

Financial Literacy #4 - Buying a New Car

Mathematics: Number and Algebra MA3-1NA: Makes connections between whole numbers and index notation and the relationship between perfect squares and square roots. MA3-2NA: Orders and calculates with fractions, decimals, percentages, and ratios. MA3-3NA: Uses a range of mental strategies and concrete materials for multiplication and division.	Introduction Video Explainer This week, join Mr. Jordan Smith's journey in choosing his next car. As a 28-year-old marketing executive with a \$60,000 salary and a \$30,000 car budget, Jordan seeks a car that balances cost, technology, and environmental impact. Your task is to analyze costs, maintenance, and eco-friendliness of different cars. Work in groups to find the best fit for Jordan, considering his income and passion for the environment and technology. Let's help Jordan make an informed, sustainable car choice!	Intro Video With Gavin Teacher Notes – This activity guides students in evaluating the complex decision of buying a car, emphasising a holistic approach beyond just financial figures. Teachers will facilitate discussions where students consider various factors like running costs, environmental impact, and technology features, in addition to the purchase price. The goal is to develop students' ability to analyse a real-life scenario comprehensively, fostering critical thinking and decision-making skills that consider multiple aspects of a practical situation.
MA3-4NA: Models, compares, and represents commonly used fractions and decimals. Measurement and Geometry MA3-9MG: Calculates the area and perimeter of rectangles and the volume and capacity of prisms and cylinders. MA3-10MG: Selects and uses the appropriate unit and device to measure lengths and distances, calculates perimeters, and converts between units of length. MA3-11MG: Measures, records, compares, and estimates areas, perimeters, and volumes.	Quote of the Week – Paul Halmos <i>Each week, we'll shine a light on the words of a great mathematician – not just someone who crunches numbers, but a thinker, a dreamer, and a problem-solver who helped shape the world we live in.</i> <i>Mathematicians have opened doors to discoveries, inventions, and ideas that touch every corner of our lives – from nature to technology, from art to architecture.</i> <i>This week's quote comes from Paul Halmos, who once said:</i> <i>"The only way to learn mathematics is to do mathematics."</i> <i>Take a moment to read that again. What do you think he meant?</i>	Teacher Notes – Use this quote to start a conversation. Ask the children to discuss in pairs or small groups: – What might Paul Halmos have meant by this? – How is doing maths different from just watching someone else do it? – Can they think of something they've learned better by trying it themselves? After the group discussions, bring everyone together. Encourage children to share their interpretations – and if any of them know more about Paul Halmos, invite them to teach the class. This is a chance to celebrate curiosity and remind children that mathematics is a hands-on, minds-on subject – just like life.

Statistics and Probability MA3-18SP: Evaluates the appropriateness of different displays of data and justifies the choice for a particular set of data. MA3-19SP: Uses appropriate statistical methods to collect and graph data, and comments on the data's distribution.	<i>This week, as you explore patterns, numbers, and ideas, remember – mathematics isn't just something you study. It's something you experience, practise, and feel. Just like riding a bike or learning an instrument, the magic of maths unfolds when you dive in and give it a go.</i>	
Working Mathematically MA3-1WM: Describes and represents mathematical situations using a variety of strategies. MA3-2WM: Selects and applies appropriate problem-solving strategies, including the use of digital technologies, in undertaking investigations. MA3-3WM: Gives a valid reason for supporting one possible solution over another. Financial Mathematics: Understanding mortgages, interest rates, and budgeting. Outcome (MA3-3WM): Uses mathematical techniques to solve problems, including money and financial matters. Measurement and Geometry: Understanding the size of a house, area measurements, etc.	Weekly Keywords These words will help you during this week's lesson. You may already know some of these words however practice makes perfect! First, read the words and then try to define them as simply as possible. Work with a partner or in a group to decide what each of these terms means. An example has been completed for you. You can write these into your books, and draw a picture to match or simply complete the task card.	Keyword task Card Teacher Notes – Introduce the spelling word list and choose from this list of tasks that can be repeated and expanded upon if necessary. Copy the words into a spelling list/Vocabulary book for later reference. Put each of the new words into a sentence and underline the new vocabulary in red pencil Place the words in alphabetical order in a list. Use a dictionary to define each of the words and place them into a vocabulary book. Try to represent each of the words using a picture or a symbol and play the guessing game. (which image is matched to which word) Write a paragraph containing all of the new vocabulary. Make a vocabulary wall containing all of the new words. Use a thesaurus to find synonyms for the words and create a synonym list.
Outcome (MA3-11MG): Measures, records, compares and estimates areas, perimeters and	The Situation – Buying a New Car .Join the journey of Mr. Jordan Smith, a young professional deciding on his next car purchase. Dive into the story and collaborate with your peers to guide	Teacher Notes – In this activity, students guide Mr. Jordan Smith in choosing a car, emphasizing ethical and financial decision-making. Teachers will facilitate discussions on

volumes. Human Society and Its Environment (HSIE): Personal and Social Capability: Making informed financial decisions, understanding the impact of financial decisions on personal and family life. Outcome (HT3-5): Applies a variety of skills of historical inquiry and communication.	Jordan through the automotive maze. Remember, buying a car isn't just about the upfront price; it's about weekly running costs, maintenance, and environmental considerations. After our group discussions, we'll reconvene to exchange insights. Read all of the information provided and discuss with your peers about the details you can extract from the sheet. There are keywords and questions for you to answer before you move on to the next task. This week presents a very interesting scenario.	balancing upfront costs, running expenses, maintenance, and environmental impact. This encourages students to consider sustainability alongside budgeting. The task enhances critical thinking and ethical reasoning, as students weigh the long-term effects of their choices on the environment and personal finance, fostering responsible and informed decision-making skills in real-world contexts.
Economics and Business: Basics of economics, understanding housing markets, the role of taxes, and savings. Outcome (HT3-4): Describes and explains effects of British colonisation in Australia. English: Comprehension and Collaboration: Discussing and evaluating various options, reading and understanding financial documents. Outcome (EN3-1A): Communicates effectively for a variety of audiences and purposes using increasingly challenging topics, ideas, issues and language forms and features.	Let's Calculate! Take a look at the following task card where we've shown you how to calculate what each decision might look like over the next ten years. Use mathematics to work out which option might be the most financially viable, and don't forget to consider the other important factors too – such as environmental impact and reliability. The table includes some blank spaces for you to complete. Use the formulas provided to calculate the remaining totals and make an informed decision.	Teacher notes – This activity is designed to foster independence, critical thinking, and real-world problem-solving skills in your students. Each week, they'll be presented with a new financial topic and a practical scenario that mirrors challenges they may face in everyday life. Before diving into calculations, students are encouraged to carefully consider the situation, identify the key costs involved, and weigh up the financial and ethical implications of each choice. They'll use mathematics to explore which option is the most financially viable over time, but they'll also be asked to consider broader factors – such as environmental impact, reliability, sustainability, and long-term value.
Cross-curricular Themes: Critical and Creative Thinking: Evaluating mortgage options, problem-solving. Numeracy: Applying mathematical knowledge to	Finding the Facts Before you can decide which option is best in this week's scenario, it's important to make sure you've got all the key facts in front of you. Sometimes, the most important numbers and details are hidden within the text of the story – so it's essential to read carefully and think critically.	Teacher notes – In this lesson, students learn to identify key information hidden within word problems, using a relatable scenario where they evaluate different mortgage options for a character. The activity strengthens their ability to extract essential data from a narrative and apply mathematical reasoning to real-life financial decisions. By engaging with practical calculations and critical thinking, students build confidence in navigating everyday money matters and develop skills that are crucial for independent,

real-life scenarios. Ethical Understanding: Considering the ethical implications of financial decisions.	Work together to complete the accompanying sheet by answering each question and calculating the relevant amounts. These figures will help guide your thinking and give you the evidence you need to make an informed decision in the next part of the learning sequence.	informed decision-making.
	Make Up Your Mind – Rubric & Discussion Jordan needs to choose a car – but this decision isn't just about dollars and cents. While the numbers help us understand the financial side of things, there are always other important factors to think about too. Use the rubric opposite to score each car option out of 5 for different criteria. Look at things like cost, environmental impact, reliability, and how well the car suits Jordan's lifestyle. Once you've filled in the rubric, total the scores at the bottom. But before you decide which car is best, take a moment to reflect. Ask yourself: ● Which car is best for the planet? ● Which one gives good value over time? ● Which option helps Jordan commute comfortably and safely every day? Remember – this isn't just a maths task. It's about thinking deeply and making a choice that balances numbers, values, and long-term thinking. Jordan is counting on you to guide him toward a	Teacher Notes – In this lesson, children will support Jordan in making a big decision by using a scoring rubric. They'll rate each car option on a scale of 1 to 5 across a range of important factors – from cost and reliability to environmental impact and ethical considerations. The activity encourages children to go beyond the numbers, helping them recognise that real-life decisions often involve a mix of logic, values, and long-term thinking. By weighing up both the data and the bigger picture, students will strengthen their critical thinking and learn how to make thoughtful, well-balanced choices in a meaningful and engaging way.

	decision that's smart, responsible, and future-focused.	
	Car Comparison Research Task – Poster Presentation Now it's your turn to help Jordan! In this activity, you will research three real cars and present your findings to the class using a poster. Each group will choose one car from each of the following categories: 1. A second-hand car – Must be over 10 years old – Found on a real car selling website 2. A brand new electric vehicle (EV) – Look for the latest models on official dealer or manufacturer websites 3. A new petrol SUV – Choose a car that is currently available on the market Once your poster is ready, you'll present it to the class. Be prepared to explain which car you think Jordan should buy, and why.	Teacher notes – In this activity, students will practise real-world research skills by investigating three different types of cars: a second-hand vehicle over 10 years old, a brand new electric vehicle, and a petrol SUV. Using real car selling websites and manufacturer pages, they will gather accurate information about each car's price, benefits, and drawbacks. They will present their findings on a poster, clearly outlining three positive features and two negatives for each option. This task encourages independent inquiry, critical thinking, and collaborative learning, while helping students develop their ability to interpret and evaluate information from real sources to inform a practical decision.
	Your Mission: Write to Someone Who Can Make a Difference Today, you're going to become a voice for change! You've already seen an example of a persuasive letter written to the Transport Minister, asking for more bike	Teacher notes – In this activity, students will apply persuasive writing skills to a real-world context. Using an example letter to the Transport Minister about bike lanes, children will explore how to write respectfully and convincingly to someone in power.

	lanes in the city. Now it's your turn to take that idea and make it your own. Here's what you'll do: 1. Research who the Transport Minister is in your state, region, or country. 2. Think carefully about everything you've learned about different types of cars. 3. Decide which type of car you think should be more common in your community — because it's the best value for families <i>and</i> it helps protect the environment. 4. Write a persuasive letter to the Transport Minister. Use strong reasons, clear facts, and passionate language to explain why this type of car should be encouraged and supported. Remember — real change starts with real voices like yours. Be confident, be clear, and speak up for what you believe is right for your community and the planet!	They will then research their own regional Transport Minister and write a persuasive letter recommending which type of car should be more common in the community — considering both environmental impact and value for families. This task strengthens research, reasoning, and writing skills while encouraging students to use their voices to advocate for sustainable, community-focused transport solutions.
	Weekly Inspiration - The Domino Effect Physicist Lorne Whitehead discovered that a single domino can knock over another domino 50% bigger than itself. That means one small domino can topple something much larger — not all at once, but step by step. In 2001, a physicist recreated the experiment using 13 dominoes. • The first domino was only 5 millimetres tall.	Teacher notes - This story serves as a powerful metaphor for exponential growth, persistence, and the impact of small actions over time. It's a perfect way to close a lesson sequence focused on financial literacy, exponential thinking, or ethical decision-making. Watch the video and discuss.

- The final domino? A massive **one metre** tall and over **100 pounds**.

With just one tiny push, that first little domino brought down something **200 times its size**.

Now imagine:

If you lined up **29 dominoes**, each 1.5 times larger than the last, the final domino would be **taller than the Empire State Building**.