100 Boards & Prediction Windows

1.4.3
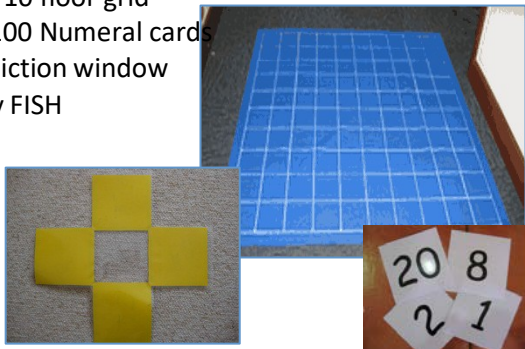
Introduction

Students will recognise numbers to 100, and create a hundreds board using numbers, words and concrete representations.

Resources

- 10 X 10 floor grid
- 1 – 100 Numeral cards
- Prediction window
- Early FISH

Time / Classroom Organisation

This activity would best be introduced in a small group with enough space to lay the number line. Allow 20 – 30 minutes to complete the activity.

Australian Curriculum Year level: One

Investigate and describe number patterns formed by skip-counting and patterns with objects (ACMNA018)

Proficiency Strand:

Reasoning – explaining patterns that have been created

Activity Process--- Filling in a Blank Grid

1. Revise the pattern of the number board i.e. 0---9 repeating number pattern; *across* is one less or one more; *up and down* is ten less or ten more. Note that each line of this grid starts with 1 and finishes with the 0 but the pattern keeps repeating.

2. Set up 10 x 10 blank floor grid on the floor.

3. Put on the star/ng number and finishing number only e.g. 1 and 100.

4. Give each child **three** numbers e.g. 26; 36; 47.
5. Students sort the numbers from smallest to largest.

6. Ask the child to position their numbers on the number grid star/ng with the smallest number.

7. Observe whether students identify the position by recognizing the patterns or by counting on.

8. Once the board is complete ask students if they can see any patterns.

9. Provide each students will 10 coloured counters (all the same colour) and ask them to put the counters on each number that is in a pattern that they can see on the 100s board.

Activity Process---Prediction window

1. Lay the prediction window over a number on the grid e.g. 23. Ask the following questions:

- *What is the number that comes one before 23?*
- *What is the number that comes one a4er 23?*
- *What is the number that comes ten before 23?*
- *What is the number that comes ten a4er 23?*

2. As students give responses, write the number in the blank boxes of the prediction window with a white board marker (or have a child fill in the numbers).
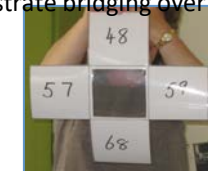

Variations & Extensions

1. Prediction Window without 100's board

Resources: 100's mat, 1 – 100 numbers, prediction window

Use the prediction window without the number board. Place one number behind the window, and ask students to fill in the blanks using the number only as a clue. Do this activity with 100 in the middle, to demonstrate bridging over to 101.

2. Non-Routine 100's Board
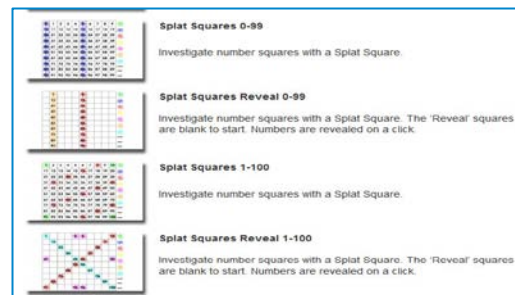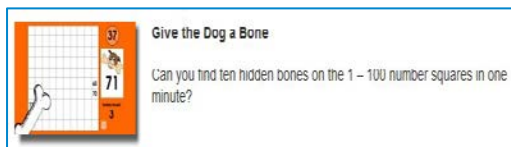
Resources: 100 mat, 1 --- 120 numbers
Start number grid from a different number e.g. 32 –
and repeat   the activity process. This will show
students how to bridge over the 100 to 101.

Source: E deVries & E Warren

Digital Resources
http://www.ideal---resources.com.au

Contexts for Learning
Play:
Race to 100 --- Materials: two laminated hundred
boards, whiteboard markers, and a dice. Students
take turns rolling the dice and moving forward that
many spaces on their hundred board. The first
student to reach 100 wins.

Investigation:
100s Board Puzzles – provide students with a copy of a
100s board. Ask students to cut it into a puzzle. Swap
with another student and see if they can complete the
puzzle.

Real life experience:
Beat the Clock – Give each student a blank 100 board and
have them write in all the numbers 1 – 100. Give the
students a /me frame to get the board complete. Repeat
often to see if students can beat their previous times.
Source: Tertini, J. 2004. *Queensland Targeting Maths,
Year 2. Teaching Guide.* Pascal Press: Glebe. P38

Routines and Transitions:
Set up the Floor 100 Board with the numbers turned over.
As students transition ask them to turn over a certain
number on the board.

Assessment
Observe students:
- Can place numbers on the 10 x 10 grid. Observe if
  the student identifies the position by recognizing the
  pattern (move *horizontally* you are moving in one's;
  move *vertically* you are moving in ten's) or by
  counting in ones. You could have students follow-up
  by answering questions like, "What number comes
  between 24 and 26? What number comes after 50?"
- Can predict what number comes before and after 9;
  13; 19; 20; 29; .....99; 100.

Achievement Standard: continue simple patterns
involving numbers and objects

Background Reading
View Jump into Number DVD – Place value – Prediction
window; using Smart board; non---routine hundreds
board. Students need to understand that they do not
have to remember every number name because the
patterns in the numeral on system enable us to predict a
number even if we have never heard it before. *Place
value is key to understanding how we say, read, write and
calculate with whole numbers. It is the **pattern** in the way
we put the digits*

*together that enables us to recognise, say and write whole
numbers.* (*First steps in Mathematics – Number* , 2007. Rigby:
Port Melbourne p52). You can tell a great deal about a child's
number development by observing them fill in the missing
numbers on a hundreds board / grid.

Do they have to count from one or can they count on from
any number?
Can they count by tens?
Do they use different counting patterns?

Year three NAPLAN --- Numeracy test links
Number
Number patterns

Links to Related MAGs
1.1.4 – Structure and Patterns of 100s Boards
1.3.1 – Numbers to 100 - 2
2.1.2 - Numbers to 1000 - 1