

## 5th Grade Maths Lesson Plan — Chapter 4: We the Travellers—II

School Name: \_\_\_\_\_ Teacher: \_\_\_\_\_

From Date: \_\_\_\_\_ To Date: \_\_\_\_\_

### Learning Outcomes :

- Perform addition and subtraction operations on 5-digit numbers with regrouping.
- Apply the inverse relationship between addition and subtraction to track balancing shifts.
- Solve multi-step financial and logic puzzles.

| Stage                                       | Learning Goals                                                     | What the Teacher Does                                                                                                                  | What the Students Do                                                                                                        | Tools & Materials                        | Sign |
|---------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------|
| <b>Engage<br/>(Get Interested)</b>          | Hook students using properties of number sequences.                | Write consecutive equations on the board: $1+2+3+4=10$ ; $2+3+4+5=14$ . Ask: 'What pattern do you notice about consecutive sums?'      | Analyze sequences to find that shifting the starting integer by 1 increases the final sum of four consecutive numbers by 4. | Blackboard, colored chalk indicators.    |      |
| <b>Explore<br/>(Look &amp; Find)</b>        | Investigate balancing arithmetic sets via trial shifts.            | Provide two groups of numbers with unequal sums. Challenge them to interchange pairs to make the total sums equal.                     | Write numbers on paper slips. Move slips back and forth between clusters until the total value metrics balance out.         | Paper slips, numeric sorting task cards. |      |
| <b>Explain<br/>(Learn &amp; Understand)</b> | Map place-value tracking protocols for multi-digit column changes. | Demonstrate formal vertical algorithms for 5-digit addition ( $18,225 + 18,104$ ) and subtraction, pointing out regrouping steps.      | Practice column management, systematically documenting decimal exchanges (e.g., 10 Tens = 1 Hundred).                       | Column place value ledger blocks.        |      |
| <b>Elaborate<br/>(Think Deeper)</b>         | Adapt balancing shorthand mental mechanics using benchmark values. | Introduce the friendly compensation trick to compute missing values quickly: To find $3,675 + \_ = 8,250$ , round to benchmarks first. | Apply compensation tricks mentally to solve real-world weight and load limits for travel freight without long column steps. | Cargo loading logic templates.           |      |
| <b>Evaluate<br/>(Check Progress)</b>        | Verify precision during multi-tier calculation word tasks.         | Provide an optimization problem tracking a person's expenses across different cities during a travel route.                            | Formulate column lines, processing sub-totals and deductions to locate the final remaining cash configurations.             | Comprehensive math assessment matrices.  |      |