# LEADERS OF EARLY LEARNING 

## Numeracy Story Planners



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| Title: Ten Little Princesses | Experiences and Outcomes - <br> I have explored numbers and understand that they <br> represent quantities, and I use them to count, create <br> sequences and describe order. MNU 0-02a <br> l use practical materials and can 'count on and back' to <br> help me understand addition and subtraction, recording <br> my ideas and solutions in different ways. MNU 0-03a |
| :--- | :--- | :--- |


| Learning Intention | We are learning: (you could select from the following) <br> - to count backwards from 10 <br> - to name written numbers <br> - to take away 1 |
| :---: | :---: |
| Success Criteria | I can: <br> - say numbers backwards from 10 <br> - say which number comes before <br> - look at a number and name it <br> - count 'how many are left' by touch counting each object only once |
| Introduction- Connect the learning |  |
| How will you build on children's own experiences to help them enjoy and relate to the text? | Before reading: <br> - Look at the front cover, back cover, blurb, - predict what the story is about <br> - Discussion about princesses and castles - how many of the princesses do the children recognise? Do they know the names of any stories with princesses? <br> - Look at the front cover - Estimate the number of princesses, check them by counting using 1-2-1 correspondence <br> - Show number of princesses on their hands <br> - Look at the different clothing - how many are wearing something in their hair, find the numeral on a number line, how many are wearing the colour pink etc |
| Development- Learners are actively involved in their learning and demonstrate learning |  |
| What key mathematical concepts will you define or ask children to define? | - Opportunities for children to engage in repeated use of principles of counting: stable order, 1-2-1 correspondence, cardinality and order irrelevance, when counting the number of princesses left <br> - Recall number sequence backwards - highlight the vocabulary 'before': "I wonder what number comes before 8?" <br> - Introduce concept of subtraction - highlight the vocabulary 'take away' and 'less': "If we had one less, than 8 , how many do you think we would have?" "If we take away 1, how many are left over?" |
| What mathematical key words/ concepts will you highlight/introduce? (Max of 5) | - Back/backwards <br> - Before <br> - Less <br> - Take away |


| How will you make the story interactive? | - Collect 10 Princess toys/dolls to enable children remove 1 item at a time: count the number of princesses left after 1 leaves, highlight the number in the corner of the story book <br> - Alternatively: Use ten frames with picture/peg princesses, allowing children to remove a princess as they go along Number line with the princesses on them - to be removed as story Progresses |
| :---: | :---: |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - What number is this? <br> - There are 10 princesses, can you see ten of any other things? Horses - There is one horse for each princess (1-2-1 correspondence) <br> - "Now there are ...." - Pause to let children say the number. Count the princesses left, pointing to each princess modelling stable order and 1-2-1 correspondence. Repeat the last number to highlight cardinality <br> - What number comes before 10? <br> - There were 10 princesses, and one pricked her thumb, how many princesses do you think we will have left? <br> - How many princesses are left now? |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - Select a random page - how many princesses do you think are on this page? <br> - Can someone help me check? (1-2-1 correspondence) (stable order) <br> - Can we count to this number? (stable order) <br> - How many princesses were on this page again? (cardinality) <br> - Can we count from this number to 10 ? (forward number sequences) <br> - Can we count from 10 to this number? (backward number sequences) |
| Further development activities | - Design 10 outfits for the princesses <br> - Have a ball - children can design plates, cups, invitations in sets of 10 <br> - Bake a cake for the ball (10 cupcakes) <br> - Select 10 songs that they could play at the ball <br> - Act out the story |

Title - Absolutely One Thing
Author - Lauren Child

| Learning Intention | We are learning: (you could select from the following) <br> - to count <br> - to name written numbers <br> - about time |
| :---: | :---: |
| Success Criteria | I can: <br> - say number words in order as I count <br> - touch each item once only as I count <br> - answer 'how many', after I have counted <br> - look at a number and name it <br> - say what 'zero' means and looks like <br> - talk about clocks and their uses |
| Introduction- Connect the learning |  |
| How will you build on children's own experiences to help them enjoy and relate to the text? | Before reading: <br> Look at front cover and talk about what you can see: <br> - Who are they children? <br> - How might they know each other? Friends? Relatives? <br> Talk about families: <br> - Who's in your family? <br> - How big is your family? - encourage children to use fingers to show amount <br> - What do you do with your family? <br> Talk about the numbers you can see: <br> - Can you name any of the numbers? <br> - I wonder if there are any numbers in your house? |
| Development- Learners are actively involved in their learning and demonstrate learning |  |
| What key mathematical concepts will you define or ask | - Zero means there is none and is written like 0 <br> - Divide means to share items out between 2 or more groups <br> - Time - introduce clocks, why do we use them, language of time e.g. hours, minutes and seconds |


| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | Numbers beyond 10 - hundred, thousand, million, billion and trillion (large numbers) Divide |
| :---: | :---: |
| How will you make the story interactive? | - Select children to act out the parts of Charlie, Lola and Mum encourage them to use their fingers to demonstrate $3,2,1$ and $0 /$ none. <br> - Use 'grow, throw and show' to highlight certain numbers in story <br> - How many socks would we need for our group? (see relevant page) <br> - Encourage and support children to count by modelling, emphasising 1-2-1 correspondence, and repeating the last number to reinforce the concept of cardinality. |
| What statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - What number is this? <br> - Can you find number 11 in the book? (identify and recognise numerals) <br> - Can you count up to 12 like the numbers on the watch? (stable order) <br> - Can we count the ladybirds on the ground? (one-to-one correspondence and stable order) <br> - How many swans were following Lola? How many letters on Charlie's t-shirt? etc. (one-to-one correspondence and cardinality) |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - Refer to book randomly pointing to numerals on different pages and asking who can identify/name them. <br> - Refer to the page with the clock - what do we use it for? <br> - Select children to count/recall how many, e.g. pigeons, swans etc. (stable order and 1-2-1 correspondence). <br> - Highlight the importance of zero, ask children 'I wonder why Lola always eventually asked/settled for 'one'. |
| Further development activities | - Go on a number hunt around the playroom/outdoors/home. <br> - Look at 100 squares to see numbers beyond 10. <br> - Go for a 'time hunt' for clocks and/or watches around the building. <br> - Use timers/stopwatches to time children completing activities e.g. running around the garden etc. using minutes/second. <br> - Provide opportunities for children to share items between groups e.g. cars for the teddy bears, fruit at snack time etc. |

Numeracy Story Planner - It's a Seashell Day

## Title - It's a Seashell Day

## Author- Dianne Ochiltree



## Experiences and Outcomes -

I have explored numbers and understand that they represent quantities, and I use them to count, create sequences and describe order. MNU 0-02a
I can match objects, and sort using my own and others' criteria, sharing my ideas with others. MNU 0-20b

| Learning Intention | We are learning: (you could select from the following) <br> - to sequence numbers forward <br> - to count |
| :--- | :--- | :--- | :--- |
| Success Criteria | I can: <br> - to sort objects |


| How will you make the story interactive? | - Have 10 seashells in a bucket / bag - allow children to select the seashells as directed in the story (One, two, three, four) (five, six, seven, eight) (nine, ten) <br> - Talk about the shells and encourage children to describe them as they pick them out the bucket (smooth, bumpy, big, small etc.) |
| :---: | :---: |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - "I count shells - one, two, three, four" point to each shell as you say the number <br> - "I count other shells - five, six, seven, eight" - point to each shell as you say the number - I wonder how many more shells we need to make 10? <br> - "Two more shells" - we are adding another 2 shells <br> - What size of creature do you think lives in this shell? |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - Can you show me on your fingers how many shells the boy has in the bucket here? <br> - Can you show me on your fingers how many shells we would have if we added one more? <br> - How many shells did we have altogether? <br> - How many jaggy shells / smooth shells? <br> - Repeat the rhyme "One, two, three, four - a pretend seashell store...." |
| Further development activities | - Hide shells in the sand - can you find the 10 shells? (or another collection of objects) <br> - Sort the shells (or another collection of objects) using children's own criteria, then others criteria, apply counting skills to establish most and least <br> - Talk about and order the shells (or another collection of objects) from large to small <br> - Pretend seashell store - sell sea shells, create labels, links to money <br> - Outdoor hunt - can you find the seashells (or other natural objects)? How many have you found so far? How many more do we need to find? <br> - Create a repeating pattern with shells (or other natural found objects) |

## Numeracy Story Planner -Ten Rubber Ducks

| Title - Ten Rubber Ducks |  | Experiences and Outcomes - <br> In movement, games and using technology, I can use <br> simple directions and describe positions. MTH-017a |
| :--- | :--- | :--- |
| Author - Eric Carle |  |  |


| Learning Intention | We are learning: <br> - to count <br> - to say the position of something in a set |
| :---: | :---: |
| Success Criteria | I can: <br> - say numbers forward from zero <br> - use the language first, second and third to describe the position of something |
| Introduction- Connect the learning |  |
| How will you build on children's own experiences to help them enjoy and relate to the text? | - Discussion about ducks real/rubber-Have you got rubber ducks...how many/ what do you like to do with them? Have you seen real ducks? What did you notice about them? Where did you see them? <br> - Have you ever been on a boat/ ship- where did you go? how did you feel? <br> - Has anyone been to a faraway country? How did you get there? How did you feel? <br> - Share your own experience of being in another country |
| Development- Learners are actively involved in their learning and demonstrate learning |  |
| What key mathematical concepts will you define or ask children to define? | - 5 principles of counting <br> - Ordinal numbers |
| What mathematical key words/ concepts will you highlight/introduce? (Max of 5) | - 5 principles of counting <br> - Counting for a purpose (real life) <br> - Ordinal numbers (real life contexts) |


| How will you make the story interactive? | - Song - 5 little ducks went swimming one day <br> - Have 10 rubber ducks available for children to hold/count <br> - Have children stand with a rubber duck and explain the ordinal number of each duck/person <br> - Pictures of the animals and signs for $1^{\text {st }}-10^{\text {th }}$. Children to hold up the signs e.g. $1^{\text {st }}$ alongside dolphin and express how they might feel if e.g. a dolphin jumped over them and so on. |
| :---: | :---: |
| What statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - Put your finger on each duck inside the front cover and say the numbers together. <br> - There are 10 ducks in each box? Can anyone tell us how many boxes there are on the truck? I wonder how many ducks there are altogether. <br> - Emphasise the ordinal numbers and the prepositional language as you read and gesture where possible. <br> I wonder what number comes before/after? <br> I wonder what will happen to the ducks? <br> I wonder what the captain will say to explain why there are only 4 boxes and not 5? |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - What happened to the ducks? <br> - How do you think they felt when they got separated? Has anything like that ever happened to you? How did you feel? What did you do? <br> - How do you think the ducks felt as they met the different creatures? How do you think you would feel? <br> - The tenth little rubber duck finds a family of real ducks... how do you think that makes it feel? <br> - They say, 'quack 'and it says 'squeak'...how would you feel if you went to another country and didn't speak the same language as other people? What would you do? |
| Further development activities | - Ducks race- explore different ways to make the ducks travel. Which one was $1^{\text {st, }}$ $2^{\text {nd }}, 3^{\text {rd }}$ ? <br> - Put objects in a water tray outside and fill to overflowing observe and discuss how far they travelled, and where they now are in relation to each other. Discuss properties of materials and how they affected how far objects travelled. <br> - Use programmable toys (bee-bots/spheros) to explore positional language. |

Title - The Doorbell Rang
Author - Pat Hutchins


## Experiences and Outcomes -

I can share out a group of items by making smaller groups and can split a whole object into smaller parts.
MNU 0-07a
I have explored numbers, understanding that they represent quantities, and I can use them to count, create sequences and describe order. MNU 0-02a

| Learning Intention | We are learning: <br> - to share things. |
| :---: | :---: |
| Success Criteria | I can: <br> - share a group of things into smaller groups. <br> - share into equal groups. <br> - share into groups that are not equal. |
| Introduction- Connect the learning |  |
| How will you build on children's own experiences to help them enjoy and relate to the text? | Before reading: <br> - Look at front cover, read the blurb, make a prediction about what the story is about. <br> - Discuss with the children their own experience of baking/cooking at home. <br> - Who are the cookies for? <br> - Have you ever made biscuits/cookies? <br> - Did you have to share them? Tell me about what happened. Did you get the same number each? Did someone get more? |

Development- Learners are actively involved in their learning and demonstrate learning

| What key mathematical concepts will you define or ask children to define? | - Main focus is on sharing - dividing a set between 2 or more people. <br> - Sharing equally means both people/everyone will have the same number. <br> - You can also share into unequal groups. |
| :---: | :---: |
| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | Sharing or Dividing (main focus) <br> - sharing practically, using one-to-one <br> - understanding how 'dealing' results in equal shares and the same number each Counting <br> - counting for a purpose - to see if everyone has the same number <br> - cardinality - the last number tells you how many there are <br> Comparing <br> saying who has more or fewer/not as many <br> saying which numbers are more or less than others |
| How will you make the story interactive? | - Read and enjoy The Doorbell Rang a number of times with the group. Use a battery doorbell or bike bell. <br> - Act out the story by involving children in sharing a number of cookies between different numbers of people (using salt dough cookies or pretend cookies and paper plates. |


| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - Tell me about this picture (showing Victoria and Sam about to take cookies from the plate.) <br> - What do you notice? How many cookies are there? <br> - What do you wonder? <br> - How can they share the cookies, so they get the same number each? Shall we act it out? <br> - Each time the doorbell goes ask the children: <br> - How many children are at the door? Can you count them? <br> - How many children will there be altogether now? Can you guess? Can you count them and check. (Estimating and checking). <br> - Sharing means everyone gets the same number <br> - How do Sam and Victoria know that there will be 6/3/2/1 cookies each? <br> - Shall we act it out? <br> - How many have you got? (Counting using one to one - one, two, three, four, five, six, cardinal principle) <br> - Have they all got the same? (Comparing - Has anyone got more/fewer?) <br> - How do you know? <br> - Can you show me? |
| :---: | :---: |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - How many cookies did mum make? <br> - What did Victoria and Sam have to do when the doorbell rang? <br> - What does sharing mean? <br> - How do Sam and Victoria know that there will be 6/3/2/1 cookies each? <br> - Ask a volunteer to share a number of cookies between 2 or more children. Do they all have the same number? How many do they have each? Have we shared them equally? |
| Further development activities | - Recording Would you like to do a drawing/picture to show how Sam and Victoria could share out the cookies fairly? To show how you have shared them? <br> - Malleable area - 12 playdough biscuits, 12 paper plates for making and sharing cookies. <br> - Retelling the story -Laminated pictures of biscuits and children from the book to arrange on a magnet board <br> - Problem Solving - A similar problem-solving story activity about Pirate Panda is available at Maths Story Time: https://nrich.maths.org/content/id/9718/Maths\%20Story\%20Time\%20.pdf |

Numeracy Story Planner - Five Little Monkeys

## Title - Five Little Monkeys

Author - Eileen Christlelow

## Experiences and Outcomes -

I use practical materials and can 'count on and back' to help me understand addition and subtraction, recording my ideas and solutions in different ways. MNU 0-03a
I am aware of how routines and events in my world link with times and seasons, and have explored ways to record and display these using clocks, calendars and other methods. MNU 0-10a

| Learning Intention | We are learning: (you could select from the following) <br> - to count on and back <br> - to take away 1 <br> - to order routines. |
| :---: | :---: |
| Success Criteria | I can <br> - say the numbers <br> - say which number comes before <br> - count 'how many are left' by touch counting each object only once <br> - order routines |
|  | Introduction- Connect the learning |
| How will you build on children's own experiences to help them enjoy and relate to the text? | Before reading: <br> - Look at front cover, read the blurb, make a prediction about what the story is about. <br> - Discussion re the song and who knows it <br> - Discussion around what might happen if you bump your head <br> - Ask who jumps on their bed <br> - Read Five Little Monkeys jumping on the bed <br> - Take time to count the monkeys with the children and confirm the cardinality <br> - Allow children opportunities to touch count in the book <br> - Show on fingers the various monkeys <br> - Have children predict how many monkeys will be left when one falls <br> - Count to affirm prediction |
| Development- Learners are actively involved in their learning and demonstrate learning |  |
| What key mathematical concepts will you define or ask children to define? | - Number sequences <br> - Stable order <br> - 1-to-1correspondence <br> - Cardinal Principle <br> - Taking away one <br> - Link daily routines from story to real life. <br> - Order familiar routines |


| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | - More <br> - Less <br> - Many <br> - Few <br> - Later <br> - Earlier <br> - Before <br> - After |
| :---: | :---: |
| How will you make the story interactive? | - Create an interactive display where children can count and add the monkeys on the bed <br> - Have the children represent the monkeys with their fingers <br> - Role play the story |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - How many monkeys are on the bed? <br> - How many would there be if 2 fell off? <br> - How many have fallen off? <br> - How many are left? |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - Refer to random pages in the book and ask children to count the monkeys |
| Further development activities | - Retell with other animals in other situations <br> - Increase starting number <br> - Have two or more fall off together |

## Numeracy Story Planner - Five Tiddly Widdly Tadpoles

Title - Five Tiddly Widdly Tadpoles

Author - Debbie Tarbett


## Experiences and Outcomes -

I have explored numbers, understanding that they represent quantities, and I can use them to count, create sequences and describe order. MNU 0-02a
I use practical materials and can 'count on and back' to help me understand addition and subtraction, recording my ideas and solutions in different ways. MNU 0-03a

| Learning Intention | We are learning: (you could select from the following) <br> - to count <br> - to take away 1 |
| :---: | :---: |
| Success Criteria | I can: <br> - say the numbers <br> - say which number comes before <br> - count 'how many are left' by touch counting each object only once |
|  | Introduction- Connect the learning |
| How will you build on children's own experiences to help them enjoy and relate to the text? | - Discuss the front cover, predict what you think the story will be about - use picture clues of sea, tadpoles, fish <br> - What is a tadpole? How many are on the front cover? Has anyone ever seen a tadpole - where can you find them? Do they always stay as tadpoles or do they change? Discuss the life cycle of tadpoles. Discuss what we know about frogs, move like a frog, talk like a frog. Do we know of any other insect/bird/animal that changes over its lifetime? <br> - Estimate the number of tadpoles and count them using 1-2-1 correspondence |

Development- Learners are actively involved in their learning and demonstrate learning

| What key mathematical concepts will you define or ask children to define? | - Every time you take away one the quantity reduces <br> - When we count back the quantity represented by the number reduces because we are taking away one |
| :---: | :---: |
| What mathematical key words/ concepts will you highlight/introduce? (Max of 5) | - Backwards, before, 1 less than, take away 1, how many are left? |
| How will you make the story interactive? | - Encourage the children to touch the raised tadpoles to count quantities, use their fingers. <br> - Role play the story with five children being the tadpoles and one by one falling away from the group. <br> - Watch clip of life cycle of the tadpole <br> - Visit local pond in spring to witness the life cycle of tadpoles |


| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - Can anyone see a number on the page? What number is it? The word for the number is on the page too...... <br> - If one tadpole stays behind, will there still be five on the next page? Scaffold the problem solving by covering one tadpole/ Can you show me five tadpoles with your fingers? Now leave one behind, how many are left? How many do you think will be on the next page? Repeat this as we progress through the book. Ask the children to predict the number of tadpoles left on the next page. Highlight that there is a pattern happening with the numbers/tadpoles, encourage children to discover the numbers are counting down. Why do you think they are counting down? Do we have fewer tadpoles every page we turn to, why? <br> - Explore opportunities to subitise as well as using one to one principle-can you count with your eyes to find out how many tadpoles are left? Count other sea creatures on the pages, notice there are four tadpoles and four fish on the same page, they are in groups of two- can you show me four using two hands? Explore other ways to make four etc. |
| :---: | :---: |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - Do we have more or less tadpoles when one stays behind? <br> - When we count backwards the quantity is reducing/less |
| Further development activities | - Use songs and rhymes that count down e.g. Five little monkeys jumping on the bed. Extend to counting down from ten. <br> - Sequence numbers from ten to one, find the number that is one less than seven now go and find that number of objects in the playroom etc. Compare sets of tadpoles/objects - which set has one less/two less etc? Can you place the correct number on that set? |

Title - Pete the Cat and his Four Groovy Buttons

Author - James Dean


## Experiences and Outcomes -

I have explored numbers, understanding that they represent quantities and I can use them to count, create sequences and describe order. MNU 0-02a
I use practical materials and can 'count on and back' to help me understand addition and subtraction, recording my ideas and solutions in different ways. MNU 0-03a

| Learning Intention | We are learning: <br> - to compare sets to decide which has the most/least <br> - to recognise that a set gets smaller when we take things away from it <br> - to demonstrate that zero means there are none left in a set. |
| :---: | :---: |
| Success Criteria | I can: <br> - find out how many are left when 1 is taken away <br> - begin to count back in ones to subtract <br> - explain that zero means there is none of a particular quantity |
| Introduction- Connect the learning |  |
| How will you build on children's own experiences to help them enjoy and relate to the text? | Before reading: <br> - Look at front cover, read the blurb, make a prediction about what the story is about. <br> - Discuss cats. Do any of the children have a cat? What colours can cats be? Do they usually wear clothes? <br> - Discussion of children's own clothing. Do they have a favourite item of clothing? <br> - Does anyone have buttons on their clothing? What do buttons do? <br> - How many buttons does Pete have on his shirt? <br> - Show me on fingers how many buttons Pete has. <br> - Show me on a number line how many buttons Pete has. <br> - Discuss what the word "groovy" means. |

Development- Learners are actively involved in their learning and demonstrate learning

| What key mathematical concepts will you define or ask children to define? | - NB Cardinal principle needs to be secure before they can fully grasp subtraction. Children need to know the last number counted gives the amount in any set before they show an understanding of an increase or decrease in quantity. <br> - The last number you say is the total number you have. (cardinality) <br> - Numeral recognition. <br> - If an item is taken away then the total number changes and is less/gets smaller. <br> - Language of comparison. <br> - Zero means there is none of something. <br> Backward number sequences. Use of counters, fingers, number line etc to demonstrate. |
| :---: | :---: |
| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | - "Take away" <br> - "How many are left?" <br> - "more" "less" <br> - "zero" "none" "all gone" numeral 0 <br> - Backward number sequences |

How will you make
the story interactive?

- Have a large Pete the Cat picture available. Blu-tac or velcro buttons can be removed as the story develops.
- Encourage the children to sing the refrain, holding up the correct number of fingers. Ask one child to remove a button on Pete picture and count how many left, rest of children take on finger away to signify lost button.
- Model mathematical language, encouraging children to "tell the story" using this language.
- Have a range of buttons for children to use when counting/taking away.
- Let's count Pete's buttons "1,2,3,4 = Pete has 4 buttons" (1:1 correspondence, cardinality, stable order)
- Can you point to the number 4 on the page?/What number is Pete thinking about in the thinking bubble?
- Can you show me 4 on your fingers? (slowly raise fingers - 1:1 correspondence, cardinality)
- Can you show me 4 quickly on your fingers? (subitise)
- The clock has numbers on it. What do they tell us? Let's count the numbers all around the clock (stable order).
- Pete's buttons are round. Can you see anything else which is round?
- Pete's buttons are big. Can you see anything else which is big/bigger? Can you see anything which is small/smaller?
- What happened to one of Pete's buttons? Where did it go? How many buttons are left? Can you show me that number story on your fingers?/counters?/buttons?
- "4 take away 1 is 3 "
- Does he have more or less/fewer buttons now?
- How many buttons would Pete have if he put one back on again? (conservation) Would he have more or less buttons now?
- How many buttons were left after the last one rolled away? (concept of zero) There were none left!
- Model removing buttons from Pete's shirt, counting backwards until you reach zero.... 4, 3, 2, 1, 0 (stable order, backwards number word sequence).
- Let's try giving Pete some more buttons (e.g. 6) and re-tell the story.


## Plenary Review and Recall

Plenary Review and
Recall

- Can you show me on your fingers how many buttons Pete had on his favourite shirt at the beginning of the story?
- How many did he have by the end? (Was it...? show numerals, flash fingers, 10 frames, dice patterns, children choose correct answer)
- Pete had 2 buttons on his shirt. How many are left if one rolls away? Show me on your fingers...with counters...etc
- What shape were Pete's buttons? Who can draw that shape in the air with their magic finger?
- When Pete's buttons rolled away did the number of buttons get bigger or smaller? More or less?
- Can you please give me 2 buttons? 5 buttons? 0 buttons?
- Can you count forwards to 4? 5?
- Can you count backwards from 4? 5? And stop when you get to zero.

|  | - There's a wee picture in the story which shows you who collected the buttons <br> when they rolled away. Can you spot who it is? (clue a couple of pages after front <br> cover!) Did they get all the buttons? |
| :--- | :--- | :--- |
| Further development |  |
| activities |  |$\quad$| - Have a Pete the Cat cut out with buttons for the children to re-tell the story with. |
| :--- |
| Encourage use of mathematical vocabulary to "tell the number story". |
| - Re-tell the story using different scenarios. E.g. birds flying from a nest. Encourage |
| similar mathematical vocabulary. |
| - Re-enact the story using these new scenarios, e.g. children can be the birds. |
| -Develop use of a number line in conjunction with the story. Demonstrate how you <br> move/count backwards on the number line when a button is removed. <br> - $\quad$ Design some new buttons for Pete's shirt, focussing on shape, colour, pattern etc. |


| Title - Ten Black Dots | TenBlackDots <br> DonaldCrews |
| :--- | :--- |
| Author - Donald Crews | I am developing a sense of size and amount by observing, <br> exploring, using and communicating with others <br> about things in the world around me. MNU 0-01a <br> I have explored numbers, understanding that they <br> represent quantities and I can use them to count, create <br> sequences and describe order. MNU 0-02a |


| Learning Intention | We are learning: (you could choose from the following) <br> - to recognise numerals. <br> - to count objects in the correct order (stable order) <br> - to touch count (1:1 correspondence) <br> - to recognise the total number of objects (cardinal principle) <br> - to count every object in any order (order irrelevance) <br> - to count various objects/sounds (abstract) <br> - to subitise dot patterns/objects. |
| :---: | :---: |
| Success Criteria | I can: (you could choose from the following): <br> - point to different numerals <br> - count forwards <br> - touch objects as I count them <br> - recognise the last number name of the last object counted is the total number in the set <br> - count objects in different positions <br> - count the dots/claps/jumps <br> - identify "how many?" without counting, in different ways (e.g. dot arrangements, fingers, dice, 5 and 10 frames) <br> - represent amounts, without counting, in different ways (e.g. dot arrangements, fingers, dice, 5 and 10 frames). |
|  | Introduction- Connect the learning |
| How will you build on children's own experiences to help them enjoy and relate to the text? | Before reading: <br> - Look at front cover, read the blurb, make a prediction about what the story is about. <br> - What number(s) can you see on the front cover? <br> - Do you think the total number of black dots on the from cover matches the number 10? Count and check. <br> - Discuss what shape the dots are. <br> - Think about where else we have seen dots or circles... (e.g. on dice, patterns on clothes etc) <br> - Look around the room - can you see any more dots or circles? (Draw children's attention to "shapes within shapes" e.g. the circle at the top of a mug, a pair of earrings etc). |
| Development- Learners are actively involved in their learning and demonstrate learning |  |


| What key mathematical concepts will you define or ask children to define? | - Numeral recognition. <br> - Subitising. <br> - Different items can be counted (abstraction). <br> - Numbers can be made up of more than one set (partitioning/aggregation). <br> - 2 equal quantities mean a set has been halved. <br> - If an item is added, then the total number changes and is more/gets bigger. |
| :---: | :---: |
| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | - Numbers 1-10 <br> - Subitising. <br> - "more" <br> - "half" (e.g. "Half in this hand and half in the other"/"Same amount in each hand") |
| How will you make the story interactive? | - Ask children to hold up correct number of fingers as they count/subitise the dots in the story. As the numbers increase encourage them to copy the pattern they see -e.g. 5 buttons are represented as one lot of 5 , whereas 5 portholes are represented as one lot of 2 and one lot of 3 . Can they think of any others? <br> - Have a ready supply of counters for children to play with. Encourage lots of practical experimentation and play before expecting children to duplicate ideas in story or generate their own. <br> - Encourage children to make the patterns shown in the story using counters. <br> - Encourage children to clap/jump the number of dots they see. |
| What statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - Let's count the dots .... 12345 6. There are 6 dots. (stable order, cardinality) <br> - Can you show me this number on your fingers? (slowly raise fingers -1:1 correspondence, cardinality) <br> - Can you show me the number using counters? (1:1 correspondence, cardinality) <br> - Can you count the dots quickly? (subitise) <br> - Can you make the counters into different patterns? (order irrelevance, conservation) <br> - 8 looks like 4 and 4 . How else can we make 8 ? (order irrelevance, conservation, cardinality) <br> - What else could 3 dots be? (abstraction) <br> - The dots are circle shapes. Can we see any other circles around us? <br> - 3 dots can make a snowman's face - does the lace have the same number of dots/beads? (order irrelevance, abstraction, conservation) <br> - What else can we see 3 of? Can you clap 3 times? Can you jump 3 times? (abstraction) <br> - If another dot is added, do we have more or less? (cardinality) <br> - How can we share the dots between 2 hands/friends/baskets etc so each has the same amount? <br> - Let's count the dots at the back of the book. What happens to the pattern when we add one more? (stable order, cardinality) <br> - 1,2,3.... 10 - we can count forwards. Let's try counting the numbers backwards.... $10,9,8 \ldots$ (stable order, FNWS BNWS) <br> - How many dots would there be before 1? (concept of zero) <br> - I wonder how long the snake would be if he had 100 spots on him? <br> - I wish I had that many pennies in my piggy bank, I wonder what other colours the pennies might be? I wonder if anyone knows what the pennies might be called? <br> - I wonder how high in the tree the balloons are? I wonder how I would get them down? |

## Plenary Review and Recall

| Plenary Review and Recall | - The snake had this many black dots on him (show on fingers) - Can you tell me how many spots it had? (Children state number) - counting, subitising <br> - The snake had 7 black dots on him. Can you show me that number on your fingers? Using the counters? On a 10 frame? On the dice? - counting, subitising <br> - The train had this many black dots for wheels (show numeral) - Can you tell me how many wheels it had? (Children state number) - counting, numeral recognition <br> - Can you give this butterfly 3 dots on each wing? Does each wing have the same number or different? How many does the butterfly have altogether? - counting, numeral recognition <br> - Can you give the frog this many dots? (flash fingers, 10 frame, numeral, dice pattern etc) - counting, subitising, numeral recognition <br> - Show 2 pictures from book. Which has more dots? How do you know? <br> - Can you count forwards to 6? 10 ? <br> - Can you count backwards from 6? 10? |
| :---: | :---: |
| Further development activities | - Go on shape hunts - where else can we see circles or dots in our environment? Take photos. <br> - Make new pictures using sticky dots. Children can draw rest of picture. <br> - Have basic templates made up for children to add dots to (sticky or counters) to complete picture - e.g. cat with no eyes, blank butterfly or ladybird, clothes with no patterns etc. Encourage careful counting. <br> - Try making the "1-10 number line" at the back of the book with counters or other objects. What happens to the pattern as we add one more onto each row? |

## Numeracy Story Planner - Seaweed Soup

Title - Seaweed Soup

Author - Stuart Murphy


## Experiences and Outcomes -

I have explored numbers, understanding that they represent quantities, and I can use them to count, create sequences and describe order. MNU0-02a I can match objects, and sort using my own and others' criteria, sharing my ideas with others. MNU 0-20b

| Learning Intention | We are learning: (you could choose from the following) <br> - to count. <br> - to sort |
| :---: | :---: |
| Success Criteria | I can: <br> - count forwards <br> - count backwards <br> - sort/group objects into sets <br> - share my ideas |
| Introduction- Connect the learning |  |
| How will you build on children's own experiences to help them enjoy and relate to the text? | - Discuss front cover-predict what story is about, identify animals in story, what they are doing, setting etc. <br> - Who likes soup? What's your favourite soup? <br> - Has anyone helped to make soup at home? <br> - Do you think seaweed soup sounds/looks tasty? <br> - What do we use to eat soup? |
| Development- Learners are actively involved in their learning and demonstrate learning |  |
| What key mathematical concepts will you define or ask children to define? | - Counting - touch count each item when one number is said Number of objects counted is linked to quantity of the set |
| What mathematical key words/ concepts will you highlight/introduce? (Max of 5) | Language - Set, group, enough, more, how many? How many altogether, total |
| How will you make the story interactive? | - Role play the story for meaningful counting possibilities. Reflecting the five animals in the book, work with a group of five children, reinforce the fourness of four -there are four objects at each place setting so four objects in each set. |


| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - What did turtle use to set the table? Name and count the items to establish there are four items in the set. <br> - Can you show me four with your fingers? Can you find the number four on the page? <br> - When crab joins turtle for lunch there is only one place set, what do you think turtle will do? <br> - How many more items does turtle have to collect to make a complete set for himself? <br> - Are three things enough to make a complete set? <br> - How many more does he need? <br> - Count the number of items on the table now it is set for two people, how is it different from the previous page? <br> - Two more guests join them for lunch - how many more items will turtle have to collect to set the table for two more guests? <br> - Now there are four guests at the table, let's count the items in four sets |
| :---: | :---: |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - How many items did turtle need to set a place for one person? <br> - What did turtle do when he didn't have four items? <br> - What happened every time new guests joined him? |
| Further development activities | - Within the daily routine ensure children are involved in setting the table for snack/lunch draw parallels with story. <br> - Encourage role play of the story in the home corner/mud kitchen setting the table for five guests predicting how many bowls will be needed etc. (use masks, props etc.) <br> - Vary the number of guests - predict how many cups you will need for 6 guests... |

Title - Ten Little Pirates

## Author - Mike Brownlow Simon Rickerty



## Experiences and Outcomes -

I have explored numbers understanding that they represent quantities, and I use them to count, create sequences and describe order. MNU 0-02a

| Learning Intention | We are learning: <br> $\bullet$ <br> $\bullet$ <br> $\bullet$ <br> $\bullet$ <br> $\bullet$ | to count backwards |
| :--- | :--- | :--- |
|  |  | to name written numbers |

Introduction- Connect the learning

How will you build on children's own experiences to help them enjoy and relate to the text?

Before reading:

- Look at front cover, read the blurb, make a prediction about what the story is about.
- Discussion about pirates and islands. Have you ever been on a boat? What sort of creatures are in the sea? Have you ever seen a squid etc.? Does anyone have any fish as pets?
- Estimate the number of pirates on the front cover, check using 1-2-1 correspondence.
- Can you start at 0 and 'grow' 10 with your fingers?

Development- Learners are actively involved in their learning and demonstrate learning

What key mathematical concepts will you define or ask children to define?

- Opportunities for children to engage in repeated use of 5 principles of counting when counting how many pirates are left
- Recall number sequences backwards "I wonder what number comes before 6...?
- Introduce concept of subtraction (highlight vocabulary 'take away and less')

| What mathematical key words/ concepts will you highlight/introduce? (Max of 5) | - What comes next/after <br> - Counting forwards/backwards <br> - How many are left? <br> - 'Less/fewer' <br> - 'More' |
| :---: | :---: |
| How will you make the story interactive? | - Have 10 pirate dolls to allow the children a concrete resource to hold/count <br> - Have ten children standing, when one pirate leaves have one child sit down <br> - Use tens frames with images of $10,9,8,7,6,5,4,3,2,1,0$ pirates <br> - Pirate number line <br> - Children act out part of the story as pirates <br> - Encourage children to count forward/back using their fingers by modelling slowly \& emphasising 1-2-1 correspondence. |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - "What number is this?" (number identification) <br> - "If one pirate gets taken away, how many pirates are left?" Select individual child or count together as a group. (stable order and one-to-one correspondence) <br> - Ask children to count number of pirates etc. on deck in different ways e.g. clockwise, anti-clockwise, left to right, right to left. (order irrelevance) <br> - "There is one more/one less..." <br> - How many are left now? |
|  | Plenary Review and Recall |
| Plenary Review and Recall | Refer back to book: <br> - Ask children to identify number without counting the number of pirates visible (name numeral). <br> - There are 10 pirates on this page, can we all count up to 10 (stable order) <br> - How many pirates are on this page? (one-to-one correspondence) <br> - If we start counting at this side, are there still 4 pirates? If yes, how do you know that? (order irrelevance) <br> - So how many legs did the birds have again? (cardinality) <br> Can we start at 4 etc. and count back? How many pirates are there in the story? Can we grow our fingers up to 10 and then go back down again? (short forward/backward number sequences) |
| Further development activities | - Matching pirate pictures with numerals. <br> - Songs, poems etc. which emphasis counting forwards and backwards e.g. 10 Green Bottles etc. <br> - Model using fingers at lunch/snack time to emphasise how many people are sitting at table and then count down again as children leave. What else can we count down? <br> - Create a nursery version of "10 little ..." on book creator. |

# Numeracy Story Planner - The Very Hungry Caterpillar 

Title - The Very Hungry Caterpillar

Author - Eric Carle


Experiences and Outcomes -
I have explored numbers understanding that they represent quantities, and I use them to count, create sequences and describe order. MNU 0-02a

| Learning Intention | We are learning (you could choose from the following) <br> - to count <br> - to copy a pattern <br> - the days of the week |
| ---: | ---: | :--- |
| Success Criteria | I can: <br> - say numbers in the right order. <br> - touch/move objects as I count them <br> - say the days of the week |

Development- Learners are actively involved in their learning and demonstrate learning

| What key mathematical concepts will you define or ask children to define? | - 5 Principles of Counting <br> - Number names to at least ten <br> - Counting forwards and backwards <br> - Recalling numbers before <br> - Remembering what number is next in the correct order <br> - Understanding last number counted is the total of group |
| :---: | :---: |
| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | - Number names to at least ten <br> - Counting forwards and backwards <br> - Recalling numbers before <br> - Remembering what number is next in the correct order <br> - Understanding last number counted is the total of group |


| How will you make the story interactive? | - Soft toy and matching foods. <br> - This storybook can be purchased with the appropriate props <br> - Matching number cards for each of the foods eaten by the caterpillar <br> - Allow children to touch or hold the foods and taste them <br> - Lay out foods in the correct order (stable order) <br> - Support one-to-one correspondence when counting foods <br> - Encourage children to join in with props when re-reading the story eg one child stands up with one apple...... etc |
| :---: | :---: |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - Can you count with me? <br> - Can you use your finger to touch the picture in the book? <br> - How many $\qquad$ <br> - What was the last number we said? <br> - What number do you think will be next? <br> - How many foods did the caterpillar eat the day before? (re-call) <br> - How many different foods did he eat on Saturday? |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - Discussions with children about how much food they ate before coming to nursery <br> - Create a food chart recording daily amounts of fruit, toast, cereal etc <br> - Encourage counting to ten in any other setting when opportunity arises <br> - Create a wall graph showing how many food items the caterpillar ate daily <br> - Encourage children to count foods the nursery uses in the snack area |
| Further development activities | - Extend learning by supporting children to count food during snack and lunch times. |

## Numeracy Story Planner - Tip Tap Went the Crab

Title - Tip Tap Went the Crab
Author - Tim Hopgood


Experiences and Outcomes -
I have explored numbers, understanding that they represent quantities, and I can use them to count, create sequences and describe order. MNU 0-02a I have spotted and explored patterns in my own and the wider environment and can copy and continue these and create my own patterns. MTH 0-13a

| Learning Intention | We are learning: (you could choose from the following) <br> - to name written numbers <br> - to count <br> - to subitise <br> - to copy a pattern |
| :---: | :---: |
| Success Criteria | I can: <br> - look at a number and say its name <br> - say the number in order as I count <br> - touch each object once only as I count <br> - answer 'how many', after I have counted <br> - count objects in any order <br> - say 'how many' without counting <br> - copy a sound pattern |
|  | Introduction- Connect the learning |
| How will you build on children's own experiences to help them enjoy and relate to the text? | Before reading: <br> - Look at front cover and read the title, what can you see? Make predictions based on discussion. <br> - Read the blurb - What sea creature is this? Show me with fingers how many creatures can you see. I wonder what other sea creatures or animals the crab might find. <br> - Discussion of children's own experience of going to the beach/being by the sea. What did you see? Did you find any sea creatures? |
| Development- Learners are actively involved in their learning and demonstrate learning |  |
| What key mathematical concepts will you define or ask children to define? | - Numeral recognition <br> - Principles of counting - stable order, one-one correspondence, cardinality and order irrelevance. <br> - Conceptual subitising - irregular patterns of objects |


| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | - How many altogether? <br> - Subitise - count using just your eyes |
| :---: | :---: |
| How will you make the story interactive? | - Model and encourage children to count by emphasising 1-2-1 correspondence and repeating the last number to reinforce the concept of cardinality. <br> - Model and encourage children to count sea creatures/animals in a different order, did we count the same amount? <br> - Can you guess the number on the next page? What comes after...? <br> - Let's find the ten gold coins together? As you find each coin place an object on a ten frame. How many have we found so far? How many more do we need to get to 10 ? <br> - Invite children to create the sound pattern of the crab using instruments or found objects e.g. sticks and stones |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - What number is this? <br> - Can you show me number 5 in the book? <br> - Can you count how many legs the octopus has? (stable order, order irrelevance and cardinality) <br> - Ask children to count legs on crab starting from different points-clockwise, anticlockwise, left to right, right to left. (order irrelevance) <br> - How can we make the sound pattern of the crab? Can you repeat it, tip-tap, tiptap, tip-tap? |
| Plenary Review and Recall |  |
| Plenary Review and Recall | - Refer to book randomly selecting different animals from different pages, can you name them? How many can you see? Try to subitise, count using just your eyes. <br> - Cover the picture and only have the numeral on show- how many "creatures" on this page? (numeral identification) Let's count to check. <br> - A crab has eight legs- can we all count to eight (stable order principle) <br> - Could I have a volunteer to check our answer? Using the picture of the crab child would apply 1-2-1 correspondence. |
| Further development activities | - Matching game with pictures of animals and numerals <br> - Sing $1,2,3,4,5$ Once I Caught a Fish Alive using your finger <br> - Make your own sea life counting book <br> - Create your own sea adventure by adding creatures to your water tray - how many of each creature can children find. <br> - Treasure hunt - hide coins in the sand, outdoor or indoor space. How many can each child find, give a set number with numbered buckets - can you find 3, can you find 5 etc. |

## Numeracy Story Planner - Where's My Teddy

Title - Where's My Teddy
Author - Jez Alborough


## Experiences and Outcomes -

I have experimented with everyday items as units of measure to investigate and compare sizes and amounts in my environment, sharing my findings with others. MNU 0-11a
I can match objects, and sort using my own and others' criteria. sharing mv ideas with others. MNU 0-20b

| Learning Intention | We are learning: (you could choose from the following) <br> - to compare different sizes <br> - to recognise different sizes <br> - to sort |
| :---: | :---: |
| Success Criteria | I can <br> - say which object/character is bigger. <br> - say which object/character is smaller. <br> - Find the biggest or smallest object/character. <br> - match/sort objects according to size. |

## Introduction- Connect the learning

How will you build on children's own experiences to help them enjoy and relate to the text?

- Look at front cover, read the title, make a prediction about what the story is about.
- Talk about the words describing objects, big, small, tall, short etc
- Talk about their own experiences in life of when size was relevant
- Discuss if they have a teddy they take to bed, and how big is it
- Show examples of things we might use to measure objects e.g. measuring tapes, rulers, string, blocks
- Talk about objects that fit into spaces
- Body parts that fit into clothes e.g. shoes, ones that are too big, ones that are too small
- Raise awareness of size in general
- Create a height chart to measure sizes

Development- Learners are actively involved in their learning and demonstrate learning

What key mathematical concepts will you define or ask children to define?

- Descriptive language defining 'big' and 'small'
- Extending language to measure things using different standards e.g. heavy, light, fat, thin, longer or shorter
- Identifying opposites using the appropriate mathematical language

| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | Big, small, bigger, smaller, tall, short, taller, shorter. |
| :---: | :---: |
| How will you make the story interactive? | - Encourage children to bring their own teddy into nursery to re-read the story <br> - Ask children to predict who has the biggest teddy <br> - Ask children to predict who has the smallest teddy <br> - Use a form of measurement to measure the teddy bears brought in and create a graph. |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - Which teddy is big? <br> - Which teddy is small? <br> - Which teddy will fit in Eddie's bed? <br> - Who should go to bed with the big Teddy? <br> - Who should go to bed with the little Teddy? <br> - Does your teddy fit into your bed? <br> - What other things do we see in the nursery that are 'big' or 'small' |
| Plenary Review and Recall |  |
| Plenary Review and Recall | - Have a few teddy bears of various sizes for children to refer to visually some big and some small <br> - Use relevant questions with the appropriate mathematical language <br> - Treasure basket with matching objects which show big and small differences <br> - Refer to the pictures in the book that show the Big Bear with the Small teddy and vice versa |
| Further development activities | - Continue to build on measure by measuring the children's heights <br> - Play games of hunt the shoe that fits, not the one that is too big or too small <br> - Go on a hunt for BIG and SMALL things in our environment e.g. Big car, small car, big tree, small tree, big dog, small dog |

Title - One is a Snail Ten is Crab

## Author - April Pulley Sayre and Jeff Sayre

Experiences and Outcomes -
I have explored numbers understanding that they represent quantities, and I use them to count, create sequences and describe order. MNU 0-02a

| Learning Intention | We are learning: <br> - to recognise numerals <br> - to count |
| :---: | :---: |
| Success Criteria | I can: (you could choose from): <br> - point to identified numbers <br> - count forwards <br> - touch objects as I count them <br> - recognise the last number name of the last object counted is the total number in the set <br> - count objects in different positions |
| Introduction- Connect the learning |  |
| How will you build on children's own experiences to help them enjoy and relate to the text? | Before reading strategies: <br> - Look at front cover, read the blurb, make a prediction about what the story is about. <br> - Discussion of children's own experience of going to the beach. <br> - Discussion of animals children have at home. <br> - How many feet do we have? Discussion of how many feet different animals have. <br> - Show me with fingers how many feet different animals have. <br> - Identify on number line how many feet different animals have. <br> - Highlight "A Counting by Feet Book" making connections with how many feet the snail and crab have. <br> - Discussion of who has seen a snail or crab. |

Development- Learners are actively involved in their learning and demonstrate learning

What key mathematical concepts will you define or ask children to define?

- "one, two, three, four, five...." (link the word with the numeral- recognising and identifying)
- "and a" (addition- augmentation)
- "or" (another way of representing that quantity)

| What mathematical key words/ concepts will you highlight/introduce? (Max of 5) | - As above and <br> - $20,30,40,50,60,70,80,90,100$ |
| :---: | :---: |
| How will you make the story interactive? | - Have a selection of toys of the same animals as the animals in the book. Select children to hold each animal. Ask children to count the number of leg when referring to their animal. <br> - Encourage children to count using their fingers by modelling slowly emphasising 1-2-1 correspondence and repeating the last number to reinforce the concept of cardinality. |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - What number is this? <br> - Can you show me number 5 in the book? <br> - Can you count how many legs the spider has? (stable order) <br> - How many legs does the crab have? (one-to-one correspondence and cardinal) <br> - Ask children to count legs on crab starting from different points- clockwise, anticlockwise, left to right, right to left. (order irrelevance) |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - Refer to book randomly selecting different animals from different pages and asking who can <br> - Is it the dog and the snail or the insect who has 5 legs? (recognise numerals) <br> - Cover the picture of the spider and only have the text on show- how many legs does the spider have? (numeral identification) <br> - An insect has six legs- can we all count to six (stable order principle) <br> - Could I have a volunteer to check our answer? Using the picture of the insect child would apply 1-2-1 correspondence. <br> - So how many legs did the insect have again? (cardinality) <br> - Count total number of feet for group of children |
| Further development activities | - Matching game with pictures/toys of animals and numerals <br> - Children make their own animal with how ever many legs they choose. |

Title - Tangram Cat

## Author - Maranke Rinck and Martin van der Linden

## Experiences and Outcomes -

I enjoy investigating objects and shapes and can sort, describe and be creative with them.
MTH 0-16a

| Learning Intention | We are learning: (you could choose from the following) <br> - to identify corners <br> - to identify sides <br> - to describe shapes <br> - to sort shapes |
| :---: | :---: |
| Success Criteria | I can: <br> - find/count the corners <br> - find/count the sides <br> - sort shapes by size, number of corners or number of sides |
|  | Introduction- Connect the learning |
| How will you build on children's own experiences to help them enjoy and relate to the text? | The story will be easier to relate to if the children have already experienced playing with 2D shapes. <br> - Set up a simple provocation with 2D shapes that allows the children to explore their properties. The shapes can either be cut up from card or actual Tangrams. There are also Tangrams programmes available online. <br> - Introduce the words "corners and sides" while playing with the shapes. Encourage grouping and comparisons of shapes while children are exploring them by using words such as 'big and small" <br> - Prior to reading the story show the children a large rectangle made of card. Cut the rectangle into Tangrams and explain to them that this is the puzzle the boy will be given in the story. |
| Development- Learners are actively involved in their learning and demonstrate learning |  |
| What key mathematical concepts will you define or ask children to define? | - 2D shape properties- straight side, corner. <br> - Grouping and comparisons |


| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | - Big/small <br> - Corner (point), Sides (straight) <br> - Square, triangle |
| :---: | :---: |
| How will you make the story interactive? | - The value of this story is in the link to concrete materials. Actual Tangrams can be bought but cut pieces of card also work well. <br> - Allow children to explore the shapes freely and create independently. |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - Repeat the key mathematical vocab - sides and corners while describing the pictures. <br> E.g. "The cat's ears are triangles. They have 3 sides and 3 corners. Let's count to check" <br> "The big square has been used for the house." |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - Use shapes as stamps for painting. <br> - Cut and stick shapes. |
| Further development activities | - Make shapes out of twigs and sticks in the outside area. Notice and name properties such as straight, curved, corner, side etc |

## Numeracy Story Planner - The Best Food in the Forest

Title - The Best Food in the Forest

Author - Mi-Ae Lee and Yeon-Joo Kim

## Experiences and Outcomes -

I can collect objects and ask questions to gather information, organising and displaying my findings in different ways. MNU 0-20a

| Learning Intention | We are learning: <br> - to use our counting to answer questions <br> - to use the pictures to answer questions |
| :---: | :---: |
| Success Criteria | I can: <br> - count the pictures to answer questions (How many) <br> - answer questions using the pictures (Who, what) |
|  | Introduction- Connect the learning |
| How will you build on children's own experiences to help them enjoy and relate to the text? | Before reading strategies: <br> - Look at front cover, read the blurb, make a prediction about what the story is about. <br> - Discussion of children's own favourite food/ingredients <br> - Discussion of different cooking styles (real life frying pans, grills and pots). <br> This story relies on children having fairly well-developed counting skills. |

Development- Learners are actively involved in their learning and demonstrate learning

| What key mathematical concepts will you define or ask children to define? | - Gathering information <br> - Organising information <br> - Displaying information <br> - Comparing amounts- most, least <br> - Decision making based on information. |
| :---: | :---: |
| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | - How many <br> - More <br> - Less <br> - Most <br> - Fewest |


| How will you make the story interactive? | This story works best when it can be linked to the real-life experience of data handling. <br> - Ideas for graphs/charts include: Favourite Nursery Rhyme/story, how you get to school, pets, snack choices, bird watching chart etc |
| :---: | :---: |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - Who wanted a sweet dish? <br> - I wonder how many chose salty? <br> - I wonder why Chef Bear decided to use meat and vegetables? |
| Plenary Review and Recall |  |
| Plenary Review and Recall | - What questions does Chef bear ask the animals? <br> - I wonder what else Chef bear could ask? <br> - I wonder why Chef Bear made the animals stand in a straight line/put the food on the mat / gave the animals fridge magnets? |
| Further development activities | - Create graphs or charts to help with decisions in the Nursery. E.g. Where should we move the book corner to? What snack will we get for Friday? Which of these three stories will we read at the end of the day? Shall we have snack inside or outside? <br> - Ask the children what information they would like to collect. - Make suggestions of how to best display information. <br> - Collect information from home and display. E.g. what pets do you have at home, how many people live in your house? Use the display to generate conversations in the playroom. |

Numeracy Story Planner - Ten in the Bed

Title - Ten in the Bed

## Author - Penny Dale




#### Abstract

Experiences and Outcomes - I have explored numbers, understanding that they represent quantities and I can use them to count, create sequences and describe order. MNU 0-02a I use practical materials and can 'count on and back' to help me understand addition and subtraction, recording my ideas and solutions in different ways. MNU 0-03a


| Learning Intention | We are learning: (you could select from the following) <br> - to count backwards from 10 <br> - to name written numbers <br> - to take away 1 |
| :---: | :---: | :---: |
| Success Criteria | I can: <br> - say numbers backwards from 10 <br> - say which number comes before <br> - look at a number and name it <br> - count 'how many are left' by touch counting each object only once |

## Introduction- Connect the learning

How will you build on children's own experiences to help them enjoy and relate to the text?

- Before reading strategies-
- The nursery rhyme can be taught to the children before the book is introduced.
- This can be done in many ways: fingers can represent the ten in the bed, ten children, puppets or cuddly toys.
- You can also take it outside using 10 children and any resources you have to represent the bed (even a simple chalk drawing on the ground would work)
- When introducing the book be mindful that some children won't know what the toys are (e.g. Nellie the Elephant). Draw attention to each animal as they fall out the bed. This is especially pertinent for EAL learners.
- Ask children if they ever have lots of toys in their bed. Draw attention to how 'the little one" might feel. Is he squashed, too hot, in a grumpy mood? Relate to how they feel when there isn't enough space.

Development- Learners are actively involved in their learning and demonstrate learning

What key mathematical concepts will you
define or ask children to define?

- One less.
- Counting backwards.
- Pointing to a number line while telling the story can help with this. Also encouraging children to use their fingers (without distracting from the story!)
- Reinforce stable order, 1-2-1 and order irrelevance throughout the telling of the story by repeatedly counting how many are left in the bed.

|  | - "How many altogether?" or "There are six left on the bed, I wonder how many are on the floor?" etc |
| :---: | :---: |
| What mathematical key words/ concepts will you highlight/introduce? <br> (Max of 5) | - Less, more, altogether. <br> - How many? |
| How will you make the story interactive? | - Have a selection of toys of the same animals as the animals in the book. Select children to hold each animal. <br> - Encourage children to count using their fingers by modelling slowly emphasising 1-2-1 correspondence and repeating the last number to reinforce the concept of cardinality. <br> - Use a familiar number line to reinforce numeral recognition. <br> - Repeat activities from the introduction. |
| What <br> statement/questions will you ask when reading aloud to introduce key mathematical vocabulary? | - How many are in the bed? <br> - How many are left? <br> - How many are now on the floor? <br> - Do you think there's now more room on the bed? |
|  | Plenary Review and Recall |
| Plenary Review and Recall | - Ask children to tell you or show you how many. Use the number line or number fans if confident in recognising numerals. <br> - Repeat the rhyme during rhyme time without the book. Use fingers, toys or children as concrete objects. <br> - Apply concepts to other context such as 10 Green bottles to see if children transfer knowledge. (A familiar number line will help scaffold this) |
| Further development activities | - Use different animals to re-enact story. Tap into children's interests E.g. dinosaurs, cars etc <br> - Make beds out of recycled materials and re-tell story using their own characters (Links to storytelling) |

