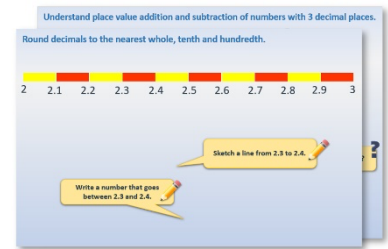


# Week 7, Day 3

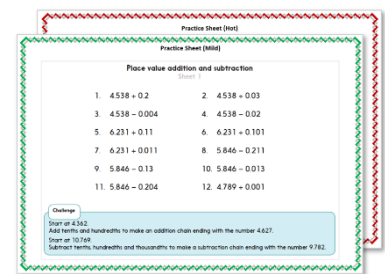
## Mental multiplication and division

Each day covers one maths topic. It should take you about 1 hour or just a little more.

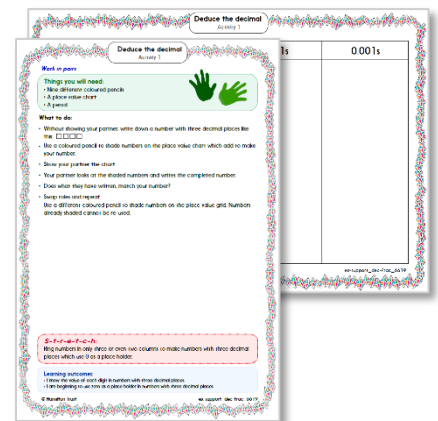
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



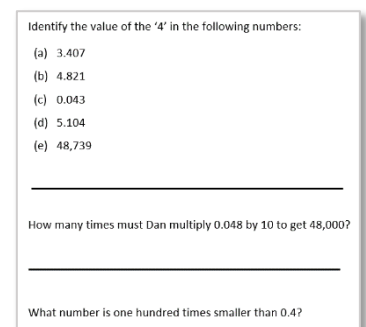
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**



4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



## Learning Reminders

Use times tables and place value to multiply and divide.

$$7 \times 5 = 35 \quad 3 \times 8 = 24 \quad 6 \times 7 = 42 \quad 4 \times 9 = 36$$



What is  $240 \div 3$ ?  
Which number fact can help?

If  $3 \times 8 = 24$  then  
 $3 \times 80$  is 240. So  
 $240 \div 3 = 80$ .

We can count in 80s to  
check... 80, 160, 240.  
3 lots of 80 are 240.

Now try  $420 \div 7$


$$42 \div 7 = 6 \text{ so, } 420 \div 7 = 60$$

**Answer**

## Learning Reminders


Use times tables and place value to multiply and divide

$$7 \times 5 = 35 \quad 3 \times 8 = 24 \quad 6 \times 7 = 42 \quad 4 \times 9 = 36$$



Now find  $350 \div 7$ .  
Which number fact can help?

If  $7 \times 5 = 35$ ,  $35 \div 7 = 5$ .  
So the answer must be 50, can you see why?



Now try  $420 \div 6$   
and  $360 \div 4$ .

Can you explain why  
 $420 \div 6 = 70$ ?

$42 \div 6 = 7$ , so  
 $420 \div 6 = 70$ .

Can you explain why  
 $360 \div 4 = 90$ ?

$36 \div 4 = 9$ , so...

## Practice Sheet Mild

### Multiplying 10s and 100s by 1-digit numbers

#### Section 1

$6 \times 2 = \boxed{\phantom{00}}$

$3 \times 5 = \boxed{\phantom{00}}$

$4 \times 9 = \boxed{\phantom{00}}$

$2 \times 2 = \boxed{\phantom{00}}$

$9 \times 3 = \boxed{\phantom{00}}$

$5 \times 4 = \boxed{\phantom{00}}$

$6 \times 20 = \boxed{\phantom{00}}$

$3 \times 50 = \boxed{\phantom{00}}$

$4 \times 90 = \boxed{\phantom{00}}$

$2 \times 200 = \boxed{\phantom{00}}$

$9 \times 300 = \boxed{\phantom{00}}$

$5 \times 400 = \boxed{\phantom{00}}$

$\boxed{\phantom{00}} \div 6 = 20$

$\boxed{\phantom{00}} \div 3 = 50$

$\boxed{\phantom{00}} \div 4 = 90$

$\boxed{\phantom{00}} \div 2 = 200$

$\boxed{\phantom{00}} \div 9 = 300$

$\boxed{\phantom{00}} \div 5 = 400$

#### Section 2

$4 \times 4 = \boxed{\phantom{00}}$

$3 \times \boxed{\phantom{00}} = 21$

$6 \times 8 = \boxed{\phantom{00}}$

$4 \times 40 = \boxed{\phantom{00}}$

$3 \times \boxed{\phantom{00}} = 2100$

$6 \times 80 = \boxed{\phantom{00}}$

$\boxed{\phantom{00}} \div 4 = 40$

$2100 \div 3 = \boxed{\phantom{00}}$

$\boxed{\phantom{00}} \div 6 = 80$

# Practice Sheet Hot

## Multiplying 10s and 100s by 1-digit numbers

### Section 1

$$\square \times 6 = 54$$

$$7 \times 9 = \square$$

$$8 \times \square = 24$$

$$\square \times 600 = 5400$$

$$7 \times 900 = \square$$

$$8 \times \square = 240$$

$$5400 \div \square = 600$$

$$\square \div 7 = 900$$

$$240 \div 8 = \square$$

### Section 2

$$7 \times \square = 28$$

$$6 \times 7 = \square$$

$$\square \times 8 = 64$$

$$11 \times 6 = \square$$

$$4 \times \square = 48$$

$$\square \times 9 = 108$$

$$7 \times \square = 280$$

$$6 \times 70 = \square$$

$$\square \times 800 = 6400$$

$$1100 \times 6 = \square$$

$$4 \times \square = 480$$

$$\square \times 9 = 10,800$$

$$280 \div 7 = \square$$

$$\square \div 6 = 70$$

$$6400 \div \square = 800$$

$$\square \div 6 = 1100$$

$$480 \div 4 = \square$$

$$10,800 \div 9 = \square$$

## Practice Sheets Answers

### Multiplying 10s and 100s by 1-digit numbers (mild)

#### Section 1

$6 \times 2 = 12$

$3 \times 5 = 15$

$4 \times 9 = 36$

$2 \times 2 = 4$

$9 \times 3 = 27$

$5 \times 4 = 20$

$6 \times 20 = 120$

$3 \times 50 = 150$

$4 \times 90 = 360$

$2 \times 200 = 400$

$9 \times 300 = 2700$

$5 \times 400 = 2000$

$120 \div 6 = 20$

$150 \div 3 = 50$

$360 \div 4 = 90$

$400 \div 2 = 200$

$2700 \div 9 = 300$

$2000 \div 5 = 400$

#### Section 2

$4 \times 4 = 16$

$3 \times 7 = 21$

$6 \times 8 = 48$

$4 \times 40 = 160$

$3 \times 700 = 2100$

$6 \times 80 = 480$

$160 \div 4 = 40$

$2100 \div 3 = 700$

$480 \div 6 = 80$

### Multiplying 10s and 100s by 1-digit numbers (hot)

#### Section 1

$9 \times 6 = 54$

$7 \times 9 = 63$

$8 \times 3 = 24$

$9 \times 600 = 5400$

$7 \times 900 = 6300$

$8 \times 30 = 240$

$5400 \div 9 = 600$

$6300 \div 7 = 900$

$240 \div 8 = 30$

#### Section 2

$7 \times 4 = 28$

$6 \times 7 = 42$

$8 \times 8 = 64$

$11 \times 6 = 66$

$4 \times 12 = 48$

$12 \times 9 = 108$

$7 \times 40 = 280$

$6 \times 70 = 420$

$8 \times 800 = 6400$

$1100 \times 6 = 6600$

$4 \times 120 = 480$

$1200 \times 9 = 10,800$

$280 \div 7 = 40$

$420 \div 6 = 70$

$6400 \div 8 = 800$

$6600 \div 6 = 1100$

$480 \div 4 = 120$

$10,800 \div 9 = 1200$

## A Bit Stuck? The 60 times table

Write out the 60 times table up to  $10 \times 60$ .  
Use your 6 times table and multiplying by 10 to help.

$$\begin{aligned}1 \times 60 &= 60 \\2 \times 60 &= 120 \\3 \times 60 &= \dots\end{aligned}$$

### Answer these questions

How many 60s are in 240?

How many 60s are in 360?

How many 60s are in 480?

	There are _____ 60s in 240.
	There are _____ 60s in 360.
	There are _____ 60s in 480.

### *S-t-r-e-t-c-h:*

Use what you have written to answer these questions:

$180 \div 60 = \square$

$180 \div 3 = \square$

$420 \div 60 = \square$

$420 \div 7 = \square$

$540 \div 60 = \square$

$540 \div 9 = \square$

## Check your understanding

### Questions

Write  $360 \div \square = \square$  then complete the sentence in at least four different ways.

---

Jimmy writes:  $40 \times 5 = 2000$ .

Is he correct? What might he not understand yet?

---

Write three mega-facts to match  $4 \times 8 = 32$ .

At least one must be a division fact!

---

'Fact families'... Which four number sentences link these numbers:

5600, 8, 700 ?

And these: 4000, 50, 80?

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## Check your understanding:

### Answers

Write  $360 \div \square = \square$  then complete the sentence in at least four different ways.

Children should use their knowledge of factors of 36.

Possible solutions:

$$360 \div 2 = 180, 360 \div 3 = 120, 360 \div 4 = 90, 360 \div 6 = 60,$$

$$360 \div 9 = 40, 360 \div 12 = 30, 360 \div 18 = 20.$$

360 can also be divided by each of those answers, e.g.  $360 \div 180 = 2$ ,  $360 \div 120 = 3$  etc.

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Jimmy writes:  $40 \times 5 = 2000$ .

Is he correct? What might he not understand yet?

He is not correct since the answer is 200. He may have misread the question as  $40 \times 50$  or made a place value error.

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Write three LARGE or mega-facts to match  $4 \times 8 = 32$ .

At least one must be a division fact!

Examples include  $40 \times 8 = 320$ ,  $4 \times 80 = 320$ ,  $400 \times 8 = 3200$ ,  $4 \times 800 = 3200$ ,  $40 \times 80 = 3200$  and any division linked to one of those.

---

'Fact families'... Which four number sentences link these numbers:

5600, 8, 700

$$700 \times 8 = 5600, 8 \times 700 = 5600, 5600 \div 8 = 700, 5600 \div 700 = 8.$$

And these: 4000, 50, 80

$$50 \times 80 = 4000, 80 \times 50 = 4000, 4000 \div 80 = 50, 4000 \div 50 = 80.$$