



Number Recognition and Counting P.1.1

Word Wall: number names 0---20, count, count on, next, before, after, die, random, the same as, count back, more than, less than, pattern.

Introduction

◆ Students will become familiar with numbers and number sequence to 10 (forwards and backwards) and recognising the numerals 0 – 9.

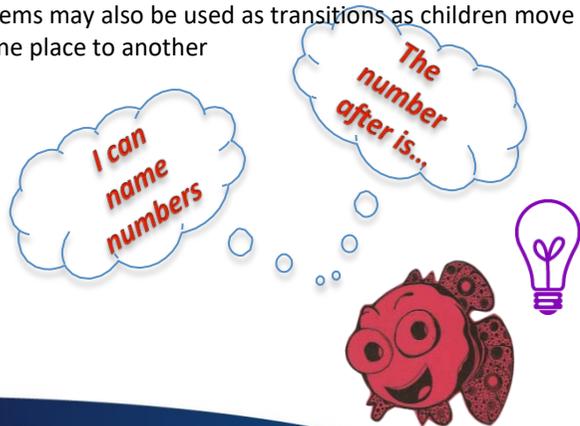
◆ Teachers will shape mathematical language by modelling appropriate terms and communicating their meaning in ways that students understand.

Resources

- Number Songs and Poems
- Wooden or plastic numbers
- Feely Bag or Mystery box
- Number Fans
- Numerals 0-9
- Early Years FISH Kit



Time / Classroom Organisation This activity may be introduced in a whole group circle or carpet time. The songs and poems may also be used as transitions as children move from one place to another



Australian Curriculum Year level: Prep

(ACMNA001) Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point
(ACMNA289) Compare, order and make correspondences between collections, initially to 20, and explain reasoning



Activity Process – Number Poems

1. Introduce and sing number songs and poems daily
2. Use movement, props and finger puppets where possible, for example: Introduce “Chook, Chook” with felt characters; “One elephant went balancing” using children walking along a rope on the ground.



1. The teacher rolls a die or calls out a number.
2. Students are to find the number on their number fans that corresponds with the number rolled on the die or called out.



Activity Process – Feely Bag Numerals

1. Place a foam, wooden or plastic numeral in a feely bag.
2. Taking turns students place their hands into the bag.
3. Students are to feel the number that is in the bag and then give the class clues so they can guess what the number might be. Teachers may have to give prompts and questions to encourage them to describe the number. *It might have straight or curved edges. Run your finger along the edges. What can you feel?*



Activity Process – Writing numerals

1. Number 1 is like a stick. A straight line down that's very quick!
2. For number 2 go right around. Then make a line across the ground!
3. Go right around, what will it be? Go round again to make a 3!
4. Down and over and down some more. That's the way to make a 4!
5. Go down and around then you stop. Finish the 5 with a line on top!
6. Make a curve, then a loop. There are no tricks to making a 6!
7. Across the sky and down from heaven. That's the way to make a 7!
8. Make an "S" and then don't wait. Climb up again to make an 8!
9. Make a loop and then a line. That's the way to make a 9!



Activity Process – Circle Counting

1. Place cards with the numerals 0-9 in the middle of the circle.
2. Encourage students to talk about the numbers, for example, *Who can find a number that is made up of only curved lines?*
3. Ask each student to pick a number that they recognise and tell the group what number they have chosen.
4. When everyone has chosen a number ask students to read out their numbers going around the circle.
5. Discuss that the numbers are not in the correct order.
6. Use prompts to encourage the students to change positions so that they numbers are in the correct order. Example questions may be *Who needs to go first?; Which number comes next?; Who needs to move where?*



Activity Process – Go Fish

Resources Indigenous Fish kit

1. Select students to fish for numbers 0-9
2. Display the caught numbers on the GO Fishing chart next to the learner's name.

Variations and Extensions

◆◆Number Check

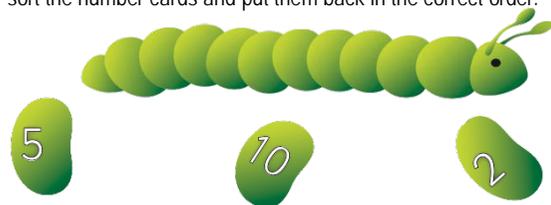
◆◆Resources: Number cards

Give each child a pile of number cards. Hold up one of the cards and ask students to find the same number. At first you can say the number as you show the card but later just hold it up for the child to look at. Discuss the features of each numeral, for example a 7 is made up of two straight lines

◆◆Number Mix

◆◆Resources: Caterpillar Number cards

Together as a group or whole class put the number 0 – 10 in order. Then select one or two students to leave the room while you mix up the numbers. The students then return to the room and have to re-sort the number cards and put them back in the correct order.



◆◆Numbers Display

◆◆Resources: Numerals and Words 0–9 visual display

Use the interactive whiteboard to run the display. As each numeral or word flashes onto the screen as the class to call out the number.

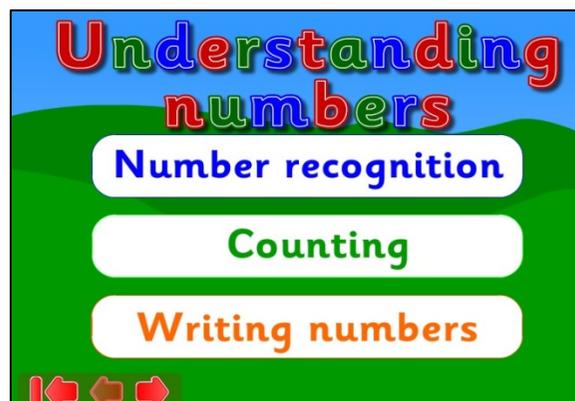
◆◆Number/Clothes Line

◆◆Resources: Choose a number and create a focus hanging display



Interactive Whiteboard Resources

http://www.ngfl-cymru.org.uk/vtc/2008-09/cynnal/maths/eng/understanding_number_eng.html



Contexts for learning

Play:

Play dough: Make the numbers out of play dough

Investigation:

Number Book: Create a number book from 0 -1 0 about objects that are in the classroom. For example: *We have 0 dogs in our classroom, We have 1 fridge in our classroom, We have 2 bins in our classroom, We have 3 computers in our classroom.*

Real life experience:

Daily count the students that are present, boys, girls and group sizes.

Routines and Transitions:

- *Dice Roll:* Roll a dice (with numerals on it instead of dots) and ask students to identify the number rolled.
- *Stepping stones:* write the numbers 0 -10 on a stepping stone. Place numbers out of order and ask students to step on the numbers in the correct order before they leave the room.
- *Count off:* as students walk out the door ask students to count off in sequence.

Assessment---Observation checklist

- ◆◆ *count with one to one correspondence*
- ◆◆ *count rhythmically to identify number patterns*
- ◆◆ *make correspondences between collections*
- ◆◆ *compare and order numbers or small groups of objects*
- ◆◆ *understand mathematical language*



Background Reading

The idea of number begins to emerge as children recognise pairs of things. They learn to name pairs of things as 'two' perhaps by pointing and saying 'two eyes', 'two ears' and comparing this with only 'one nose'. In a similar way, through familiar rhymes and stories, they learn to recognise and name three things at a glance: 'three little pigs'; 'three blind mice', etc.

In order to systematically count a collection, children need both to remember the **counting sequence** and know how to use the sequence in one-to-one correspondence with the items in the collection.

Most children are likely to learn 'to count' in the sense of chanting the number names in order and *then* learn to count a collection by 1-1 matching of the number names in order with the items. Others may learn to recognise 'how many' are in small collections by recognising "fiveness" before they can chant number names in order to five. Either way, the two ideas must come together so that children see the link between the order in which we say the number names and the size of the collections.

Source: *First steps in Mathematics – Number*, 2007. Rigby: Port Melbourne. P85,86

Links to other MAG's

P.1.6 – Different Representations

1.1.1 - Numbers to 100 - 1

1.2.3 - Sequence and order



What understandings have I caught?

Links to other Resources

Grab Bag <http://nzmaths.co.nz/node/1441>



Adapted for use in the Cairns Diocese with the permission of the Catholic Education Office Toowoomba