

*Helping Children to Learn  
Information Booklet for  
Parents*

*Numeracy in Year 2*



## WALT AND WILF?



### **A Little bit of Theory..**

We want to encourage our students to be actively involved in their learning because research shows that they are more motivated when they understand not just the task but the learning objective of the task. We want them to understand what they are being asked to do and what we hope they will learn in order to help them to make better decision about how they tackle a set task.

Learning is more effective if they are asked to help create the success criteria (*i.e. How will we know we've achieved this?*) because they can be clear about how their work will be judged and what the teacher wants to see in the finished task. By inviting children to help create the success criteria, we are involving them in their own learning and encouraging them to evaluate their performance.

Children need to know why they are learning something so that they can see how their work fits into the "bigger picture".



***WALT is short for We Are Learning Today...***

These are the learning objectives for the lesson.



***WILF is short for What I'm Looking for...***

These are the success criteria against which the children and teacher judge how well they are doing.

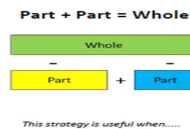
| Year 2   |  |
|--|--|
| <p style="text-align: center;"><b>WALT</b></p> <p style="text-align: center;">We are learning to...</p> <p style="text-align: center;">Read the time to the hour, half hour, quarter to and quarter past on an analogue clock.</p> | <p style="text-align: center;"><b>WILF</b></p> <p style="text-align: center;">What I'm looking for..</p> <p style="text-align: center;">I know where the hands point for "o'clock", half past, quarter past and quarter to the hour.</p> |

You can help by asking your child **"What did you learn today?"** rather than **"What did you do today?"**

| Problem Solving Strategies Taught Across Year 2                               |  |  |   |
|---|--|--|---|
| Term 1  | Term 2   | Term 3   | Term 4  |
| Part-Part-Whole<br>Make a list<br>Draw a picture<br>Benchmark—<br>Probability | Focus on parts<br>Patterns<br>Make a list<br>Part-Part-Whole | Benchmark—<br>number line<br>Draw a picture<br>Focus on parts<br>Part-Part-Whole | Patterns<br>Make a list<br>Benchmark—<br>time/location<br>Part-Part-Whole |

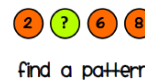
**Part-Part-Whole**

All addition and subtraction problems can be represented using the Part-Part-Whole Model. The Part-Part-Whole strategy enables students to identify the correct operation and represent the situation using the appropriate mathematical numbers and symbols.



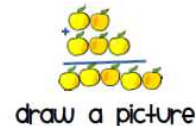
**Patterns**

Look at a series of objects, colours or numbers to see if you can find a pattern. The pattern should repeat and may not always be obvious.



**Draw a Picture**

Drawing a picture gives you a visual and helps you to see the problem and find a solution.



**Number Sentences**

Change the word problem into a number problem to solve it.

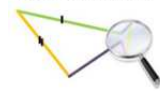
$$4 + 2 = 6$$

write a number sentence

**Focus on Parts**

Analyse the component parts that form the object - their shape, size and placement, considering how the components fit and hold together.

See the parts to match the whole

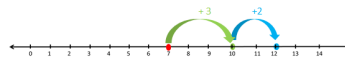


**Benchmark - Number line**

A benchmark is a standard point of reference against which things may be compared.

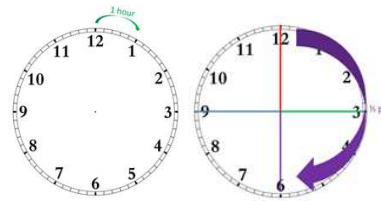
*Benchmarking to 10 is fundamental to developing mental calculation skills*

EG.  $7 + 5 =$



**Benchmark - Time/Location**

Recognise the numbers on the clock face, represent 2 different values depending on which hand is pointing to them: Hours or minute intervals



**Benchmark - Probability**

Identify every day events that involve chance, describe chance outcomes, and events as likely, unlikely, certain, or impossible.

## NUMBER FACTS

Students in year 2 will investigate number sequences initially those increasing and decreasing by twos, threes, fives and ten from any starting point, and then moving to other sequences

They will develop fluency and confidence with numbers and calculations by saying number sequences.

## WARMUPS

**Goal:** Warmups are designed to promote fluency with core skills in a variety of contexts (to move core curriculum content from short term memory to long term memory).

Usually delivered at the start of a Maths block. A typical numeracy warmup may include:

- Number facts
- Times tables
- Counting
- Four processes
- Place Value
- Rules, formulae
- Maths vocabulary

## Concepts taught in Year 2 - Australian Curriculum

### Term 1

#### ***Number and place value***

- ◆ count collections in groups of ten
- ◆ represent two-digit numbers, read and write two-digit numbers
- ◆ connect two-digit number representations
- ◆ partition two-digit numbers
- ◆ use the twos, fives and tens counting sequence
- ◆ investigate twos, fives & tens number sequences
- ◆ represent addition and subtraction
- ◆ use part-part-whole relationships to solve problems
- ◆ connect part-part-whole understanding to number facts
- ◆ recall addition number facts
- ◆ add strings of single-digit numbers
- ◆ add 2-digit numbers
- ◆ represent multiplication and division
- ◆ solve simple multiplication and division problems

#### ***Using units of measurement***

- ◆ order days of the week and months of the year
- ◆ use calendars to record and plan significant events
- ◆ connect seasons to the months of the year
- ◆ compare lengths using direct comparison
- ◆ compare lengths using indirect comparison
- ◆ measure and compare lengths using non-standard units

#### ***Chance***

- ◆ identify every day events that involve chance
- ◆ describe chance outcomes
- ◆ describe events as likely, unlikely, certain, impossible

#### ***Data representation and interpretation***

- ◆ collect simple data, record data in lists and tables
- ◆ display data in a picture graph
- ◆ describe outcomes of data investigations

## Concepts taught in Year 2 - Australian Curriculum

### Term 2

#### ***Number and place value***

- ◆ recall addition & subtraction number facts
- ◆ represent two-digit numbers
- ◆ partition two-digit numbers into place value parts
- ◆ represent addition situations
- ◆ describe part-part-whole relationships
- ◆ add & subtract single and two-digit numbers
- ◆ solve addition & subtraction problems
- ◆ represent multiplication, represent division
- ◆ solve simple grouping and sharing problems

#### ***Fractions and decimals***

- ◆ represent halves & quarters of shapes
- ◆ represent halves & quarters of collections
- ◆ represent eighths of shapes and collections
- ◆ describe the connection between halves, quarters & eighths
- ◆ and solve simple number problems involving halves, quarters & eighths

#### ***Money and financial mathematics***

- ◆ describe the features of Australian coins
- ◆ count coin collections
- ◆ identify equivalent combinations
- ◆ identify \$5 & \$10 notes
- ◆ count small collections of coins & notes

#### ***Patterns and algebra***

- ◆ identify the 3s counting sequence
- ◆ describe number patterns
- ◆ identify missing elements in counting patterns
- ◆ solve simple number pattern problems

## Concepts taught in Year 2 - Australian Curriculum

### Term 2 Continued

#### ***Using units of measurement***

- ◆ use a calendar
- ◆ identify the number of days in each month
- ◆ relate months to seasons
- ◆ tell time to the quarter hour
- ◆ compare and order area of shapes and surfaces
- ◆ cover surfaces to represent area
- ◆ measure area with informal units

#### ***Shape***

- ◆ recognise and name familiar 2D shapes
- ◆ describe the features of 2D shapes
- ◆ draw 2D shapes & describe the features of familiar 3D objects

#### ***Location and transformation***

- ◆ interpret simple maps of familiar locations
- ◆ describe 'bird's-eye view'
- ◆ use appropriate language to describe locations
- ◆ use simple maps to identify locations of interest

## Concepts taught in Year 2—Australian Curriculum

### Term 3

#### ***Number and place value***

- ◆ count to and from 1000
- ◆ represent three-digit numbers
- ◆ partition three-digit numbers
- ◆ compare and order three-digit numbers
- ◆ read and write three-digit numbers
- ◆ recall addition number facts
- ◆ identify related addition and subtraction facts
- ◆ add and subtract with two-digit numbers
- ◆ represent multiplication and division
- ◆ use multiplication to solve problems
- ◆ count large collections



## Concepts taught in Year 2 - Australian Curriculum

### Term 3 continued

#### ***Fractions and decimals***

- ◆ divide shapes and collections into halves, quarters and eighths
- ◆ solve simple fraction problems

#### ***Money and financial mathematics***

- ◆ count collections of coins & notes
- ◆ make & compare money amounts
- ◆ read & write money amounts
- ◆ compare money amounts

#### ***Using units of measurement***

- ◆ compare and order objects
- ◆ measure length, area and capacity using informal units
- ◆ identify purposes for calendars
- ◆ explore seasons & calendars

#### ***Location and transformation***

- ◆ describe the effect of single-step transformations including turns
- ◆ flips and slides
- ◆ identify turns, flips and slides in real world situations

## Concepts taught in Year 2 - Australian Curriculum

### Term 4

#### ***Number and place value***

- ◆ recall addition and subtraction number facts
- ◆ identify related addition and subtraction facts
- ◆ add and subtract with 2-digit and 3-digit numbers
- ◆ use place value to solve addition and subtraction problems
- ◆ represent multiplication and division
- ◆ connect multiplication and division

## Concepts taught in Year 2 - Australian Curriculum

### Term 4 continued

#### ***Fractions and decimals***

- ◆ identify halves, quarter and eights of shapes and collections

#### ***Using units of measurement***

- ◆ directly compare mass of objects
- ◆ use informal units to measure mass, length, area and capacity of objects and shapes
- ◆ compare and order objects and shapes based on a single attribute
- ◆ tell time to the quarter hour

#### ***Shape***

- ◆ draw two-dimensional shapes,
- ◆ draw two-dimensional shapes with straight sides and curved lines
- ◆ describe two-dimensional shapes
- ◆ describe three-dimensional objects

#### ***Location and transformation***

- ◆ identify half and quarter turns
- ◆ represent flips and slides
- ◆ interpret simple maps

#### ***Chance***

- ◆ explore the language of chance
- ◆ make predictions based on data displays

#### ***Data representation and interpretation***

- ◆ Use data to answer questions, represent data

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