



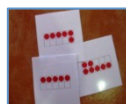
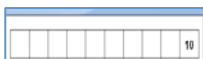
Number Track

P.2.5

Word Wall: *make to ten, the same as, and, add, how many, altogether, before, after, forward, backward, just before, just after, sequence, order, estimate, guess*

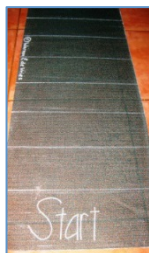
Introduction

Students will say, understand and reason with number sequences initially to 10 and then to 20, from any given n



Resources

- Early FISH Kit
- Number track---large
- Number Cards 1---25
- Ten sided dice
- Number Tracks Blank---laminated
- Washable pen
- Two pocket jumbo dice
- 3 "F" cards for forwards
- 3 "B" cards for backwards;
- other dice with numbers 1-6.



Time/Classroom Organisation

The Number Track can be used with a small or large group. Allow approximately 20 minutes. When children can confidently count forwards to and backwards from ten, starting from any number, gradually introduce numbers ten to twenty. Use the number track regularly for focused teaching, games and transition activities.

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

(ACMNA002) Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond

(ACMNA003) Subitise small collections of objects

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

Proficiency Strand:

Fluency – counting numbers in sequences readily

Understanding – connecting names, numerals and quantities

Problem Solving – using familiar counting sequences to solve unfamiliar problems; discussing the reasonableness of the answer

Reasoning – explaining comparisons of quantities

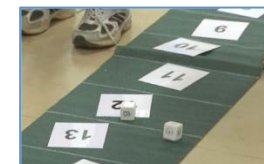


Activity Process---Number Track

1. Place the numbers in order starting with one (counting forwards).
2. Ask students to locate a number, for example *five*. Locate the number *just before five*; *just after five*.
3. Place the numbers in order starting with 10 (counting backwards)
4. The teacher selects one number and puts it on the number track. Students fill in the missing numbers.



5. The teacher puts two numbers on the number track and students fill in the missing numbers **between** the two numbers.
6. The teacher places the student on the blank number track and the student estimates on which number they are standing.
7. Students place numbers 1 to 10 on the track. Ask students to locate a number *one after 4*; *two after 5*; *one before 8*; *two after 8*; *one more than 4*; *one less than 4*; *two more than 4*; *two less than 4*
8. Students roll the ten-sided die and count on from this number.



9. When students are confident with numbers to ten, gradually introduce numbers to 20 using the same activity process..



Activity Process---Hidden Number

1. Ask students to place the numbers 0 – 20 on the number track.
2. Turn over all the numbers except 0 and 20.
3. Ask one student to stand next to the number 0 and then step forward to a card of their choice.
4. Ask the class:



What card is the student standing on?

How do you know?

What will the number before/after be?



Catholic Education
Diocese of Cairns

Learning with Faith and Vision

5. Ask the student to turn the over and check that the classes answer was correct. This activity can also be played backwards – starting at 20 and stepping back.
Source: E deVries, 2008

Variations & Extensions

1. Word Name cards / Ten frame cards

- Repeat above activities with word names and symbols to 10.

2. Number Track games for two students

- Each student rolls the dice and places that number in the correct position on the number track. If they do not have that number they miss a turn. The first student to place all their cards wins the game.

3. Treasure hunt

Number Track will need to be numbered 1---20 with a “treasure” at the end.

- Each student starts on number 10 and rolls both dice.
- The students move forwards or backwards according to their roll.
- As the student rolls, they say: *I’m on 12 and I have to go back 2. Now I’m on 10.* The first to reach the treasure is the winner.

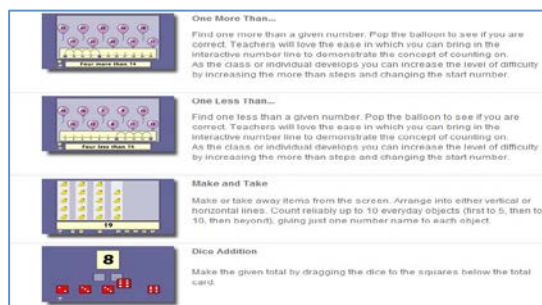
4. Small Number Tracks

- Display the first number track for the numbers one to ten.
- Have the children help to fill in the spaces on the number track.
- Ask the children *What number comes next after 4 ? (5)*
- Ask the children to **count on** from this number to the end of the number track.

- Ask the children what number comes **before** 8? (7)
- Ask the children to **count backwards** from this number to the start of the number track.
- Ask the children the numbers that come **between** 3 and 7.
- Attach the next section of the number track ending in 20.
- Ask the children to **count on** from any given number (6) to 20. Repeat this starting from another number (3). Fill in the numbers
- Ask children *What number comes next after 13? (14)*
- Ask the children to **count backwards** from this number to the start of the number track.

Interactive Whiteboard Resources

<http://www.ideal---resources.com.au/index.php>



Contexts for Learning

Play:

- Play the number track game
- Hopscotch
- Snakes and Ladders

Investigation:

- Give students number cards 1---10. Have students sequence the numbers from 1---10 and 10---1.
- Unscramble the numeral cards on the number track.

Real life experience:

Count the number of students in attendance at school today.

Routines and Transitions:

Use the number track for transition activities, for example: find the missing number, start at a given number and count to 10, count backwards.



Assessment

Students fill in a number track (initially to 10); count on from any given number; count backwards from any given number; name the number that comes before and after and between any given numbers.

Achievement Standard: count to and from 20; make the connections between number names, numerals and quantities up to 10; order small collections



Background Reading

Knowing how the numbers are related to each other (e.g. *what comes after four; how many more to eight? How many to fourteen?*) is essential for mental computation, addition and subtraction. The number track provides a linear model of number – number as length. Experience with the number track will support students’ understanding of number line and proportional thinking about number.

Source: E deVries & E Warren

Links to Related MAGs

- P.1.1 Number Recognition and Counting
- P.2.6 Positional Language
- P.3.3 Ordinal Numbers
- P.3.4 Hanging Geckoes



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