

# Mathematics

## Week 1 Term 4

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STAGE 3






# Set up of Week 1 Maths

- Hi Stage 3,
- We have tried to set your Maths work up a little differently. You will notice that each slide has a star.
- Just like at school, sometimes we need to complete work differently to other students to make sure we are working on a skill that will help you continue to learn and grow.
- Your teacher will be in contact with you if you are to work on the 1 star or 3 star activities.
- If you feel the 2 star activities are too hard, please attempt the 1 star activity. If you feel the 2 star activity is too easy please attempt the 3 star activity.



# THURSDAY

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- ❖ Daily NAPLAN Question.
  - ❖ Multiplication time challenge.
    - ❖ 1-star activity
    - ❖ 2-star activity
    - ❖ 3-star activity
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# NAPLAN Question

Eva travelled *four thousand and thirty-seven* kilometres from Darwin to Sydney.



This distance can be written as:

437 km

4037 km

4370 km

40 037 km

# Multiplication Time Challenge

Number of Questions: **50**

Testing: **2x, 3x, 4x, 5x, 6x, 7x, 8x, 9x, 10x, 11x, 12x, 13x, 16x, 17x, 20x**

$7 \times 2 = \underline{\quad}$

$12 \times 17 = \underline{\quad}$

$9 \times 6 = \underline{\quad}$

$5 \times 12 = \underline{\quad}$

$4 \times 10 = \underline{\quad}$

$9 \times 4 = \underline{\quad}$

$1 \times 13 = \underline{\quad}$

$7 \times 5 = \underline{\quad}$

$8 \times 8 = \underline{\quad}$

$17 \times 2 = \underline{\quad}$

$2 \times 8 = \underline{\quad}$

$13 \times 11 = \underline{\quad}$

$10 \times 7 = \underline{\quad}$

$7 \times 2 = \underline{\quad}$

$9 \times 7 = \underline{\quad}$

$10 \times 8 = \underline{\quad}$

$1 \times 12 = \underline{\quad}$

$4 \times 4 = \underline{\quad}$

$1 \times 6 = \underline{\quad}$

$10 \times 4 = \underline{\quad}$

$8 \times 17 = \underline{\quad}$

$1 \times 10 = \underline{\quad}$

$10 \times 16 = \underline{\quad}$

$9 \times 3 = \underline{\quad}$

$6 \times 9 = \underline{\quad}$

$9 \times 2 = \underline{\quad}$

$11 \times 6 = \underline{\quad}$

$16 \times 3 = \underline{\quad}$

$8 \times 2 = \underline{\quad}$

$7 \times 3 = \underline{\quad}$

$3 \times 9 = \underline{\quad}$

$6 \times 9 = \underline{\quad}$

$8 \times 10 = \underline{\quad}$

$9 \times 1 = \underline{\quad}$

$17 \times 7 = \underline{\quad}$

$7 \times 6 = \underline{\quad}$

$8 \times 9 = \underline{\quad}$

$7 \times 4 = \underline{\quad}$

$7 \times 8 = \underline{\quad}$

$7 \times 11 = \underline{\quad}$

$11 \times 9 = \underline{\quad}$

$17 \times 10 = \underline{\quad}$

$4 \times 6 = \underline{\quad}$

$11 \times 1 = \underline{\quad}$

$9 \times 8 = \underline{\quad}$

$13 \times 9 = \underline{\quad}$

$12 \times 2 = \underline{\quad}$

$7 \times 1 = \underline{\quad}$

- Put on a timer/ stopwatch for 10 minutes and complete as many questions as possible in the time.
- Note down your time and try and challenge yourself to better your time each day! 😊

# 1 Star Activity

UNIT 4
Estimating multiplication

**1** Write an estimate for each multiplication in the box below before finding the exact answer. The first one is done for you.

<p>a</p> $\begin{array}{r} 384 \\ \times 5 \\ \hline 1920 \\ \hline 2000 \end{array}$	<p>b</p> $\begin{array}{r} 427 \\ \times \quad 6 \\ \hline \\ \hline \end{array}$	<p>c</p> $\begin{array}{r} 380 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$	<p>d</p> $\begin{array}{r} 646 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$	<p>e</p> $\begin{array}{r} 375 \\ \times \quad 8 \\ \hline \\ \hline \end{array}$
<p>f</p> $\begin{array}{r} 2034 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$	<p>g</p> $\begin{array}{r} 3602 \\ \times \quad 8 \\ \hline \\ \hline \end{array}$	<p>h</p> $\begin{array}{r} 2354 \\ \times \quad 6 \\ \hline \\ \hline \end{array}$	<p>i</p> $\begin{array}{r} 3347 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$	<p>j</p> $\begin{array}{r} 3379 \\ \times \quad 9 \\ \hline \\ \hline \end{array}$
<p>k</p> $\begin{array}{r} 13064 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$	<p>l</p> $\begin{array}{r} 12935 \\ \times \quad 8 \\ \hline \\ \hline \end{array}$	<p>m</p> $\begin{array}{r} 35704 \\ \times \quad 9 \\ \hline \\ \hline \end{array}$	<p>n</p> $\begin{array}{r} 26579 \\ \times \quad 6 \\ \hline \\ \hline \end{array}$	<p>o</p> $\begin{array}{r} 30890 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$
<p>p</p> $\begin{array}{r} 35896 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$	<p>q</p> $\begin{array}{r} 29999 \\ \times \quad 8 \\ \hline \\ \hline \end{array}$	<p>r</p> $\begin{array}{r} 30013 \\ \times \quad 9 \\ \hline \\ \hline \end{array}$	<div style="border: 1px solid gray; padding: 5px; background-color: #f0f0f0;"> <p><b>SUPER QUESTION</b></p> <math display="block">\begin{array}{r} 357406237 \\ \times \quad 6 \\ \hline \\ \hline \end{array}</math> </div>	

\$456

\$145

\$1476

\$2675

\$36 846

**2** Calculate the cost of the purchases on a separate piece of paper.

a	Mr Hood bought 4 new TVs for his motel.	\$ _____
b	Mrs Hicks bought 6 iPods as prizes for a competition.	\$ _____
c	Mr Hussein bought 6 new fridges for his restaurant.	\$ _____
d	Mrs Chambers bought 7 new stereos for her hotel.	\$ _____
e	Mr Papadopolous bought 5 new cars for his company.	\$ _____
f	How much would 3 iPods and 5 televisions cost?	\$ _____

# 2 Star Activity

UNIT 34
Long multiplication

**1** Complete each long multiplication.

<p>a</p> $\begin{array}{r} 125 \\ \times 15 \\ \hline \\ \hline \\ \hline \end{array}$	<p>b</p> $\begin{array}{r} 217 \\ \times 26 \\ \hline \\ \hline \\ \hline \end{array}$	<p>c</p> $\begin{array}{r} 315 \\ \times 34 \\ \hline \\ \hline \\ \hline \end{array}$	<p>d</p> $\begin{array}{r} 4217 \\ \times 46 \\ \hline \\ \hline \\ \hline \end{array}$	<p>e</p> $\begin{array}{r} 3574 \\ \times 58 \\ \hline \\ \hline \\ \hline \end{array}$
<p>f</p> $\begin{array}{r} 2135 \\ \times 44 \\ \hline \\ \hline \\ \hline \end{array}$	<p>g</p> $\begin{array}{r} 3246 \\ \times 45 \\ \hline \\ \hline \\ \hline \end{array}$	<p>h</p> $\begin{array}{r} 25428 \\ \times 56 \\ \hline \\ \hline \\ \hline \end{array}$	<p>i</p> $\begin{array}{r} 14315 \\ \times 68 \\ \hline \\ \hline \\ \hline \end{array}$	<p>j</p> $\begin{array}{r} 36247 \\ \times 73 \\ \hline \\ \hline \\ \hline \end{array}$

**2** Emily has estimated how much of the following items each person will eat or drink at her party. Use this information to calculate answers to the problems. There are 38 children coming to the party.

popcorn 30 g	juice 700 mL	chips 20 g	nibbles 60 g	crackers 40 g

<p>a How many grams of chips do you think Emily will need to order?</p>	<p>d Six people do not eat nibbles. How many grams of nibbles do you think Emily should order?</p>
<p>b Emily knows that 3 children will not drink juice. How many litres of juice do you think she will order?</p>	<p>e Everybody likes crackers but Emily knows that 5 of the children eat double the amount of crackers. How many grams will Emily need to order?</p>
<p>c Everybody likes popcorn, except for 2. How many grams of popcorn will Emily need to order?</p>	<p>f One quarter of the nibbles will be made up of cheese. How many grams of cheese should Emily order?</p>

**SUPER QUESTION**

**3** Think about how many millilitres of fluid you would drink in a day. Then calculate how much you would drink in November.

# 3 Star Activities

**UNIT 3 Mental multiplying**

**4** Double, then double again, to quickly multiply by 4 or double, double and double again to multiply by 8.

125 × 4  
Double 125 = 250  
Double 250 = 500

a 12 × 4 = \_\_\_\_\_ f 136 × 4 = \_\_\_\_\_ k 20 × 8 = \_\_\_\_\_  
 b 14 × 4 = \_\_\_\_\_ g 124 × 4 = \_\_\_\_\_ l 22 × 8 = \_\_\_\_\_  
 c 16 × 4 = \_\_\_\_\_ h 12 × 8 = \_\_\_\_\_ m 25 × 8 = \_\_\_\_\_  
 d 20 × 4 = \_\_\_\_\_ i 14 × 8 = \_\_\_\_\_ n 110 × 8 = \_\_\_\_\_  
 e 24 × 4 = \_\_\_\_\_ j 16 × 8 = \_\_\_\_\_ o 115 × 8 = \_\_\_\_\_

**5** Round to the nearest 10 (a–e), 100 (f–j) or 1000 (k–o) to make an estimate of these multiplications.

1989 × 9 =  
Think  
2000 × 9  
equals 18 000

a 29 × 4 ≈ \_\_\_\_\_ f 409 × 3 ≈ \_\_\_\_\_ k 1034 × 7 ≈ \_\_\_\_\_  
 b 32 × 5 ≈ \_\_\_\_\_ g 413 × 4 ≈ \_\_\_\_\_ l 2103 × 4 ≈ \_\_\_\_\_  
 c 49 × 6 ≈ \_\_\_\_\_ h 287 × 5 ≈ \_\_\_\_\_ m 7109 × 3 ≈ \_\_\_\_\_  
 d 93 × 7 ≈ \_\_\_\_\_ i 820 × 6 ≈ \_\_\_\_\_ n 8946 × 4 ≈ \_\_\_\_\_  
 e 69 × 9 ≈ \_\_\_\_\_ j 492 × 7 ≈ \_\_\_\_\_ o 7994 × 8 ≈ \_\_\_\_\_

**6** Use multiplication facts and your knowledge of place value to answer these questions. For example, 40 × 60 equals 4 tens × 6 tens which equals 24 hundreds (2400).

a 20 × 30 = \_\_\_\_\_ f 30 × 70 = \_\_\_\_\_ k 90 × 700 = \_\_\_\_\_  
 b 40 × 30 = \_\_\_\_\_ g 50 × 90 = \_\_\_\_\_ l 80 × 900 = \_\_\_\_\_  
 c 50 × 30 = \_\_\_\_\_ h 30 × 60 = \_\_\_\_\_ m 60 × 900 = \_\_\_\_\_  
 d 40 × 50 = \_\_\_\_\_ i 80 × 50 = \_\_\_\_\_ n 60 × 700 = \_\_\_\_\_  
 e 50 × 60 = \_\_\_\_\_ j 90 × 90 = \_\_\_\_\_ o 90 × 400 = \_\_\_\_\_

**7** Mentally calculate the answers to the multiplications.

235 × 4  
Think  
4 × 200 = 800  
4 × 30 = 120  
4 × 5 = 20  
Total = 940

a 25 × 3 = \_\_\_\_\_ f 131 × 7 = \_\_\_\_\_ k 326 × 6 = \_\_\_\_\_  
 b 36 × 3 = \_\_\_\_\_ g 145 × 5 = \_\_\_\_\_ l 434 × 7 = \_\_\_\_\_  
 c 42 × 4 = \_\_\_\_\_ h 254 × 3 = \_\_\_\_\_ m 523 × 8 = \_\_\_\_\_  
 d 63 × 3 = \_\_\_\_\_ i 257 × 4 = \_\_\_\_\_ n 232 × 9 = \_\_\_\_\_  
 e 72 × 2 = \_\_\_\_\_ j 174 × 5 = \_\_\_\_\_ o 463 × 7 = \_\_\_\_\_

**8** Multiply these multiples of 10.

a 6 × 9 = \_\_\_\_\_ b 8 × 7 = \_\_\_\_\_ c 50 × 9 = \_\_\_\_\_  
 6 × 90 = \_\_\_\_\_ 8 × 70 = \_\_\_\_\_ 50 × 90 = \_\_\_\_\_  
 6 × 900 = \_\_\_\_\_ 8 × 700 = \_\_\_\_\_ 50 × 900 = \_\_\_\_\_  
 6 × 9000 = \_\_\_\_\_ 8 × 7000 = \_\_\_\_\_ 50 × 9000 = \_\_\_\_\_  
 6 × 90 000 = \_\_\_\_\_ 8 × 70 000 = \_\_\_\_\_ 50 × 90 000 = \_\_\_\_\_

**UNIT 7 Super problem solving**

**10** Solve these using order of operations.

a (3 + 7) × 9 = \_\_\_\_\_ d 39 + 6 × (3 + 7) = \_\_\_\_\_ g (13 + 7) × (18 ÷ 3) = \_\_\_\_\_  
 b 3 + 7 × 9 = \_\_\_\_\_ e 86 - 7 × (13 - 8) = \_\_\_\_\_ h 5 × 3 × 5 - 37 = \_\_\_\_\_  
 c (100 - 79) × 3 = \_\_\_\_\_ f (16 + 4) - 12 ×  $\frac{3}{4}$  = \_\_\_\_\_ i (100 - 75) × (38 + 12) = \_\_\_\_\_

**11** Solve the problems.

a Mr King drew a rectangle on the blackboard that measured 40 cm by 25 cm. What is the area of the rectangle he drew?	d Mrs Hook spent \$12 680 on 3 items for her house. She paid \$2890 for carpet and \$5674 on a kitchen. How much was the third item?
b In a warehouse there were 26 motorbikes, 57 cars and 25 six-wheel trucks. How many wheels were in the warehouse?	e Mark paid a deposit of \$4590 towards a new kitchen and 24 payments of \$275. How much did the kitchen cost in total?
c A clothing factory made \$54 675 profit in 5 years. If it expected \$12 000 profit per year, by how much was it short of its budget expectations?	f There are 46 lollies in each packet and 24 packets to a box. There are also 36 boxes to a carton. How many lollies are there on a pallet containing 25 cartons?

**WEEKLY TESTER**

**12** The Electricity Company charges a factory 18c per hour to run a large new machine. Over a week the machine runs from 6.45 in the morning to 9.15 at night 6 days a week.

a For how many hours does the machine run in a day? \_\_\_\_\_  
 b For how long would the machine run in a 6-day week? \_\_\_\_\_  
 c How much would it cost for electricity to run the machine for a week? \_\_\_\_\_  
 d How much would it cost for electricity to run the machine for a year? \_\_\_\_\_

**OPEN-ENDED CHALLENGER**

**13** Kimberly drew a common 2D shape on the playground that had a perimeter of 18 m. What might the shape have been, and what might its sides have measured, if they were all decimal numbers? Give at least 5 answers.

**30** Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers (ACMNA 3-3)