

Ngunnawal Primary School **Year 4 Maths** **Learning Matrix**

Number	Number	Number	Number
Learning Intention: To discuss the properties of odd and even numbers. Success Criteria: Describe the outcome for adding odd and even numbers. Learning Task What happens when you add an odd number to an even number? Show 5 examples using different 4-digit or higher numbers, and then explain what the rule might be.	Learning Intention: To read and write five digits numbers using words and numerals. Success Criteria: Read and write numbers using words and numerals. Learning Task Choose a number between 10 000 and 99 000. Use words and pictures to create a poster (digital or hard copy) showing as much information about the number as possible.	Learning Intention: To identify and apply a range of terms and language used for addition. Success Criteria: Uses different terms used for addition. Learning Task Write 5 real-life word problems that need to be solved using addition. Answer each problem and show your working.	Learning Intention: To identify and explain strategies for finding unknown quantities in number sentences. Success Criteria: Applies place value to partition, rearrange and regroup numbers to at least tens of thousands to assist calculations and solve problems. Learning Task Using a take-away menu, order dinner for your family. List each item and how much it costs, then calculate the total price. Use a calculator to check your calculations.
Number	Number	Number	Working Mathematically
Learning Intention: To identify and explain strategies for finding unknown quantities in number sentences. Success Criteria: Identify and explain strategies for finding unknown quantities in number	Learning Intention: To identify and explain strategies for finding unknown quantities in number sentences. Success Criteria: Identify patterns in answers for repeated addition.	Learning Intention: To investigate the history and uses of numerical concepts and patterns. Success Criteria: Describe the concept of infinity. Learning Task	Learning Intention: To review and evaluate different mathematical resources. Success Criteria: Able to describe maths concepts used in digital games.

sentences. Learning Task Use the sum $689 + 507$. Write out how you would solve this sum using the mental strategies of jump and split. Then solve this sum using the written strategy of a vertical algorithm.	Learning Task 'Add on'. Choose a single digit number (higher than three) to start at and then choose a single digit number (higher than three) to add on. Time yourself for 90 seconds to see how far you can go in adding, remembering that you just have to list the answers. Once you finish, examine the ones, tens and hundreds column to identify any recurring patterns in the answers. Repeat this at least twice using different starting numbers and add ons.	Research the number concept of 'Infinity'. Create a poster or slide show that explains some of the history and mathematical uses for infinity.	Learning Task Choose one online maths game (Cool Maths Game; ABCYA; Maths Playground etc.) and write a review of that game. The review should include the name of the game, a description of how to play the game and an explanation of 3 maths concepts used in the game with examples.
Length	Length	Length	Time
Learning Intention: To use scaled instruments to measure and compare lengths. Success Criteria: Accurately measures and order by length a range of objects. Learning Task Find 10 items around the house and measure the length of them in cm and mm. Next, order the measurements from smallest to largest.	Learning Intention: To use scaled instruments to measure and compare lengths. Success Criteria: Measures perimeter accurately. Learning Task Draw a birds eye view of your bedroom. Add the outline of furniture, such as bed, wardrobe, desk or bedside table. Measure the length of each side of these objects using a formal measure (centimetres) or informal units (eg. shoes, wooden spoon, tennis racquet). Write a sum to work out the perimeter of each object,	Learning Intention: To use scaled instruments to measure and compare lengths. Success Criteria: Compares the lengths of different events. Learning Task Research the different lengths athletes compete at for Track & Swimming events at the Olympic Games. Make a chart that lists each disciplines events from shortest to longest. You can also research the World Record for the Field events (long jump, high jump, javelin etc.)	Learning Intention: To solve problems involving time duration Success Criteria: Uses patterns of time to make reasonable predictions. Learning Task Each night this week, record the total amount of sleep you have each night. Predict how much sleep you might have over the weekend and explain your prediction.

	including the room. Don't forget to include your units of measurement for your answers.	and list these events with the record lengths in metres, centimetres and millimetres.	
Time	Time	Time	Time
Learning Intention: To solve problems involving time duration. Success Criteria: Creates a detailed timetable. Learning Task Construct a timetable for your day yesterday using 30-minute slots. Include brief details about each activity. E.g. – Viewing: watched 'Frozen 2' on DVD; Lego: built a fortress without using instructions.	Learning Intention: To convert between units of time. Success Criteria: Accurately converts between minutes and seconds. Learning Task Use the daily timetable you made or reflect on the events of a 24 hour period, and answer these questions as a total in minutes. Then convert each total from minutes to seconds. Questions: How many minutes did you sleep for? How many minutes did you watch TV/movies/streaming for? How many minutes did you exercise or participate in physical activity for? How many minutes did you eat for? How many minutes did you spend doing household chores? How many minutes did you spend doing personal hygiene (bathe, brush teeth etc)? How many minutes did you read for?	Learning Intention: To convert between units of time. Success Criteria: Accurately converts between seconds, minutes and hours. Learning Task Identify five different activities that take exactly 10 seconds. List the activities and calculate how many times you could do this activity in 1 minute. Then calculate how many times you could do this activity in 1 hour or even 1 day.	Learning Intention: To use 'am' and 'pm' notation and solve simple time problems. Success Criteria: Explains the use of am and pm when describing time. Learning Task Research what the terms 'am' and 'pm' mean. Write an explanation and then discuss why we need to have 'am' & 'pm' time. You can also research the Greenwich Meridian and International Date Line and write an explanation of how these two geographical features help to decide what time it is in different parts of the world.