|  |
| :--- |
| Level 1 Number and Algebra |
| Students count to and from 100 and locate these numbers on a |
| number line. They partition numbers using place value and carry |
| out simple additions and subtractions, using counting strategies. |
| Students recognise Australian coins according to their value. |
| They identify representations of one half. Students describe |
| number sequences resulting from skip counting by $2 \mathrm{~s}, 5 \mathrm{~s}$ and |
| 10s. They continue simple patterns involving numbers and |
| objects with and without the use of digital technology. |
| Level 2 Number and Algebra |
| Students count to and from, and order numbers up to 1000. |
| They perform simple addition and subtraction calculations, using |
| a range of strategies. They find the total value of simple |
| collections of Australian notes and coins. Students represent |
| multiplication and division by grouping into sets and divide |
| collections and shapes into halves, quarters and eighths. They |
| recognise increasing and decreasing number sequences involving |
| $2 s, 3 s, 5 s$ and 10s, identify the missing element in a number |
| sequence, and use digital technology to produce sequences by |
| constant addition. |

## Working towards achievement of standards

## Level 1 Measurement and Geometry <br> Students use informal units of measurement to

 order objects based on length, mass and capacity. They tell time to the half-hour and explain time durations. Students describe two-dimensional shapes and three-dimensional objects. They use the language of distance and direction to move from place to place.
## Level 2 Measurement and Geometry

Students order shapes and objects, using informal units for a range of measures. They tell time to the quarter hour and use a calendar to identify the date, days, weeks and months included in seasons and other events. Students draw two-dimensional shapes, specify their features and explain the effects of one-step transformations. They recognise the features of three-dimensional objects. They interpret simple maps of familiar locations.

Level 1 Statistics and Probability
Students describe data displays. They ask questions to collect data and draw simple data displays. Students classify outcomes of simple familiar events.

## Level 2 Statistics and Probability

Students collect data from relevant questions to create lists, tables and picture graphs with and without the use of digital technology. They interpret data in context. Students use everyday language to describe outcomes of familiar events

## Links to Capability \& Digital Technology descriptors

## Critical and Creative Thinking

By the end of Level 2, students use and give examples of different kinds of questions. Students generate ideas that are new to them and make choices after considering personal preferences. Students identify words that indicate components of a point of view. They use reasons and examples for different purposes. Students express and describe thinking activity. They practise some learning strategies. Students demonstrate and articulate some problem-solving approaches.

## Digital Technologies

By the end of Level 2, students identify how common digital systems are used to meet specific purposes. Students use digital systems to represent simple patterns in data in different ways and collect familiar data and display them to convey meaning. Students design solutions to simple problems using a sequence of steps and decisions. They create and organise ideas and information using information systems and share these in safe online environments.

## EAGLEHAWK NORTH PRIMARY SCHOOL - GRADE 1/2 NUMERACY PLANNER - TERM 2

| Teaching and Learning resources <br> - Booker - Teaching Primary Mathematics <br> - Essential Assessment <br> - Visible Learning | Teaching and Learnin <br> - Exploratory <br> - Explicit mod <br> - Small group <br> - Independent <br> - Reflective lea | ing approaches Learning delling instruction t learning earning | Special events and dates <br> - ANZAC day <br> - Mother's Day <br> - King's Birthday |
| :---: | :---: | :---: | :---: |
| Performance outcome/Product of learning <br> - Independent learners <br> - Fluency of number facts <br> - Efficient mental strategies <br> - Efficient written strategies <br> - Relating to real life situations <br> - Risk taking with learning <br> - Productive peer learning |  | Vocabulary Expectations <br> Addition: and, add, addition, plus, add to, more than. <br> Subtraction: take away, subtraction, less than. <br> Money: coins, notes, cents, dollars, how many, how much, change, trade. <br> Probability: chance, statistics, attribute, likelihood, possible outcomes, certain, likely, possible, unlikely, impossible, experiment. <br> Mass: grams, kilograms, tonne, more than, less than, estimate, weigh, measure, weight, heavy, light. <br> Length: centimetres, metres, kilometres, length, long, short, tall, small, longest, shortest, middle point, number line. <br> 3D Shape: vertices, vertex, edges, face, 2 dimensional, 3 dimensional, cube, sphere, prism, pyramid. <br> Place Value: ones, tens, hundreds, thousands, tens of thousands, number line. |  |


| TUNE <br> IN | TARGET TEACH | TRY OUT | TUNE UP | TAKE OFF | $\begin{gathered} \text { TIE } \\ \text { TOGETHER } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Weeks \& Dates | Learning focus |  |  | Assessment |  |
|  | Number \& Algebra | Measurement \& Geometry | Statistics \& Probability |  |  |
|  | Place value warm up game: Round the Gard Each pair get a round the garden place mat, Students to start anywhere on the board (as their counter move and when they land on marker so they can see that the ones PV did | using 2 and 3 digit. 10-99, 100-999 wo 10 sided dice, 2 mini whiteboard, two co $t$ is continuous) and roll the dice and have a 10 more" then the student needs to change 't change but the tens value did. | nters. tarting number. Then roll 1 dice to make heir starting on the mini whiteboard using a |  |  |
| Week 1 - <br> Number and <br> Algebra: <br> Operations: <br> Addition <br> Measurement <br> \& Geometry: <br> Mass | Level 1: <br> Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts (VCMNA089) <br> Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts (VCMNA089) <br> Teach students to: <br> - estimate <br> - understand commutative strategy <br> - double single and double digits <br> - use near doubles to 10 \& 20 <br> - build to the next 10 <br> - use factors of 100 to add and subtract <br> Level 2: <br> Explore the connection between addition and subtraction (VCMNA106) | Level 1: <br> Measure and compare the lengths, masses and capacities of pairs of objects using uniform informal units (VCMMG095) <br> Teach students to: <br> - use measurement language, Eg. heavy, light, long, short, tall, full, less, more <br> - lift to compare mass of objects <br> - the importance of a unified unit of measurement when measuring and comparing objects <br> Level 2: <br> Compare masses of objects using balance scales (VCMMG116) <br> Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units (VCMMG115) <br> Teach students to: | Lessons to add to weekly planner: <br> - x1 lesson essential assessment <br> - x1 mathletics session for teachers to do addition and subtraction interview <br> - x1 addition <br> - x1 mass <br> Explicitly teach: <br> - introduce math thinking moves <br> - estimate <br> - introduce build to the next ten strategy eg. $17+5$ <br> - introduce mass which one weighs more than (estimation) <br> - students explore using balance scales (when we do mass we have to teach this 2 classrooms at a time) <br> - modelling on a number line | Pre- <br> Assessment: <br> Essential <br> Assessment <br> Measurement and <br> Geometry: All <br> Addition and <br> subtraction |  |


|  | Solve simple addition and subtraction problems using a range of efficient mental and written strategies (VCMNA107) <br> Solve problems by using number sentences for addition or subtraction (VCMNA113) <br> Teach students to: <br> - estimate <br> - connect add and subtract using equivalent number sentences <br> - represent sums on a number line <br> - understand compensate strategy <br> - double 1, 2, 3 digits <br> - use near doubles to 100 <br> - use factors of 1000 to add and subtract. | - use measurement language <br> - use balance scales <br> - weigh objects to determine mass <br> - estimate more than or less than <br> - measure using metric system. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Place value warm up game: Number talk $\begin{aligned} & 7+5,12+9,25+7,106+7,315+8 \\ & 8+4,19+4,27+5,103+9,217+6 \\ & 9+3,19+3,56+5,107+8,423+8 \\ & 7+9,15+9,73,9,111+9,366+7 \\ & 6+5,14+8,37+5,114+7,444+9 \end{aligned}$ <br> Let students use thinking math moves | ms we can use on the board |  |  |
| Week 2- <br> Number and <br> Algebra: <br> Operations: <br> Addition <br> Measurement <br> \& Geometry: <br> Mass | Level 1: <br> Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts (VCMNA089) <br> Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts (VCMNA089) Teach students to: <br> - estimate | Level 1: <br> Measure and compare the lengths, masses and capacities of pairs of objects using uniform informal units (VCMMG095) <br> Teach students to: <br> - use measurement language, Eg. heavy, light, long, short, tall, full, less, more <br> - lift to compare mass of objects | Lessons to add to weekly planner: <br> x3 addition <br> x2 mass <br> Explicitly teach: <br> - math thinking moves <br> - estimate <br> - doubles <br> - near doubles <br> - factors of $10,100,1000$ to add <br> - exploratory measurement of weight <br> - recording heaviest to lightest |  |

## EAGLEHAWK NORTH PRIMARY SCHOOL - GRADE 1/2 NUMERACY PLANNER - TERM 2



## EAGLEHAWK NORTH PRIMARY SCHOOL - GRADE 1/2 NUMERACY PLANNER - TERM 2

## Number and Algebra: <br> Operations: Subtraction <br> Measurement <br> \& Geometry:

Length
strategies including counting on, partitioning and rearranging parts (VCMNA089)
Represent and solve simple addition and
subtraction problems using a range of strategies including counting on, partitioning and rearranging parts (VCMNA089)

## Teach students to

- estimate
- known facts
- double single and double digits
- use near doubles to 10 \& 20
- build to the next 10
- use factors of 100 to add and subtract


## Level 2:

Explore the connection between addition and subtraction (VCMNA106)

Solve simple addition and subtraction problems using a range of efficient mental and written strategies (VCMNA107)

Solve problems by using number sentences for addition or subtraction (VCMNA113) Teach students to:

- estimate
- connect add and subtract using equivalent number sentences
- represent sums on a number line
- understand compensate strategy
- double 1, 2, 3 digits
- use near doubles to 100
- use factors of 1000 to add and subtract


## Teach students to

- use measurement language, Eg. long, short, tall, full, less, more
- the importance of a unified unit of measurement when measuring and comparing objects


## Level 2:

Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units (VCMMG115)

## Teach students to

- use measurement language
- estimate more than or less than
- measure length using historical measurements: handspan
- measure using metric system


## Explicitly teach:

- estimate
- link addition strategies with subtraction strategies
- break down to the last 10
- reverse factors of $10,100,1000$
- verbal stories using manipulatives
- informal units of measurement:handspan
- shortest to tallest in the room
- modelling on a number line

|  | Place value warm up game: Number talk $\begin{aligned} & 6+6,33+33,222+222 \\ & 7+6,34+35,344+346 \\ & 8-3,17-4,87-5,567-6 \\ & 3+7,16+4,72+8,673+7 \\ & 7-4,19-7,96-3,548-5 \\ & \hline \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Week 4 - <br> PAT-M <br> Number and <br> Algebra: <br> Operations: <br> Subtraction <br> Measurement <br> \& Geometry: <br> Length <br> Mother's Day | Level 1: <br> Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts (VCMNA089) Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts (VCMNA089) <br> Teach students to: <br> - estimate <br> - understand commutative strategy <br> - double single and double digits <br> - use near doubles to 10 \& 20 <br> - build to the next 10 <br> - use factors of 100 to add and subtract <br> Level 2: <br> Explore the connection between addition and subtraction (VCMNA106) <br> Solve simple addition and subtraction problems using a range of efficient mental and written strategies (VCMNA107) <br> Solve problems by using number sentences for addition or subtraction (VCMNA113) <br> Teach students to: <br> - estimate <br> - connect add and subtract using equivalent number sentences | Level 1: <br> Measure and compare the lengths, masses and capacities of pairs of objects using uniform informal units (VCMMG095) <br> Teach students to: <br> - use measurement language, Eg. long, short, tall, full, less, more <br> - the importance of a unified unit of measurement when measuring and comparing objects <br> Level 2: <br> Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units (VCMMG115) <br> Teach students to: <br> - use measurement language <br> - estimate more than or less than <br> - measure length using historical measurements: handspan <br> - measure using metric system | Lessons to add to weekly planner: x3 PAT-M tests and other students on mathletics x2 length <br> Explicitly teach: <br> - achieving our best in a test <br> - comparing objects in the yard length hunt <br> - paper aeroplanes making and launching and measuring using metres (measuring tapes) <br> - modelling on a number line | PAT-M <br> Number and <br> Algebra <br>  <br> Geometry <br> Data and Statistics |

## EAGLEHAWK NORTH PRIMARY SCHOOL - GRADE 1/2 NUMERACY PLANNER - TERM 2



|  | - estimate <br> - connect add and subtract using equivalent number sentences <br> - represent sums on a number line <br> - understand compensate strategy <br> - double 1, 2, 3 digits <br> - use near doubles to 100 <br> use factors of 1000 to add and <br> subtract |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Place value warm up game: Game of 40 (card game) <br> Place all the cards from ace to 10 on the table with a partner and exclude the face cards. Then use a mini whiteboard to write down 40 and take turns to turn over a card. eg 7 of hearts, 40-7=33 (use the 7 of hearts icons to count down for a strategy) and then the next person has a turn eg 10 of spades, $33-10=23$ (use the 10 of spades icons to count down for a strategy) keep a running score. Let students play as partners. Play for the week and then let the students in on the Magic number. 11. Discuss why this is the magic number on Thursday and challenge them to play their parents at home. |  |  |  |
| Week 6- <br> Assessment <br> Week <br> Number and <br> Algebra: <br> Operations: <br>  <br> Subtraction <br> Data and <br> statistics: <br> Chance | Level 1: <br> Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts (VCMNA089) Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts (VCMNA089) Teach students to: <br> - estimate <br> - understand commutative strategy <br> - double single and double digits <br> - use near doubles to 10 \& 20 <br> - build to the next 10 <br> - use factors of 100 to add and subtract <br> Level 2: | Lessons to add to weekly planner: x1 essential assessment for MID number and algebra \& measurement and geometry <br> x2 addition and subtraction <br> x2 chance <br> Explicitly teach: <br> - equivalent number sentences <br> - modelling on a number line <br> - teddies in a bag <br> - counters in a bag/box | Level 1 <br> Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen' (VCMSP100) <br> Teach students to: <br> - begin to use the language of chance (likely, unlikely, will happen, certain, impossible <br> - classify events according to chance <br> - explain reasoning <br> Level 2 <br> Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' (VCMSP125) <br> Teach students to: | Assessment: <br> Essential <br> Assessment <br> Number and <br> Algebra <br> General AII MID <br>  <br> Geometry All MID |


|  | Explore the connection between addition and subtraction (VCMNA106) <br> Solve simple addition and subtraction problems using a range of efficient mental and written strategies (VCMNA107) <br> Solve problems by using number sentences for addition or subtraction (VCMNA113) <br> Teach students to: <br> - estimate <br> - connect add and subtract using equivalent number sentences <br> - represent sums on a number line <br> - understand compensate strategy <br> - double 1, 2, 3 digits <br> - use near doubles to 100 <br> - use factors of 1000 to add and subtract |  | - use the language of chance <br> - classify events according to 'how likely' <br> explain reasoning |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Place value warm up game: How many do Fruit fraction pictures |  |  |  |
| Week 7 - <br> Number and <br> Algebra: <br> Fractions <br> Data and <br> statistics: <br> Chance | Level 1 <br> Recognise and describe one-half as one of two equal parts of a whole (VCMNA091) <br> Teach students to: <br> - estimate <br> - explore concepts of 1 , including collections <br> - develop idea of equal sharing <br> - classify those that are halves and those that aren't <br> Level 2 <br> Recognise and interpret common uses of halves, quarters and eighths of shapes and collections (VCMNA110) <br> Teach students to: <br> - estimate | Lessons to add to weekly planner: <br> x3 fractions <br> x2 chance <br> Explicitly teach: <br> - verbal outcomes of chance and assign likelihood (weather, football teams) <br> - teddies in the bag again (see what students understand about likelihood). <br> - partitioning rectangles paper folding and string folding <br> - focus on $1 / 2$ and $1 / 3$ | Level 1 <br> Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen' (VCMSP100) <br> Teach students to: <br> - begin to use the language of chance (likely, unlikely, will happen, certain, impossible <br> - classify events according to chance <br> - explain reasoning <br> Level 2 |  |

## EAGLEHAWK NORTH PRIMARY SCHOOL - GRADE 1/2 NUMERACY PLANNER - TERM 2

|  | - partition objects (not circles) in different ways <br> - find the fraction on a number line | - focus on $1 / 4$ and $1 / 8$ <br> finding the fraction on a number line 0 to 100 and 0 to 1000 | identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' (VCMSP125) <br> Teach students to: <br> - use the language of chance <br> - classify events according to 'how likely' <br> explain reasoning |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Place value warm up game: How many do you see? Fruit fraction pictures |  |  |  |
| Week 8 - <br> King's <br> Birthday <br> Number and <br> Algebra: <br> Fractions <br> Measurement <br> \& Geometry: <br> 3D shape | Level 1 <br> Recognise and describe one-half as one of two equal parts of a whole (VCMNA091) <br> Teach students to: <br> - estimate <br> - explore concepts of 1 , including collections <br> - develop idea of equal sharing <br> - classify those that are halves and those that aren't <br> Level 2 <br> Recognise and interpret common uses of halves, quarters and eighths of shapes and collections (VCMNA110) <br> Teach students to: <br> - estimate <br> - partition objects (not circles) in different ways <br> - find the fraction on a number line | Level 1 <br> Recognise and classify familiar twodimensional shapes and three-dimensional objects using obvious features (VCMMG098) Teach students to: <br> - identify geometric features of common 3D shapes <br> - use the language of vertex, vertices, edges, and faces <br> Level 2 <br> Describe the features of three-dimensional objects (VCMMG121) <br> Teach students to: <br> - describe properties of 3D shapes <br> - use and write language of vertex, vertice, edge, and face <br> - draw and label 3D shapes | Lessons to add to weekly planner: <br> x2 fractions <br> x2 3D shape <br> Explicitly teach: <br> - finding the fraction in a collection of things (fruit) <br> - using manipulatives <br> - exploratory 3D shapes <br> - naming properties |  |
|  | Place value warm up game: I have two coin have in my pockets? | 1 pocket and 1 coin in the other pocket, | they have the same value. What coins do I |  |


|  | Use a T chart to track student guessing <br> Monday: \$1, x2 50c <br> Tuesday: \$2, x2 \$1 <br> Wednesday:20c, x2 10c (gauge how class is going and can open up to I have coins $x$ coins in one pocket and $x$ coins in the other but they equal the same value, what could they be?) <br> Tell me 10 things about this shape.. (use cube, square-based pyramid) (don't tell the students the name of shape as this is 1 of the 10 things about the shape you want them to name). |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Week 9 - <br> Number and <br> Algebra: <br> Money <br> Measurement <br> \& Geometry: <br> 3D shape | Level 1 <br> Recognise, describe and order Australian coins according to their value (VCMNA092) <br> Teach students to: <br> - use features of different Australian coins to identify them <br> - understand size does not determine value <br> - understand coins are different in other countries <br> Level 2 <br> Count and order small collections of Australian coins and notes according to their value (VCMNA111) <br> Teach students to: <br> - estimate more or less $\$ 100$ <br> - equate value of coins and notes <br> - count coins to match a price tag | Level 1 <br> Recognise and classify familiar twodimensional shapes and three-dimensional objects using obvious features (VCMMG098) Teach students to: <br> - identify geometric features of common 3D shapes <br> - use the language of vertex, vertices, edges, and faces <br> Level 2 <br> Describe the features of three-dimensional objects (VCMMG121) <br> Teach students to: <br> - describe properties of 3D shapes <br> - use and write language of vertex, vertice, edge, and face <br> - draw and label 3D shapes | Lessons to add to weekly planner: <br> x3 money <br> x2 3D shape <br> Explicitly teach: <br> - estimate how much, more or less than \$1, \$5, \$10 <br> - play based money session <br> - organise money according to value not size or colour <br> - finding shapes in everyday objects <br> - comparing shapes |  |
| Week 10 <br> Number and <br> Algebra: <br> Money | Level 1 <br> Recognise, describe and order Australian coins according to their value (VCMNA092) <br> Teach students to: <br> - use features of different Australian coins to identify them | Level 1 <br> Recognise and classify familiar twodimensional shapes and three-dimensional objects using obvious features (VCMMG098) Teach students to: | Lessons to add to weekly planner: <br> x3 money <br> x2 3D shape <br> Explicitly teach: <br> - estimate how much, more or less than $\$ 1, \$ 5, \$ 10$ |  |

## EAGLEHAWK NORTH PRIMARY SCHOOL - GRADE 1/2 NUMERACY PLANNER - TERM 2

| Measurement \& Geometry: 3D shape | - understand size does not determine value <br> - understand coins are different in other countries <br> Level 2 <br> Count and order small collections of Australian coins and notes according to their value (VCMNA111) <br> Teach students to: <br> - estimate more or less $\$ 100$ <br> - equate value of coins and notes <br> - count coins to match a price tag | - identify geometric features of common 3D shapes <br> - use the language of vertex, vertices, edges, and faces <br> Level 2 <br> Describe the features of three-dimensional objects (VCMMG121) <br> Teach students to: <br> - describe properties of 3D shapes <br> - use and write language of vertex, vertice, edge, and face <br> - draw and label 3D shapes | - play based money session <br> - organise money according to value not size or colour <br> - finding shapes in everyday objects <br> - comparing shapes. |  |
| :---: | :---: | :---: | :---: | :---: |
| Week 11 <br> Review and games |  |  |  |  |

