



Connection Chart

P.2.3

Word Wall: make to ten, the same as, and, add, how many, altogether,

Introduction

Students will partition collections to 10 and represent the partitions.

Resources

- Collage materials e.g. patty pans, feathers, coloured paper
- Connections Chart A3 (see support resources--Curriculum Sharing) or draw up a large connection chart on easel paper –1 per group
- Number flash cards
- Bingo cards (see support resources--Curriculum Sharing)
- Early FISH Kit



Time/Classroom Organisation

This is a small group activity for 6 to 8 students. Allow approximately 20 minutes. Repeat this activity regularly, gradually increasing the number being partitioned from 5 to 10 over time as students are ready.

Australian Curriculum Year level Prep





(ACMNA289) Compare, order and make correspondences between collections, initially to 20, and explain reasoning

(ACMNA004) Represent practical situations to model addition and sharing

Proficiency Strand: Problem Solving – discussing the reasonableness of the answer. **Reasoning** – explaining comparisons of quantities



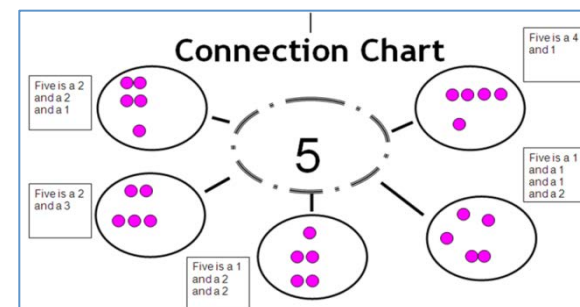
Activity Process---Connection Chart

1. Place a collection of one collage item into a container e.g. feathers or patty pans or paper squares. 
2. Ask each learner to close their eyes and **take 5** collage items e.g. 5 feathers; or 5 patty pans; or 5 paper squares from the container. 
3. Ask the learner to **sort their collection into groups according to colour**. Ask: *How do you see the 5? e.g. I see 3 and 2; I see 4 and 1.*
 1. How many are there altogether?
4. Ask each learner to paste their collection on to the connection chart in the partitions they have made. 
5. When the collage items are pasted on the connection chart, **write the 'story' that the student has told about their collection**. eg. 5 is a 3 and a 2. 5 is the same as 2 + 3.
6. When the chart is completed, ask learners to, look to see if any of the stories about 5 are the same. 
7. Repeat the activity as learner are ready with numbers to 10.

Variation

Repeat as an online activity with 5 and 10

<http://www.amblesideprimary.com/ambleweb/mentalmaths/numberbond.htm>



Activity Process---Bingo

1. Each learner has a laminated bingo board and a non-permanent marker
2. Teacher displays and calls out a number from zero to five or ten
3. If a student has the number bond (make to ten number) they cross it off. Eg. If the teacher calls out 6, a student can cross off 4.
4. When all numbers are crossed off, the child calls out 'bingo'



Catholic Education
Diocese of Cairns

Learning with Faith and Vision

Variations & Extensions

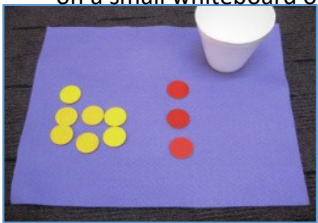
1. Hands Up

Have two students face each other, then clap their hands three times before holding up between five and ten fingers. Have them show all the fingers on one hand and some extra fingers on the second hand. Together, children say how many fingers are held up altogether.

2. Combinations to 10

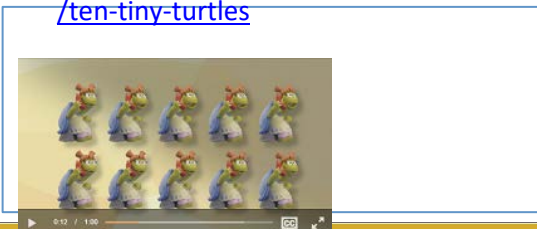
Resources: Felt square, counters, cups.

- Ask students to place 10 double sided counters into a cup.
- Ask students to shake the cup and tip out the counters and sort them into colour groups.
- Ask students to display their counters in a way that is easiest to 'read the number'
- Ask students to record their algorithm in written form on a small whiteboard or notepad.



Digital Resources

<http://splash.abc.net.au/home#!/media/1626912/ten-tiny-turtles>



Contexts for Learning

Play:

Number cards and pegs. Students place the appropriate number of pegs on the numeral card.

Investigation:

Number Puzzles

Real life experience:

Clumps – Ask the students to organise themselves into groups according to the number that the teacher calls.

Routines and Transitions:

Flash Cards: Use the Five or Ten frame subitising cards to flash to students as they go to lunch. Ask them to tell you how many dots they see and then how many more they need to make five or ten.

Assessment

Observe responses and checklist responses on the connection chart.

Transition activity – tell me a number story about 5
First Steps in Mathematics – Number Course Book.

Diagnostic Task – How Many

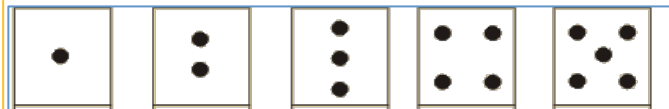
Source: *First steps in Mathematics – Number*, 2007.
Rigby: Port Melbourne p92.

Achievement Standard: order small collections

Background Reading

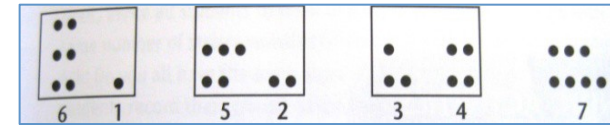
Students need to think of a collection in component parts, coming to see that:

- It is easier to see how many there are when collections are in special arrangements:

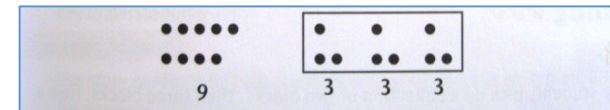


and later into tens and hundreds frames.

- Any collection can be separated into parts and each part can be represented by a number; thinking 'part-part-whole' can help us to see 'how many' there are. For example, in this array, some students may say, *I see 2, 4, which is 6*; another child may see 3 and 3.
- The same number can be thought of in parts in different ways.



- A number can also be thought of in more than two parts.



First Steps.2010. First Steps in Mathematics – Number.
Rigby: Port Melbourne. P 24-25

Links to Related MAGs

P.2.4 Make to ten

P.3.1 Ten Frames

P.4.4 Addition and Subtraction Stories



