

WELLTRAINED ACADEMY

SPRINGFIELD PRIMARY OLYMPIAD PROGRAMME

CHOOSE THE SMART MOVE

Week 2 - Number Sense and Efficient Arithmetic

Monday, 31 August 2026 | Primary 4-6 | English

9 STUDENTS	60 MINUTES	3 LEARNING ROUTES	25 SCORED MARKS
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TODAY'S GOAL Choose compensation, regrouping, doubling-halving, or compatible numbers instead of calculating blindly.

Name: _____ Grade: _____ Date: _____

Session route

Time	Stage	What you do
0-6	Retrieval	Four quick calculations; name the smart move
6-15	Strategy Lab	Learn four efficient arithmetic strategies
15-25	Guided practice	Compare methods and explain the safer one
25-48	Independent routes	Complete Must Do, Should Do, or Extension
48-55	Error detective	Find and repair one risky step
55-60	Exit ticket	Select a strategy for 125×32

CLASS RULE No calculator. Show the smart strategy, the exact answer, and one quick check.

STRATEGY LAB

Pick a Strategy Before You Calculate

Strategy	When it helps	Example
Compensation	A number is close to 10, 100, or 1,000	$597 + 248 = 600 + 248 - 3 = 845$
Regrouping	Some numbers combine into a friendly total	$175 + 25 + 38 = 200 + 38 = 238$
Double-halving	One factor is even	$28 \times 15 = 14 \times 30 = 420$
Break apart	A factor is close to a friendly number	$19 \times 24 = 20 \times 24 - 24 = 456$

THE HABIT Name the strategy, write the adjustment, calculate, then check whether the answer is reasonable.

Retrieval warm-up

	Calculation	Strategy name	Answer
A	$299 + 156$		
B	$1,000 - 497$		
C	25×28		
D	18×15		

Coach model

MODEL $398 + 267 = 400 + 267 - 2 = 665$. Estimate: about $400 + 270 = 670$, so 665 is reasonable.

Guided check - solve and name the strategy

G. Calculate 49×18 efficiently. Why is your method safer than long multiplication?

WEEK 2 - MUST DO

Core - Build Accuracy First

ROUTE Everyone starts here. Write the efficient strategy and show every adjustment.

MUST DO | CORE | COMPENSATION | 2 MARKS

1. Calculate $498 + 367$ mentally. Show the compensation used.

MUST DO | CORE | COMPATIBLE NUMBERS | 2 MARKS

2. Calculate 25×64 without long multiplication.

MUST DO | CORE | COMPENSATION | 2 MARKS

3. Calculate $1,001 - 487$ efficiently. Show your method.

MUST DO | CORE | MULTI-STEP ARITHMETIC | 3 MARKS

4. A school buys 18 boxes of 24 pencils. It gives 137 pencils away. How many pencils remain?

WEEK 2 - SHOULD DO

Challenge - Explain the Smart Move

ROUTE Continue when Core is secure. A correct explanation matters as much as speed.

SHOULD DO | CHALLENGE | DOUBLE AND HALVE | 2 MARKS

5. Find 48×75 using doubling and halving.

SHOULD DO | CHALLENGE | CONSECUTIVE NUMBERS | 3 MARKS

6. The sum of five consecutive odd numbers is 215. Find the largest number.

SHOULD DO | CHALLENGE | ORDER OF OPERATIONS | 3 MARKS

7. Insert brackets into $8 + 4 \times 6 - 2$ so that the value is 70.

WEEK 2 - EXTENSION

Stretch, Bonus, and Reflect

EXTENSION Complete these after your assigned route. Explain the shortcut, not only the answer.

EXTENSION | OLYMPIAD EXTENSION | ASSUMPTION METHOD | 4 MARKS

8. A cashier has only \$5 and \$10 notes. There are 23 notes worth \$170. How many notes of each type are there?

EXTENSION | OLYMPIAD EXTENSION | PATTERN SUM | 4 MARKS

9. Without adding every term one by one, find $1 + 3 + 5 + \dots + 99$.

BONUS | FAST FINISHER | NO SCORE

10. Without long multiplication, find $999 \times 37 + 37$.

Score record

Core / 9	Challenge / 8	Extension / 8	Scored total / 25	Bonus

EXIT TICKET Which strategy is most efficient for 125×32 ? Explain briefly.
