



Hanging Geokoes

P.3.4

Word Wall: count, order, sequence, groups of,

Introduction

Students will place numbers in sequence along a number justifying position and explaining their reasoning.

Resources

- Hanging Geckos
- Skipping rope – varying lengths
- Early Years FISH Kit

Time / Classroom Organisation

These activities may be introduced in a whole group circle or carpet & me, or with small groups. Have the materials available for play and investigations after the activity. Allow 20 mins for each activity.

Australian Curriculum---Year Prep

Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point ([ACMNA001](#))

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

Proficiency Strand:

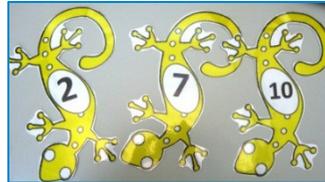
Fluency – counting numbers in sequences readily

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

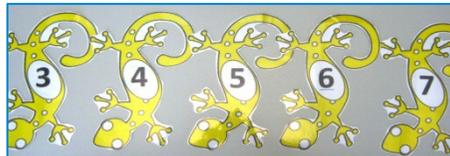


Activity Process---Ordering geckoes

1. Begin by using hanging geckoes from 1 --- 10 only



2. Hand out a gecko to each student in the group.
3. Ask each student to look at their number and think of something interesting to say about their number, for example: *what comes before, what comes after.*
4. Allow each student to tell you about their number, for example: *My number is 8, that comes after 7. My brother is 8.*
5. Encourage the students to put themselves in order from 1 to 10.
6. Listen to the conversations and take note of the language students use to explain the order of the numbers.
7. When all the numbers from 1---10 are lined up, count from 1---10 to check if the order is correct. Have a student use a pointer as you say each number.



8. As students come to sit down, give the following instructions: *Sit down if you are a number bigger than 8; Sit down if you are a number that comes before 4; Sit down if you are a number between 5 and 8.*
9. When students are confident, repeat the activity process using numbers 1---20.



Activity Process---Hanging Geckos

1. Initially use hanging geckoes 1---10 and the skipping rope
2. Place numbers 1 and 10 on the rope



3. Ask the student with gecko number 5 to come out. Encourage the student to tell you about their number, for example: *number 5 comes before number 6 --- I'm 6 and I used to be 5.*
4. Encourage the student to place the number 5 gecko on the line where he/she thinks it would 'belong'



5. Say: *If you are the number that comes before 5, come out and hang your gecko where you think it belongs.* Encourage the student to say some interesting facts about their number as he/she comes out, for example: *I am number 4, I come between 3 and 5.*
6. Bring out each number between 1 and 10 in random order. If the students have not left enough space for a number, discuss what might need to happen. This may involve repositioning an already placed number to make room for a new number.



7. When students are ready, repeat the above process using the geckos and a skipping rope using the numbers 1 – 20.



Catholic Education
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Variations & Extensions

1. Hanging geckoes – variations

Resources: Hanging geckoes 1---20 and rope
Using the hanging geckoes with numbers 1---20, and a skipping rope, solve the following problems:

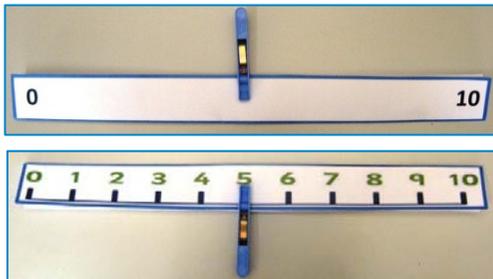
- Construct the number line with numbers missing. Students guess which numbers are missing.
- Construct the number line with numbers in the incorrect position. Ask students to see if they can find what is in the incorrect position, and place in the correct position
- Have an empty number line with 1 and 10 at either end. Write a number, for example: number 5 on 5 different hanging geckoes. Students take turns at hanging the gecko where they think 5 would belong. Discuss strategies to figure out the correct position.

2. Where's the number?

Resources: [0---10 number line strip](#) and peg.
Using a peg as a marker, the students are asked to locate a particular number on the number line and discuss its placement in relation to 0 and 10. The activity is repeated for other numbers between 0 and 10, for example: *move the peg to where the number 3 would be*. Flip the strip over to check your peg placement.

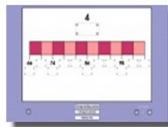
Variation: Number line strip from 1---20. Source: Board of Studies NSW, Mathematics K---6 Units of work. P 14.

http://k6.boardofstudies.nsw.edu.au/files/maths/maths_k6_ws.pdf



Digital Resources

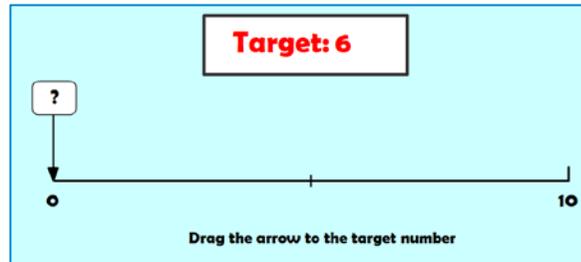
<http://www.ideal-resources.com.au/index.php>



Number Line (Whole numbers)

Create different number lines with this activity. Change the starting numbers and the incurrent number to suit age or ability. Alternatively use the random number lines by clicking on the mystery key.

http://www.mathsframe.co.uk/resources/Placing_Numbers_on_a_Number_Line.aspx



Contexts for Learning

Play:

- Leave materials out for exploratory play.
- Place a dice game with number track (1---20) using a number dice and a forwards/backwards dice. Start at 10 and see who reaches 20 first.

Investigation:

- Hanging geckoes – on a skipping rope place numbers 0 and 20 at each end. Where would 15 go? How can we check?

Real life experience:

Use the number track to figure out basic addition and subtraction problems.

Routines and Transitions:

- Choose a number between one and twenty. As students line up start with this number and count forwards or backwards.
- Number of the day: Choose a number between 0 and 20. As students go to lunch, they write their name in pairs on a gecko and place it on the line where they think the number belongs. When you come in from lunch, see who is the closest to the number of the day.

Assessment

Teachers will observe two elements of the students' learning. They will note students' ability to sequence numbers in the correct order and the ability to identify some properties of the number, for example: number before/after/between. Teachers make anecdotal notes and observations.

Achievement Standard: count to and from 20; order small collections

Background Reading

Knowing how the numbers are related to each other (for example: *What comes after 15; how many more to get to 20?*) is essential for mental computation, addition and subtraction. The number line uses a linear representation on number (number as length) and requires children to think about number in a proportional way.

Source: E. deVries & E. Warren, 2009

Links to Related MAGs

- P.2.5 – Number Track
- P.4.2 – Number ladder
- P.4.7 – Number line
- 1.2.2 – Hanging Geckoes
- 1.3.3 – Area to linear



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