

Maths Medium Term Plan

Sharks Class

TERM ONE

Victoria Sargent

PLEASE NOTE: All planning is subject to change. More time will be devoted to each block if needed before moving on and difficult concepts will be revisited.

Topic: NUMBER: PLACE VALUE (WITHIN 10)

Week One

Baseline assessments (Ongoing throughout the term/where necessary)

Diving in to Mastery - Counting Principles

- The One - One Principle (count each object once, saying one number name for each object)
- The Stable Order Principle (saying the numbers in the same order whilst counting, understanding the order always stays the same)
- The Cardinal Principle (the last number said gives the total for the group)
- The Abstraction Principle (anything can be counted including things that can not be touched or seen)
- The Order Irrelevance Principle (the total remains the same despite the order in which a group of objects is counted)

Week Two

Sort objects

What will children learn?

- To sort groups by characteristics
- To sort groups in a variety of ways

What will learning look like?

- *Tell me how I have sorted the toy fruit/bears/shapes/transport/buttons*
- *Suggest other ways of sorting the toy fruit/bears/shapes/transport/buttons in to groups*

	<ul style="list-style-type: none"> • <i>James and Lottie have sorted these objects in to groups. Lottie has sorted them into cubes and counters. James has sorted them in to green and yellow. Who is correct? Explain your answer</i> • True or False? (for Recap and discussion and to check that learning has been embedded) <i>The objects have been sorted by type of shape (False. The objects have been sorted by colour)</i> <p>Mathematical Talk/Assessment for Learning</p> <ul style="list-style-type: none"> • How can you sort the objects? • Are there different ways the objects can be sorted? • How have you grouped the objects? • How do you think these objects have been grouped? • Can there be more than two groups?
Week Three	<p><u>Count objects</u></p> <p>What will children learn?</p> <ul style="list-style-type: none"> • To count from 1 to 10 to work out how many there are • To count one object at a time when finding how many there are • To understand that the last number said is the total number of objects in the group • To improve accuracy when counting <p>What will learning look like?</p> <ul style="list-style-type: none"> • <i>Counting groups of objects by placing them in stem frame</i> • <i>Counting groups of objects by lining them up</i> • <i>How many red cubes? How many green cubes?</i> <p><i>How many cubes altogether?</i></p> <ul style="list-style-type: none"> • <i>Group the items, and then count how many there are in each group. Compare your group with your partner's</i> • <i>How many different ways can you find to group the doughnuts and find the total?</i> • True or False? (for Recap and discussion and to check that learning has been embedded) <i>There are 17 pencils (True. There are 17 pencils altogether)</i>

	<p>Mathematical Talk/Assessment for Learning</p> <ul style="list-style-type: none"> • Line up the objects. Is it easier to count now? Why? • What does one ... represent? • How many are there in total? • When would we count 0? • What does zero look like? • Can you show me a group of zero?
Week Four	<p><u>Represent objects</u></p> <p>What will children learn?</p> <ul style="list-style-type: none"> • To understand that one object can be represented by another • To understand that an object can be pictorially represented <p>What will learning look like?</p> <ul style="list-style-type: none"> • <i>How many pumpkins in the picture? Place counters on them to help you count</i> • <i>Show how many pumpkins there are by drawing/placing counters on your five frame</i> • <i>Show me (using five frames and counters)</i> ~ <i>How many ears has Lottie got?</i> ~ <i>How many noses has Lottie got?</i> ~ <i>How many fingers is Lottie showing us?</i> ~ <i>How many times did Lottie clap her hands?</i> • <i>Match the animals to the ten frames</i> • <i>Use counters to show how many... there are and write the numerals for each</i> • <i>Wrapping paper</i> - <i>Which animal is represented the most? Place counters on the pictures to help you find out</i> - <i>Which animal is represented the least? Place counters on the pictures to help you find out</i> • <i>Which representation matches which group?</i> • <i>How many different ways can you represent 6 apples on the tree?</i>

	<ul style="list-style-type: none"> • True or False? (for Recap and discussion and to check that learning has been embedded) <i>The counters represent the frogs and the chickens (True. There are 3 red counters to show the number of chickens and 2 yellow counters to show the number of frogs)</i> <p>Mathematical Talk/Assessment for Learning</p> <ul style="list-style-type: none"> • How can the five frame help you to count the objects? • Can you write the number three in words? • How many ways can you draw three? • Do we always have to use counters to represent objects? • What can we use to represent the...? • What does each...represent? • How many different ways can we represent...?
Week Five	<p><u>Count forwards</u></p> <p>What will the children learn?</p> <ul style="list-style-type: none"> • To continue a number sequence forwards • To find consecutive and non-consecutive missing numbers in sequences • To visualise zero and know that this comes before one <p>What will learning look like?</p> <ul style="list-style-type: none"> • <i>Complete the number tracks</i> • <i>Fill in the missing numbers</i> • <i>Spot the mistakes and correct the sequences</i> • <i>Whitney says when counting forwards, you always count from zero. Do you agree? Why?</i> • True or False? (for Recap and discussion and to check that learning has been embedded) <i>The missing numbers are 3,7,8 (False. The missing numbers are 3,7,9)</i> <p>Mathematical Talk/Assessment for Learning</p> <ul style="list-style-type: none"> • Do we always have to count from 0 and 1? • Are the numbers getting greater or smaller?

	<ul style="list-style-type: none"> • What is the next number? • Can you use the resources or images to help you count? <p><u>Count backwards</u></p> <p>What will the children learn?</p> <ul style="list-style-type: none"> • To continue a number sequence backwards • To find consecutive and non-consecutive missing numbers in sequences <p>What will learning look like?</p> <ul style="list-style-type: none"> • <i>Write numerals to match the cubes. Can you describe the pattern?</i> • <i>Complete the number tracks</i> • <i>Fill in the empty boxes (dominoes in order)</i> • <i>Alex is counting - how do you know she is counting backwards?</i> • <i>How many different starting points could you have if you wanted to count backwards and stop at three?</i> • True or False? (for Recap and discussion and to check that learning has been embedded) <p><i>The towers go down by 1 each time. The next tower of cubes will have 4 cubes</i></p> <p>Mathematical Talk/Assessment for Learning</p> <ul style="list-style-type: none"> • How can we use our counting skills? • Do we always have to start at 10 when counting backwards? • Will all the boxes have dots in? • Are the numbers getting greater or smaller? • What comes before...?
Week Six	<p><u>Count one more</u></p> <p>What will the children learn?</p> <ul style="list-style-type: none"> • To confidently place numbers on the track and begin to use the language of one more • To know that one more is the number after

	<ul style="list-style-type: none"> • To subitise <p>What will learning look like?</p> <ul style="list-style-type: none"> • Complete each box using a picture, a numeral and a word • Roll a dice, represent the number using counters on the track, add one more • Complete the sentences (One more than 5 is...) • Choose a number card from 0-9, complete the table (write number as numeral, word, place on number track, complete - one more than...is...) • How many different ways can you complete the box below (...one more...) using number cards 1-10 • Teddy rolls the number that is one more than the dice below. He says the number is... Explain his mistake • Mo says, "I'm one year older than my sister, my sister is one year older than my brother. My brother is 7" How old is Mo? • True or False? (for Recap and discussion and to check that learning has been embedded) One more than 7 is 8 (True. See the ten frames) <p>Mathematical Talk/Assessment for Learning</p> <ul style="list-style-type: none"> • How can counting help us with finding one more? • Where can one more than be found on a number track? • What does one more mean? • Will the number get greater or smaller? Why? • How can we show one more? • Do we need to count from 0 every time we find one more?
Week Seven	<p><u>Count one less</u></p> <p>What will the children learn?</p> <ul style="list-style-type: none"> • To relate one less to one more • To understand that one less is the opposite to one more • To understand that one less is the number before the starting number

What will the learning look like?

- Complete each box using a numeral, a number word or a picture
- Roll a dice, represent the number using counters on a track, find one less
- Complete the sentence (One less than...is...)
- Choose a number card from 0-9, complete the table (write number as numeral, word, place on number track, complete - one less than...is...)
- How many different ways can you complete the box below (...one less...) using number cards 1-1
- One more than seven is the same as one less than nine. Use a number track to show the answer
- **True or False?** (for Recap and discussion and to check that learning has been embedded)

If one bird flies away there will be three birds (True. Four birds were sitting on the tree in the first picture. Three birds are sitting in the tree in the second picture)

Mathematical Talk/Assessment for Learning

- How can counting help in work finding one less?
- Where can one less than...be found on a number track?
- What does one less mean?
- Will the number get greater or smaller? Why?
- How can we show one less?

Assess and Review