## Using Rotation Groups Successfully


#### Abstract

Almost every lower primary classroom that I have been into has used rotation groups for literacy. Yet when this same approach is used for numeracy the effectiveness tends to be pretty variable. This month I would like to share with you my personal approach to using rotation groups effectively and in such a way that doesn't require hours of preparation, marking or clean up...


## Choosing groups:

Sometimes rotation groups can quickly become big behaviour management headaches. To avoid this problem, I use a few simple strategies when forming my groups in the first place:

I usually form around six groups from the kids in my class, with 3,4 or 5 students in each. I create these groups based on student behaviour rather than on their ability, so that I know that the groups will continue to function well even when I am not with them. Six groups allows me to separate my "naughtiest" kids and then form the groups around these kids based on who will work together well.

## Structuring a lesson:

During any rotation group lesson I tend to work using $3 \times 20 \mathrm{~min}$ blocks. Here's how it works:

## First 20 minutes:

I work with three groups (half the class) doing a problem-solving task. These kids don't necessarily work in their groups - they will be grouped according to what I want them to achieve during this time (e.g. might be ability grouped, might be as one large group, might be in pairs...). By keeping half the kids with me I am able to limit the amount of behaviour management and intervention that I need to do. The other three groups rotate through $3 \times 5 \mathrm{~min}$ activities.

## Second 20 minutes:

Swap. I work with the other three groups while the kids who worked with me do the three rotational activities.

## Last 20 minutes:

All the kids come back together for sharing and generalising time. I ask specific children to share what they have done in the problem-solving task rather than someone from each group. I use their explanation as the basis for my own, and help all students to generalise the principles learned.

## Choosing activities:

I use fluency or simple application tasks for the rotational groups that are not with me. I have around 10 activities that are on high rotation and at least two of the activities for the day come from this set. This limits the amount of explanation time needed each lesson and gives practice time for important concepts. Each of these activities take only 5 minutes, are exciting, and are simple for the kids to self-manage. My favourites can be found at below. I hope that you find this a manageable structure that you can adapt for your kids.

## My top ten rotation group activities:

1. Matching cards for two or three digit place value (or for single digit numbers). These have different representations on them (e.g. words, digits, MAB or bundling sticks) and can be used to play memory, go fish or snap. These cards are already made for both two and three digit numbers at the link above.
2. Hundreds board jig saw puzzle: Photocopy and laminate a hundreds board, then cut it up into different pieces. Place the pieces into a zip lock bag as a simple jig saw puzzle. For a more advanced puzzle, take a piece from each of 5 different hundreds boards and put it into one bag. Kids have to make the board, complete with overlaps and gaps, and then write down all the missing numbers. You can download a ready-made board at the link above.
3. Make-ten dominoes: Play dominoes, but matching up pairs to make ten instead of just matching the same number. E.g. if there is a nine then you would need to join on a one. Ready-made dominoes can be downloaded at the link above. You could also use these to make other numbers.
4. Board games with two dice (e.g. snakes and ladders): Kids can decide to go forwards by both numbers, backwards by both, or forwards by one and backwards by the other. This adds an element of strategy to a game like snakes and ladders. I tend to put the two dice into a clear plastic container so that they don't get thrown or lost. This also limits clean-up time.
5. Squares from a hundreds board: On an A4 sheet, create a series of squares that are joined at the sides or corners in an interesting pattern. These represent some of the squares from a hundreds chart. Laminate the page. For the activity, use a permanent pen to write a two digit number in one of the squares. Kids use white board pens to fill in the other numbers based on the one that they are given. They wipe off the page at the end of the activity so that it is ready for the next group to use, but your number is still there. What number you choose and where you put it makes the task much easier or harder.
6. Partitioning tasks: skittles, beads, drawings, blocks and counters are all used in various ways for partitioning tasks. The link above has a number of suggestions as well as resources to use.
7. Clocks and calendars: Check out this link for a great way to teach analogue time using spinners. It will work for non-members as well.
8. Matching 3D representations with cards: Using multilinks cubes to build different shapes and matching up a top/side view and a list of properties (e.g. number of cubes). The link at the top has ready-made cards to use.
9. Dice games: Put three dice into a clear plastic container (making sure that they don't roll away, get thrown or lost). Shake the dice to get three numbers. Draw a card from 1-30 and try to use the numbers once only to make as close to the total as possible. For a simpler version, just nominate a number of the day (e.g. 12). Each time the dice are rolled, students need to use the numbers to make as close as possible to 12 . You can vary the rules here depending on the age and ability of your kids - use all four operations or just two, use the numbers once only or as many times as you like, use all three numbers or just two...
10. Patterning games: Match the bead/shape/number pattern and then continue it on your own. Describe how you did it (including using numbers). Make a similar pattern. This can be 2D or 3D depending on the kids.

And just because having more is always a bonus...
11. Making a number in as many ways as possible on mini magnetic white boards. They can stick on magnets to make it, write the words (or stick on magnetic words), draw it... Then have one person in the group take a photo of them holding their board at the end

