## ADDITION AND

 SUBTRACTION STRATEGIES Hardout
## ADDITION \& SUB TRAC TION mental strateges

## I can COUNT ITEMS

- Counting objects and identifying how many

- One-to-one correspondence and counting to ten


- Identifying which group has more


I can COUNT ITEMS ONE AT A TIME TO ADD/ SUBTRACT

- Using concrete objects and fingers to add and subtract
- Using one to one counting to match number words and objects

3 three

- Making numbers up to 10 using two groups



## I can USE 2-DIGIT FLEXIBLE STRATEGIES

- Applying knowledge of 10 as a unit to add and subtract numbers $8+25=33 \quad 63+32=95 \quad 13+29=42$
 JUMP SPLIT COMPENSATION
- Manipulating tens and ones flexibly to add and subtract e.g. $45+37=82$

Add tens to $45-55,65,75$. Partition the 7 into 5 and 2. Add the 5 to make

- Using part-whole knowledge of numbers to 20 to calculate 2 digit addition and subtraction
e.g. $53-27=26$

Regroup 53 ( 40 and 13) and $27(20$ and 7)
$40-20=20 \quad 13-7=6 \quad 20+6=26$

## I can USE 3-DIGIT FLEXIBLE STRATEGIES

- Flexibly use hundreds, tens and ones to add and subtract e.g. $250+457=707$.

Ungroup 250 into 2 hundreds, 5 tens. $457+200=657$.
Then $657+50=707$.

- Manipulate and regroup place value of numbers to add 3-digit numbers and beyond
e.g. $650+550=1200$

Regroup 650 as 600 and $50.50+550=600$. Double $600=1200$.

ip place value of numbers to subtract
30 and 300 for mental computation ion, including trading or exchanging units

$$
\begin{array}{ll}
\text { alues } & { }^{2 / 14} \\
\text { z the } 4 \text { larger by trading a } & 17 \\
\text { nfrom the tens column. } & \frac{17}{17}
\end{array}
$$

## I can COUNT ON \& BACK TO ADD/SUBTRACT

- Hold the bigger number in your head and count on to add or back to subtract. $5+4: " 5 \ldots, 7,8,9$. The answer is 9""

10-3 "10... 9, 8, 7. The answer is 7"

- Using numbers as completed counts when solving missing addend problems.
$7+?=10: " 7 . .8,9,10$. The answer is 10 "
$6-?=3$ " $6 \ldots 5,4,3$. I counted back 3".


## I can USE FLEXIBLE STRATEGIES TO TEN

- Using non count by one strategies to add/subtract


DOUBLES \& $\begin{aligned} & 3+3=6 \\ & 4+4=8\end{aligned}$ BRIDGE TO $10+2=12$
NEAR DOUBLES TEN

- Partitioning whole numbers up to 10

$$
7 \text { equals... } 6+1 \quad 5+2 \quad 4+3 \quad 3+2+1
$$

- Recognising inverse operations for addition/subtraction

$$
2+4=6
$$

## Black and White Version also included

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(1) 8

$\because \cdot$
$3+$
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3 $\square$ three

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## I can USE 2-DIGIT FLEXIBLE STRATEGIES

- Applying knowledge of 10 as a unit to add and subtract numbers

| $8+25=33$ | $63+32=95$ |  |  | $13+29=42$ |
| :---: | :---: | :---: | :---: | :---: |
| $\overbrace{\sim}^{+5}$ |  | 32-30 | $60+30=90$ | Round 29 up to 30 . |
| $23 \quad 33$ |  |  | $\begin{aligned} 3+2 & =5 \\ 90+6 & =95 \end{aligned}$ | 13 $43-1=42$ |
| JUMP |  | SPLIT |  | COMPENSATION |

- Manipulating tens and ones flexibly to add and subtract


## e.g. $45+37=82$

Add tens to $45.55,65,75$. Partition the 7 into 5 and 2. Add the 5 to make 80. Then to 2 to make 82.

- Using part-whole knowledge of numbers to 20 to calculate 2 digit addition and subtraction
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Regroup 650 as 600 and $50.50+550=600$. Double $600=1200$.

- Manipulate and regroup place value of numbers to subtract e.g. $3000-260=2740$

Partition 3000 into 2700 and 300 for mental computation.

- Regroup for subtraction, including trading or exchanging units with different place values

34-17=17 $\begin{gathered}\text { Make the } 4 \text { larger by trading a } \\ \text { ten from the tens column. }\end{gathered} \quad \frac{17}{17}$ 10... $9,8,7$. The answer is $7^{\prime \prime}$ counts when solving missing addend $7.8,9,10$. The answer is $10^{11}$
$5,4,3$. I counted back $3^{\prime \prime}$.

## STRATEGIES TO TEN

egies to add/subtract


## BUMP IT UP: MATHS

## If this handout is useful, you might like to check out my Ninja Maths Bump It Up Posters!

Posters are also editable so thi select your own colour


- I can hold the bigger nu head and count on to a $5+4: 5,6,7,8,9$ The ans - I can use numbers as $c$ counts when solving pre $6+3$ : Starts at 6.6 .7 .8


## GREEN NIN

- I can use counting on tu avive missing addends.
$7+$ ? = 10:



## PURPLE NINJAS

- I can use objects and my fingers to add and subtract.
 I can use one to one counting to match number words and objects. 3 three

I can make numbers up to 10 using two groups. $6+4=10$


Mental addition \& subtraction strategies: 8 LEVELS


Aligned to the Australian National Numeracy Learning Progressions.


# Other FREE handouts that may be useful: 

## GAMES \& ACTIVITIES TO

 buld number sklls AT HOMEGENERAL NUMBER SENSE AC TMITIES
Incidental counting e.g. how many buttons on your top, how many pegs to hang out the washing, how many animals in this book, how many red cars can we spot, how many houses can we count? Also getting children to count out groups of objects e.g. count out 5 apples for me.

Counting forward and backwards as you walk or drive places. Begin with counting forward and backwards by is. You could progress to counting forward and backwards by $2 \mathrm{~s}, 5 \mathrm{~s}$ or 10 s .
Counting books and songs on YouTube.
Number hunts- spot them in your environment e.g. on letterboxes, at the post office, in the shops.

Bingo games- numeral ID, number words, counting groups of objects.


Board games- counting forward and backwards, recognising dot dice patterns.

Grouping and sharing e.g. I have four jellybeans to share with you and your brother. How many will you both get?
Use empty egg cartons to practise simple addition and subtraction.
Building Numbers: use Lego, Duplo, blocks, rocks, beads, playdough or anything you like.
Get Active- count the number of hops/skips/jumps, how many times can we throw the ball back and forth etc.

## DICE GAMES

Whoever rolls the highest number wins the counter
Dice Addilion:
Roll 2 dice and add together. Highest number wins a counter. Roll 3 dice and add together. Encourage children to use the most effective strategy (e.g. doubles, friends of 10 ).
Roll 4 dice and turn into 2 sets of 2 digit numbers, then add together. E.g. if you roll a 3, 5, / and 2, then your problem is $35+12$. Highest total wins the counter. Encourage the use of the most
effective strategy.
Race to Zero- Start with a certain number of points (e.g. 20, 50, 100 ). Take it in turn to roll the dice and subtract from your number. With larger totals, encourage children to use the most effective strategy.

## CARD GAMES

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## 0

Games to practise numeral ID, number words and counting groups of
objects. Use playing cards or write onto flash cards.
Snap
Go Fish
Memory
Create Bingo boards with playing cards (e.g. $3 \times 3$ sets of cards)
Card Flip- identify the number and highest number wins both cards. Card Flip Addition

2 cards- highest total wins all four cards
3 cards- highest total wins all six cards. Encourage the use of the most effective strategy.
4 cards- turn into 2 sets of 2 digit numbers and then add together. Eg if you turn over a $4,5,2$ and 6 , then your problem is $45+26$. Highest total wins all 8 cards. Encourage the use of the most effective strategy.
Card Flip addition with 2 or 3 cards- highest total wins all the cards- encourage the use of the most effective strategy.
Card Flip Subtraction
2 cards- take away from the highest number. First to solve wins all the cards.
3 cards-add the first two cards together and then take away the third. First to solve wins all the cards.
4 cards- create two sets of 2 digit numbers and take the smaller number away. First to solve wins all the cards.

ACTMITES TO HELP BUILD
early literacy skels AT HOME
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 When readng books, ask your chld questors ccout whic
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Whang
What what , when where, haw and why question
 PRE-READING SKILLS (PHONOLOGICAL AWAR - Revyming octurtres


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 PLONICS





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Parent Handout: Great for Parent Interviews!

HOME TEAdING
parent handout

## SiGHT W@RDS <br> parent handout


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## ADDIIION \＆SUB TRAC TION

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6+4=10
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I can COUNT HIDDEN ITEMS

- Visualising covered objects and counting to find how many.


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- Hold the bigger number in your head and count on to add or back to subtract. $5+4:$ " $5 \ldots, 6,7,8,9$. The answer is 9". 10-3 "10... 9, 8, 7. The answer is 7"
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$\square$
DOUBLES \& TEN

NEAR DOUBLES


- Partitioning whole numbers up to 10 7 equals... $6+1$

$$
5+2
$$

$$
4+3
$$

$$
3+2+1
$$

- Recognising inverse operations for addition/subtraction

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ADDITION $\rightleftarrows$ SUBTRACTION

$$
6-4=2 \quad 6-2=4
$$

## I can USE 2-DIGIT FLEXIBLE STRATEGIES

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$8+25=33$


JUMP
$63+32=95$
$63-60 \quad 32=30 \begin{gathered}60+30=90 \\ 3+2=5 \\ 90+6=95\end{gathered}$ SPLIT
$13+29=42$
Round 29 up to 30. $13+30=43$ $43-1=42$

COMPENSATION

- Manipulating tens and ones flexibly to add and subtract e.g. $45+37=82$

Add tens to $45 . . .55,65,75$. Partition the 7 into 5 and 2. Add the 5 to make 80. Then to 2 to make 82.

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- Partitioning whole numbers up to 10

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7 \text { equals... } \quad 6+1 \quad 5+2 \quad 4+3 \quad 3+2+1
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$$
\text { ADDITION } \rightleftarrows \text { SUBTRACTION } \quad 6-4=2 \quad 6-2=4
$$

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\end{array}
$$

$$
\begin{aligned}
& 2314 \\
& 17 \\
& \hline 17
\end{aligned}
$$

# PS- are you Frothin' On Phonics yet?! 



For a comprehensive guide of all you need to effectively and systematically teach spelling and phonics in your classroom, download your FREE copy of the \#frothinonphonics handbook.
It is 282 pages of content knowledge, teaching tips, activity ideas, displays and more!

To find lots more phonics resources, check out the \#frothinonphonics section of my TpT.

## Subscribe to

 www.misslearningbee.com for freebies, teaching tips, lesson ideas and morel

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## 

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