuses on ordering 3-digit numbers.*	*NG 31*
Add/Subtract: Near 10s	*Small group activity focusing on adding/subtracting 10/20 on a hundred square.*	*EM 45*

Longer activities (e.g. Main)

Number track challenge	*Gives pupils an intensive practice of counting on and back in response to a range of vocabulary options for add and subtract.*	*EM 25*
Flats, Rods, Cubes 1	*Model 2 and 3-digit numbers as quantities.*	*NG 4*
Flats, Rods, Cubes 2	*Challenge pupils to estimate quantities, including the need for exchange between columns – could be a Starter.*	*NG 7*
Flats, Rods, Cubes 4	*More intensive consolidation for those who need it in reading and recording 2 and 2-digit numbers.*	*NG 9*
Gattegno Chart 1	*Invite pupils to IWB to demonstrate adding to and subtracting from a single column.*	*NG 14*
Gattegno Chart 2	*Provides consolidation of the above as well as dealing with near 10s on an independent basis.*	*NG 17*
Mental Maths Challenge: Copper 1; 3; 4; 5; 6; Bronze 1; 3; 4; 5;	*Two main ways of using these activities:* • *On IWB, with a pupil performing with support from rest of group, or* • *Individual or paired activity on laptops.*	*MMC*

Note

The above are intended to be ideas for supplementing the planning of a Unit of work. We believe that pupils' engagement with images and models of mathematical ideas through the medium of software can enhance their understanding as well as their motivation and love of the subject.

©Ian Sugarman 2012

Incorporating NUMBERGYM into daily planning

Years 1 & 2 *(6-7 year olds)*	Blocks B, E, Securing number facts and relationships

Short activities (e.g. Starters)

		User Guide page
BondBuilder	*Vary the level so that different groups are catered for. Invite pupil to come to IWB and encourage rest of class (or group) to support them by calling out. How quickly can they complete the level?*	*BB*
Mental Maths Challenge: Copper 1 and 3	*Invite pupil to IWB to tackle the Doubles and Halves activities, supported by others. Can they do them correctly?*	*MMC*
Great Turtle Race	*Games 1 or 2. Play, as above, or in pairs in computer suite or laptops – with each pair starting on the word ,Go!*	*NG 37*

Longer activities (e.g. Main)

Match the Pattern	*Can they reproduce the stick patterns with only 2 secs. to see them and describe their counting strategy, mentioning doubles?*	*EM 6*
User-defined Spinners: Bingo:	*Each player has board consisting of a blank 3 by 3 grid. Ask them to fill in each of the squares with a number that might be the answer when the spinner is spun. [You can easily change what is on those spinners using the keyboard]. Now start the game……..* • *who is the first to get a line of 3? Finish the board?* • *What combination would give them the number they are waiting for? Any other combination?*	*NG 39*
Spinner games	*Set this up with pairs sharing a computer. There are 4 games – match the pupils to the level.*	*NG 40*
Exploring Venn diagrams 1	*Drag three counters onto the diagram (e.g. 2, 3, 4). What is the total in the Circle? In the Square? Click on the small shapes in the top left hand corner to hide the solutions. Click again to reveal them.* *Vary the trio of numbers, then increase to four counters.*	*NG 32*
Exploring Venn diagrams 2	*Set a pair of target totals (e.g. 4,5). Ask pupils to come to the board to find a new way of getting that shown above each diagram. Can they find ways using 2 counters? 3? 4? etc.* *Print off the template sheet in the User Guide Appendix for pupil recording.*	*NG 33*
The Vennster Challenge	*A whole class activity or one to work at in pairs – with the level of challenge set appropriately.*	*NG 34*
Fuzzles	*Focus on a single operation – e.g. just addition, or just subtraction before advancing to either/or.* *A higher level challenge is to set it to 3 number cards then to hide them. Press GO and ask them to predict what the number cards might be. They could score a point for each one that is correct.*	*NG 36*
Estimating Money	*Set the time to be not long enough to allow counting – they are forced to estimate or just long enough to allow quick counting.* *Can be a shorter activity too.*	*NG 45*

Note

The above are intended to be ideas for supplementing the planning of a Unit of work. We believe that pupils' engagement with images and models of mathematical ideas through the medium of software can enhance their understanding as well as their motivation and love of the subject.

©Ian Sugarman 2012

Incorporating NUMBERGYM into daily planning

Years 1 & 2 *(6-7 year olds)*	**Blocks B,D,** **Understanding Shape**

Short activities (e.g. Starters)

		User Guide page
Last Block Down	*Set up a 2-player game, representing 2 teams. Encourage rest of team to reason about the best move strategically and offer advice. Relate strategy to the relative areas of the blocks.*	*EM 20*
Match the Pattern: Sticks/Counters/Squares	*A teacher led activity – encourage discussion about the properties of the images, injecting appropriate shape and positional vocabulary.*	*EM 6*

Longer activities (e.g. Main)

Blocks in Boxes	*Invite someone to fill the shape with blocks of just one colour. 2 colours? Only symmetrical arrangements? All 4 colours?*	*EM 21*
Shape Builder	*Pupils create shapes on the grids, print them, cut them out and sort and classify them according to how many sides etc.*	*NG 82*
Turtle tracks	*Copy a picture from the collection (p.85)*	*EM42 NG85*
Route Pathways	*After a teacher-led session, pupils can create their own pathways on the grid and send the turtle to the houses using directional instructions.*	*EM37 NG92*
MathsArt: KaleidoDrawing	*With the lines of reflection set to 1, pupils can create letters of the alphabet with a single line of symmetry – horizontally and vertically.*	
MathsArt: Pattern Blocks	*Pupils create their own tessellations using properties of common polygons.*	
MathsArt: Mosaics	*Pupils can work in 2 or 4 quadrants to build up mosaic patterns with one or 2 lines of symmetry.*	
Digital Light Bars	*Pupils re-create the digital numerals then sort them according to how many light bars are needed for each one. Can they transform one into another?*	*NG 80*

Note

The above are intended to be ideas for supplementing the planning of a Unit of work. We believe that pupils' engagement with images and models of mathematical ideas through the medium of software can enhance their understanding as well as their motivation and love of the subject.

©Ian Sugarman 2012