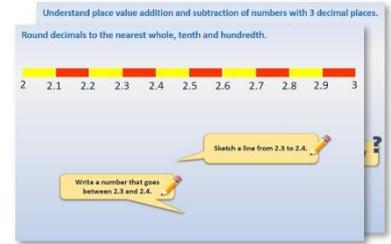


Week 12, Day 3

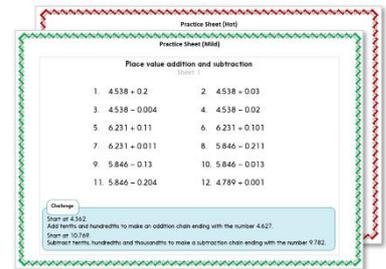
Times tables

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

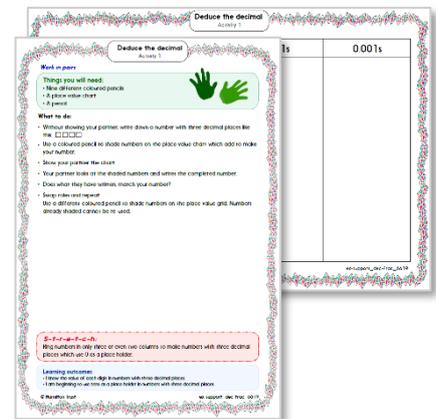
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



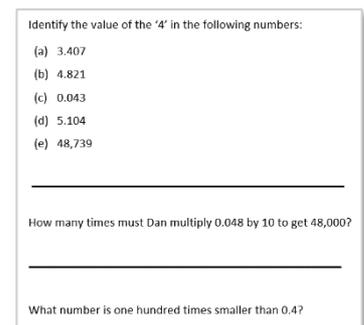
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



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

Revise times tables and division facts (1x, 2x, 3x, 4x, 5x, 8x, 10x).

Partially completed multiplication grid

| × | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| 1 | 1 | 2 | 3 | | | 6 | 7 | 8 | | 10 | 11 | |
| 2 | 2 | 4 | 6 | 8 | | | 14 | 16 | 18 | | 22 | |
| 3 | 3 | 6 | | 12 | | 18 | 21 | 24 | 27 | | 33 | 36 |
| 4 | 4 | 8 | | | | 24 | 28 | 32 | 36 | 40 | 44 | 48 |
| 5 | 5 | | 15 | | | 30 | | 40 | 45 | | 55 | 60 |
| 6 | | 12 | | | 30 | 36 | 42 | 48 | 54 | | 66 | 72 |
| 7 | 7 | | | 28 | | 42 | 49 | 56 | 63 | 70 | 77 | 84 |
| 8 | | | 24 | | | 48 | 56 | 64 | 72 | | 88 | 96 |
| 9 | 9 | 18 | | 36 | | 54 | 63 | 72 | 81 | | 99 | 108 |
| 10 | 10 | | 30 | | | | 70 | | 90 | 100 | 110 | 120 |
| 11 | | 22 | | 44 | | 66 | 77 | 88 | 99 | 110 | 121 | 132 |
| 12 | 12 | 24 | 36 | | 60 | 72 | 84 | 96 | 108 | | 132 | 144 |

This multiplication grid shows different times tables.

There are lots of missing tables facts!

We can use facts we know to find other facts...

For example: we can easily fill in 7×5 and that helps us to fill in 5×7 .

Learning Reminders

Revise times tables and division facts (1x, 2x, 3x, 4x, 5x, 8x, 10x).

| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | | |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | | |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | | | | |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | | | | | |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | | | | |
| 11 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 | 121 | 132 |
| 12 | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 |

How many 3s
are there in 21?

7

Write a number
sentence to describe
the relationship
between the numbers
3, 7, and 21.



Revise times tables and division facts (1x, 2x, 3x, 4x, 5x, 8x, 10x).

$$7 \times 3 = 21$$

$$21 \div 3 = 7$$

$$3 \times 7 = 21$$

$$21 \div 7 = 3$$

Just knowing one
multiplication fact
gives us three more
facts for free!

Learning Reminders

Revise times tables and division facts (1x, 2x, 3x, 4x, 5x, 8x, 10x).

| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | | |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | | |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 | 44 | 48 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | | 66 | 72 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 | | |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | | | | |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | | | |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | | | | |
| 11 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | 88 | 99 | 110 | 121 | 132 |
| 12 | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 |

How many 4s
are there in 32?

8

Write a number
sentence to describe
the relationship
between the numbers
4, 8, and 32.

Revise times tables and division facts (1x, 2x, 3x, 4x, 5x, 8x, 10x).

$$8 \times 4 = 32$$

$$32 \div 4 = 8$$

$$4 \times 8 = 32$$

$$32 \div 8 = 4$$

Practice Sheet Mild

Multiplication grid

Complete the multiplication grid.

| <i>x</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> | <i>8</i> | <i>9</i> | <i>10</i> |
|-----------|----------|----------|----------|----------|----------|-----------|-----------|----------|-----------|-----------|
| <i>1</i> | | | | | | <i>6</i> | <i>7</i> | | <i>9</i> | |
| <i>2</i> | | | | | | <i>12</i> | <i>14</i> | | <i>18</i> | |
| <i>3</i> | | | | | | <i>18</i> | <i>21</i> | | <i>27</i> | |
| <i>4</i> | | | | | | <i>24</i> | <i>28</i> | | <i>36</i> | |
| <i>5</i> | | | | | | <i>30</i> | <i>35</i> | | <i>45</i> | |
| <i>6</i> | | | | | | <i>36</i> | <i>42</i> | | <i>54</i> | |
| <i>7</i> | | | | | | <i>42</i> | <i>49</i> | | <i>63</i> | |
| <i>8</i> | | | | | | <i>48</i> | <i>56</i> | | <i>72</i> | |
| <i>9</i> | | | | | | <i>54</i> | <i>63</i> | | <i>81</i> | |
| <i>10</i> | | | | | | <i>60</i> | <i>70</i> | | <i>90</i> | |

Practice Sheet Hot

Multiplication grid

Fill in the multiplication grid, timing how long it takes. Don't rush! Aim for accuracy...
Once complete, check your answers and try to learn any that were incorrect.

| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-----|---|---|---|---|---|---|---|---|---|----|
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |

Challenge

After a quick break, have a go at completing a second copy of the grid (provided on next page), again timing how long it takes.

Did you improve your time and/or have more correct answers?

Practice Sheet Hot

Multiplication grid

| <i>x</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> | <i>6</i> | <i>7</i> | <i>8</i> | <i>9</i> | <i>10</i> |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| <i>1</i> | | | | | | | | | | |
| <i>2</i> | | | | | | | | | | |
| <i>3</i> | | | | | | | | | | |
| <i>4</i> | | | | | | | | | | |
| <i>5</i> | | | | | | | | | | |
| <i>6</i> | | | | | | | | | | |
| <i>7</i> | | | | | | | | | | |
| <i>8</i> | | | | | | | | | | |
| <i>9</i> | | | | | | | | | | |
| <i>10</i> | | | | | | | | | | |

Practice Sheets Answers

Multiplication grid (mild)

| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

Multiplication grid (hot)

| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

A Bit Stuck? Monster multiplications

Work in pairs

Things you will need:

- A set of 1-10 cards
- A set of monster cards
- A pencil



What to do:

- Shuffle the 1-10 cards. Place face down.
- Take the top card. Take that number of monster cards.
- Count in 3s to work out how many shoes are needed for the monsters.
- Write the matching multiplication.
- You can use the hops you have drawn on the 0 to 30 beaded line to help you to count in 3s.
- Repeat.
- Score 3 points for each correct multiplication you write.
- When you have finished, count in 3s to work out your final score.

| | |
|---|-------------------|
| ○ | |
| ○ | |
| ○ | |
| ○ | $6 \times 3 = 18$ |
| ○ | $4 \times 3 =$ |
| ○ | |
| ○ | |
| ○ | |
| ○ | |

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

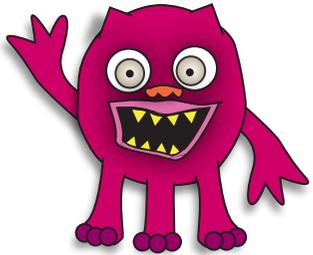
Write out the 3 times table:

- 1 x 3 =
- 2 x 3 =
- 3 x 3 =
- 4 x 3 =
- 5 x 3 =
- 6 x 3 =
- 7 x 3 =
- 8 x 3 =
- 9 x 3 =
- 10 x 3 =

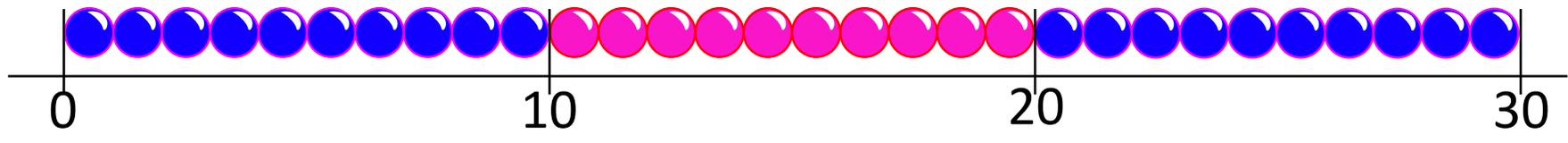
Learning outcomes:

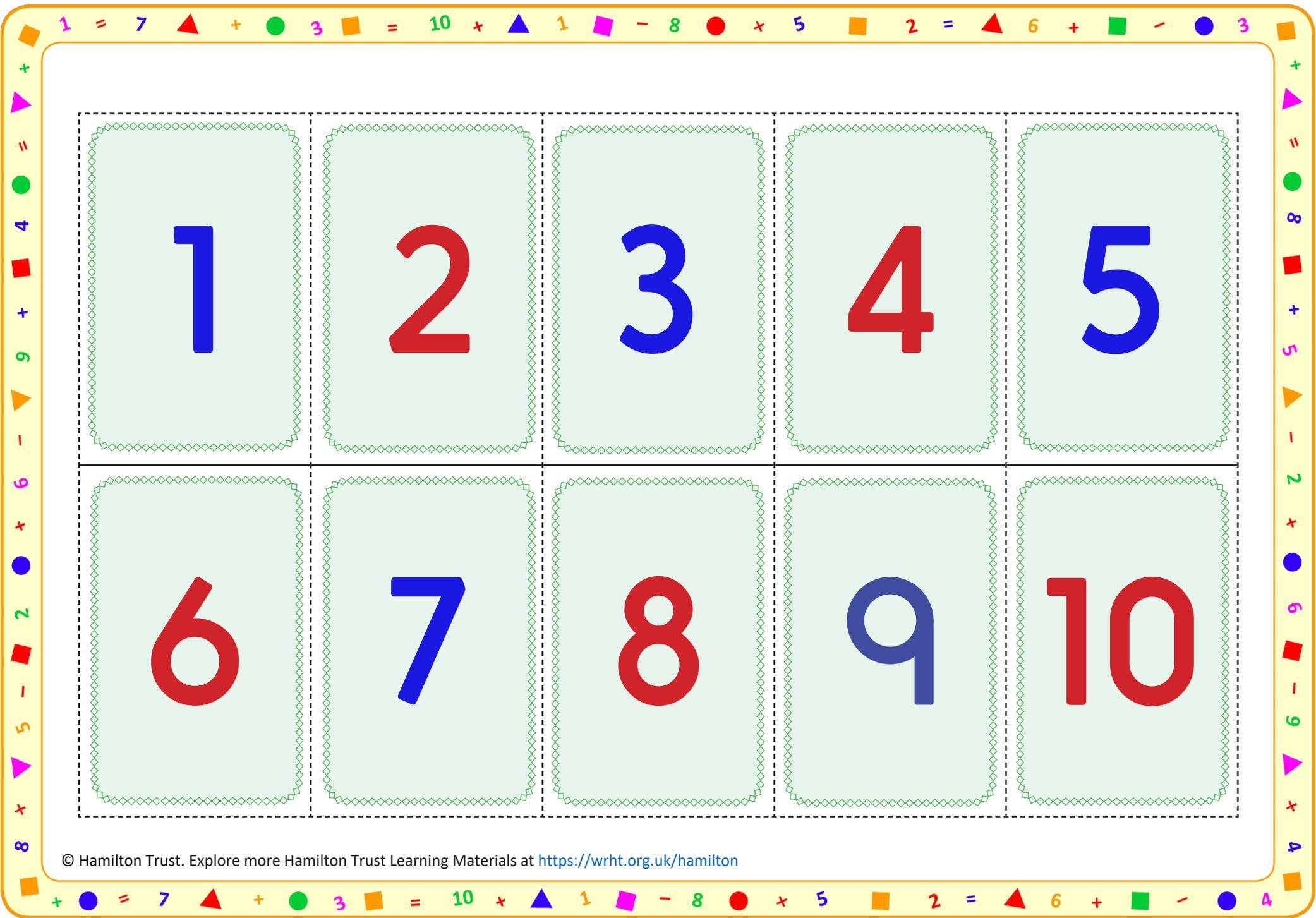
- I can use 'clever counting' in 3s.
- I can write the matching multiplications.
- I am beginning to know my 3 times table.

A Bit Stuck?
Monster multiplications



A Bit Stuck? Monster multiplications





| | | | | |
|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 |

Check your understanding

Questions

Write the missing numbers:

$$\square \times 8 = 32$$

$$6 \times \square = 48$$

$$9 = 36 \div \square$$

$$\square \times 4 = 48$$

$$5 = \square \div 8$$

Write $8 \times 6 = 48$ in the middle of a space and circle it.

Draw 8 spider legs out from it.

Write 8 related number sentences using this central fact.

Always true, sometimes true or never true?

- 6×8 is the same as 4×12 .
 - Dividing a number by 3 gives an odd answer.
 - Even numbers divide by 8 to leave no remainder.
-
-

Answers on the next page

Check your understanding

Answers

Write the missing numbers.

$$4 \times 8 = 32$$

$$6 \times 8 = 48$$

$$9 = 36 \div 4$$

$$12 \times 4 = 48$$

$$5 = 40 \div 8$$

Check children are applying known times tables facts and are clear how to use them to solve division questions.

Write $8 \times 6 = 48$ in the middle of a space and circle it.

Draw 8 spider legs out from it.

Write 8 related number sentences using this central fact.

e.g. $6 \times 8 = 48$; $80 \times 6 = 480$; $8 \times 60 = 480$; $800 \times 6 = 4800$; $8 \times 600 = 4800$; $80 \times 60 = 4800$; $48 \div 6 = 8$; $48 \div 8 = 6$; $4 \times 6 = 24$; $6 \times 4 = 24$;
 $9 \times 6 = 54$

Always true, sometimes true or never true?

- 6×8 is the same as 4×12 . True, both equal 48.
- Dividing a number by 3 gives an odd answer. Sometimes, e.g. $9 \div 3 = 3$ but $12 \div 3 = 4$. (Children should give examples).
- Even numbers divide by 8 to leave no remainder. Sometimes, e.g. multiples of 8 such as 16, 24 or 32; but other even numbers will leave a remainder, e.g. 12, 20, or 22.