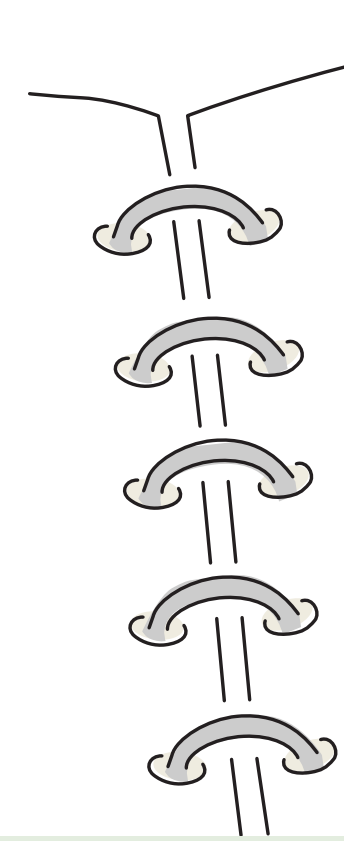
NCCA

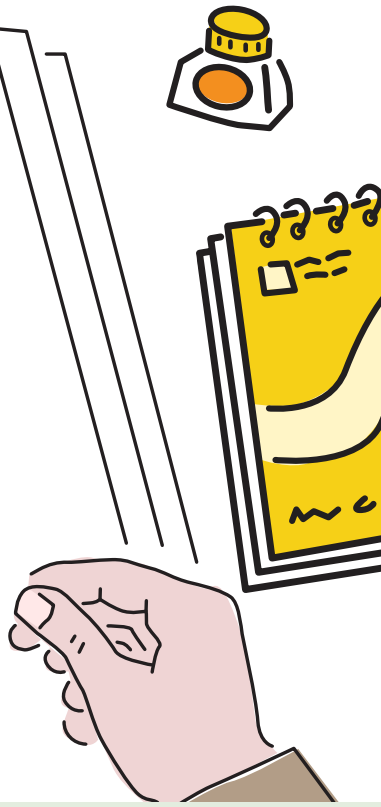
Primary Mathematics Toolkit – Support material

Number: Sets and operations – Suggestions for the learning environment



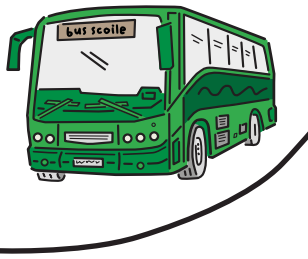
IDEAS FOR THE CLASSROOM

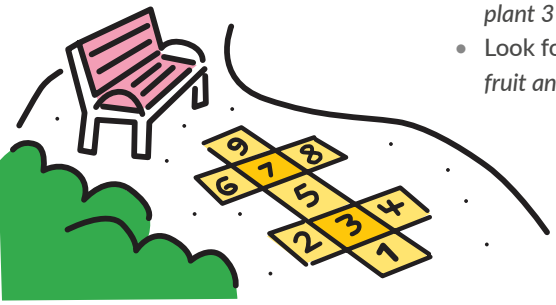
- Play games and sing rhymes/songs where objects are added or taken away, e.g., *10 green bottles*.
- Set up a recycling corner in the classroom. Children sort materials by type and place in correct bin type, e.g., *plastic, metal, cardboard, glass and paper*.
- Set up a shop with small items for sale. There should be several of each small item in order for this to work as an activity, e.g., *cars for 5 cent each. One child takes on the role of cashier*.
- Display examples of children's mental strategies around the classroom.
- Work together in small groups to create 'Fact Family' posters of the multiplication and division number facts.
- Notice and Wonder: Promote talk and discussion using images and prompt questions, e.g., *what do you notice, What do you wonder? How can we calculate the total amount of chocolates in the box? What mathematics do you see here?*



IDEAS OUTSIDE THE CLASSROOM

- Nature Trail – children work in groups to search for items in the school garden, e.g., *twigs, leaves, feathers etc.* Encourage children to create their own sorting criteria for the items collected and group into sets.
- Organise a representative from local industry or parent to visit the school and talk about how they use operations in their daily work.
- Minibeast hunt around the school – count the legs on the insects that you find. Sort the insects by number of legs and create addition/multiplication sentences to match each group of insects, e.g., *the number of legs on three spiders can be represented using the number sentences: 8 + 8 + 8 = 24 or 3 x 8 = 24*.
- Array hunt: search for items that come in arrays around the school, e.g., *tiles on the floor, desks in the classroom, panes of glass in windows*. Examine how the item is arranged, e.g., *how many rows and columns there are*. Compare and contrast different arrays.
- Create a school garden. Use multiplication and division to help set up the garden, e.g., *if you want to have 5 cucumber plants and you need to plant 3 seeds in each hole, how many seeds do you need to have altogether?*
- Look for items in shops that are arranged on shelves in arrays, e.g., *fruit and vegetables*.





Developed in collaboration with **Mary McMahon, Primary School Teacher, Co. Cork**