## TEACHING PACK


tfachit primary

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## Introduction

This pack aims to provide creative activities, engaging resources, differentiated mastery-type word problems, including answers, and essential assessments to support children in their learning of the multiplication facts to $12 \times 12$.
It is organised into the following sections:

## Adaptable resources and activities

A collection of games, resources and activities which can be adapted for every year group.

## $x 2, x 5$ and $\times 10$ resources

A collection of worksheets, activites and problems to tackle the 2, 5 and 10 multiplication tables.
$x 3, x 4$ and $x 8$ resources
A collection of worksheets, activites and problems to tackle the 3,4 and 8 multiplication tables.
$x 6, x 7, x 9, x 11$ and $x 12$ resources
A collection of worksheets, activites and problems to tackle the 6, 7, 9, 11 and 12 multiplication tables.

Individual multiplication table assessments
Individual multiplication assessment sheets.

## Challenge multiplication sheets

A collection of timed assessment sheets which increase in difficulty.
There is also a handy PowerPoint with a collection of starter activities for tackling each of the multiplication facts. This can be found here.

We hope you enjoy using this pack. If you have any questions, please get in touch: email support@teachitprimary.co.uk or call us on 01225788851 . Alternatively, you might like to give some feedback for other Teachit Primary members - you can do this by adding a comment on the Mastering multiplication page on Teachit Primary (please log in to access this).

## Games and activities

## Rapid recall cards

A quick and fun way to help children recall multiplication facts
Print the sheets off back-to-back or glue the two sheets back to back - the multiplication facts and their answers will match up. Cut out the facts (you may chose to laminate the fact cards to prolong their life.) and ask children to arrange the multiplication facts face up. They must now say each fact aloud and recall its answer before turning the card to check, for example, ' $7 \times 7$ is 49 '. If children work with a partner they can time how quickly each of them is able to recall all of the multiplication facts.

A further challenge is for children to find the inverse, so they start with the answer and need to recall the multiplication sum required to find this answer. For example, ' 49 is 7 lots of 7 '.
NB the resource shows the 7 times multiplication facts but can be easily edited to show a different multiplication table.

## Make it with arrays

Perfect for visual and kinaesthetic learners
Help children of all ages to visualise the multiplication by building it as an array (a systematic arrangement of the sums using rows and columns). You can use conventional classroom tools like cubes or counters; or try some unusual objects like buttons, Smarties or Lego bricks.
Alternatively, children generate their own arrays by rolling two dice and completing the Arrays sheet.

$4 \times 3$

## Multiplication flowers

Ideal for your visual learners
Model how to complete the multiplication flower resource with a multiplication table of your choice. Perfect as a starter, plenary or home learning task.

Multiplication flowers
Ideal for your visual learners
Model how to complete the multiplication flower
resource with a multiplication table of your choice.
Perfect as a starter, plenary or home learning task.


## Multiplication dartboards

A fun idea for rapid recall
Children recall multiplication facts by multiplying the middle number by the one next to it in each of the segments, then write the answer in the outer circle (see example). Add your own numbers to the sheet or ask children to choose their own.


## Multiplication with cards

You will need a pack of playing cards for each pair of children
You will need a deck of cards for this game. Allocate a value to the picture cards, so Ace is $1, J$ ack is 0 , Queen is 11 and King is 12 . Split the pack into two piles, turn a card each and multiply. Whoever has the highest product keeps both cards.
Extend by asking for the inverse division sum.

## Bingo!

A multiplication spin on this classroom favourite!
Write the numbers below on the board and ask children to choose nine different numbers at random and write them on a Bingo! grid. Call out the sums on the multiplication flash cards and ask children to cross out or cover any corresponding answers - remember to make a note of the cards called. The winner is the first child to cross out or cover all of their numbers and call out Bingo!

Blue cards ( $x 2, x 5, x 10$ facts):
$3,5,6,7,8,9,10,11,12,14,15,16,40,45,60,80,90,100,120$
Pink cards ( $\times 3, \times 4, \times 8$ facts):
$1,4,6,7,8,9,11,12,16,21,24,27,28,32,33,36,48,56,72,88$
Yellow cards ( $x 6, x 7, x 9, x 11, x 12$ facts):
$1,2,3,4,5,6,7,8,9,11,12,18,24,27,28,30,36,44,48,49,54,60,63,66,70$, $72,77,88,96,121,132,144$

Name: $\qquad$ Date: $\qquad$

## Mini speedy multiplication grids

Add your own numbers and time yourself to see how speedily you can recall the number facts!

| $\mathbf{X}$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

I completed my table in

I made errors.
$\qquad$
Name: $\qquad$
$\qquad$

## Mini speedy multiplication grids

Add your own numbers and time yourself to see how speedily you can recall the number facts!

| $X$ |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

I completed my table in $\qquad$ I made $\qquad$ errors.


Name: Date:

## Multiplication triangles

Throw two dice together and record the numbers in the bottom corners. Multiply together to generate their product and write in the top box. Find all four related facts.
$3 \times 4=12$
$4 \times 3=12$
$12 \div 4=3$
$12 \div 3=4$


## Multiplication dominoes - 2, 5 and 10




You may wish to laminate these cards so that they can be reused.

## A game of dominoes for $\mathbf{2}$ or $\mathbf{4}$ children

Cut out the dominoes and place face down on the table and mixed up. Each child takes an even number of dominoes and keeps them hidden from the other children.

The youngest child starts first and places a domino in the centre of the table. Play then works around the group in a clockwise direction.

Children must match the number sentences and correct array on the domino. If they cannot go, they knock on the table and play passes to the next child.

The winner is the first child to get rid of all their dominoes.

## Individual task

Children match up corresponding number sentences and arrays on dominoes.

Name:
Date:

## Two, five and ten times multiplication problems

## Set A

1. Write these addition sentences as multiplication sentences. The first one has been completed for you.
a. $5+5+5+5=5 \times 4$
b. $2+2+2+2+2=$
c. $10+10=$
d. $5+5+5+5+5+5+5=$.
2. This array shows $5 \times 4=20$

Write three other multiplication or addition facts that
 this array shows.

Write one division fact that this array shows.
3. A school buys pencils in boxes of ten. They buy twelve boxes. How many pencils do they have altogether? Write the number sentence needed.

4. a. J ane buys 3 circus tickets costing $£ 5$ each. How much does she spend? Write the multiplication number sentence and calculate the cost.
b. If J ane paid with a $£ 20$ note, how much change would she get?
$\square$
5. 12 children ride their two-wheeled bicycles to the park. How many wheels are there altogether?

6. a. Two friends share 14 sweets equally between them. How much do they each get? Write this as a division number sentence.
b. Write your own sharing story like this one.
$\square$
7. a. Textbooks cost $£ 10$ each. A school has $£ 80$. How many books can they buy?

b. How much change would there be from $£ 100$ ?

8. There are 16 gloves in the lost property box at school. How many pairs of gloves will this make?

9. A lollipop costs 5 p. Thomas buys 7 of them. How much money does he spend?

10. a. Gingerbread men come in packs (groups) of 5 . Dave wants to buy 20 gingerbread men. How many packs will he need to buy? Write this as a division sum.
b. Make up your own grouping story like this one.


## Two, five and ten times multiplication problems

## Set B

1. Write these addition sentences as multiplication sentences. The first one has been completed for you.
a. $5+5+5+5=5 \times 4$
b. $2+2+2+2+2=$
c. $10+10=$
d. $5+5+5+5+5+5+5=$
2. This array shows $5 \times 4=20$

Write three other multiplication or addition facts that
 this array shows.

Write one division fact that this array shows.
3. A school buys pencils in boxes of ten. They buy twelve boxes. How many pencils do they have altogether? Write the number sentence needed.

4. a. J ane buys 3 circus tickets costing $£ 5$ each. How much does she spend? Write the multiplication number sentence and calculate the cost.

b. If J ane paid with a $£ 20$ note, how much change would she get?
5. 12 children ride their two-wheeled bicycles to the park. How many wheels are there altogether?

6. a. Two friends share 14 sweets equally between them. How much do they each get? Write this as a division number sentence.
$\square$
b. Write your own sharing story like this one.

7. a. Textbooks cost $£ 10$ each. A school has $£ 80$. How many books can they buy?

b. How much change would there be from $£ 100$ ?

8. There are 16 gloves in the lost property box at school. How many pairs of gloves will this make?

9. A lollipop costs 5 p. Thomas buys 7 of them. How much money does he spend?

10. a. Gingerbread men come in packs (groups) of 5 . Dave wants to buy 20 gingerbread men. How many packs will he need to buy? Write this as a division sum.

b. Make up your own grouping story like this one.


## Answers

## Set B problems provide more pictorial support for the children.

1. Write these addition sentences as multiplication sentences. The first one has been completed for you.
a. $5+5+5+5=5 \times 4$
b. $2+2+2+2+2=2 \times 5$
c. $10+10=10 \times 2$
d. $5+5+5+5+5+5+5=5 \times 7$
2. This array shows $5 \times 4=20$


Write three other multiplication or addition facts that this array shows.
$4 \times 5=20$
$5+5+5+5=20$
$4+4+4+4+4=20$
Write one division fact that this array shows. $20 \div 5=4$ or $20 \div 4=5$
3. A school buys pencils in boxes of ten. They buy twelve boxes. How many pencils do they have altogether? Write the number sentence needed. $10 \times 12=120$ pencils
4a. J ane buys 3 circus tickets costing $£ 5$ each. How much does she spend?
Write the multiplication number sentence and calculate the cost.
$£ 5 \times 3=£ 15$
b. If J ane paid with a $£ 20$ note, how much change would she get?
$£ 20-£ 5=£ 15$
5. 12 children ride their two-wheeled bicycles to the park.

How many tyres are there altogether?
$12 \times 2=24$
6a. Two friends share 14 sweets equally between them. How much do they each get? Write this as a division number sentence.
$14 \div 2=7$
b. Write your own sharing story like this one.

Accept suitable examples.
7a. Textbooks cost $£ 10$ each. A school has $£ 80$. How many books can they buy? $£ 80 \div £ 10=8$ books
b. How much change would there be from $£ 100$ ? £20
8. There are 16 gloves in the lost property box at school. How many pairs of gloves will this make?
$16 \div 2=8$
9. A lollipop costs 5 p. Thomas buys 7 of them. How much money does he spend? $5 p \times 7=35 p$

10a. Gingerbread men come in packs (groups) of 5. Dave wants to buy 20 gingerbread men. How many packs will he need to buy? Write this as a division sum. $20 \div 5=4$
b. Make up your own grouping story like this one.

Accept suitable examples.

Name: Date:

## The witches' cauldron problem

Use your multiplication skills to solve the following problems and work systematically.

$$
\text { Bats have } 2 \text { legs. }
$$

Frogs have 4 legs.
Spiders have 8 legs.


1. Winnie the witch needs 12 legs to turn a child into a toad. How many different combinations of bats, frogs and spiders can she use?

| Bats (2 legs) |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Frogs (4 legs) |  |  |  |  |  |  |
| Spiders (8 legs) |  |  |  |  |  |  |
| Total number of legs | 12 | 12 | 12 | 12 | 12 | 12 |

2. Meg the witch needs 20 legs to turn twins into toads. How many different combinations of bats, frogs and spiders can she use?

| Bats (2 legs) |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Frogs (4 legs) |  |  |  |  |  |  |  |  |  |  |  |  |
| Spiders (8 legs) |  |  |  |  |  |  |  |  |  |  |  |  |
| Total number of legs | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

The Grand High Witch needs 24 legs to turn the teacher into a toad. How many different combinations of bats, frogs and spiders can she use?

## Answers

Encourage children to work systematically to find all of the possibilities, modelling an example as necessary. For extra support, children can draw the creatures and count the legs.

1. Winnie the witch needs 12 legs to turn a child into a toad. How many different combinations of bats, frogs and spiders can she use?

| Bats (2 legs) | 6 | 4 | 2 | 2 | 0 | 0 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Frogs (4 legs) | 0 | 1 | 2 | 0 | 3 | 1 |
| Spiders (8 legs) | 0 | 0 | 0 | 1 | 0 | 1 |
| Total number of legs | 12 | 12 | 12 | 12 | 12 | 12 |

2. Meg the witch needs 20 legs to turn twins into toads. How many different combinations of bats, frogs and spiders can she use?

The following is a selection of answers. Others are possible.

| Bats (2 legs) | 10 | 8 | 6 | 6 | 4 | 4 | 2 | 2 | 2 | 0 | 0 | 0 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frogs (4 legs) | 0 | 1 | 2 | 0 | 3 | 1 | 4 | 2 | 0 | 5 | 3 | 1 | 0 |
| Spiders (8 legs) | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Total number of legs | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

## Challenge:

The Grand High Witch needs 24 legs to turn the teacher into a toad. How many different combinations of bats, frogs and spiders can she use?

The following is a selection of answers. Others are possible.

| Bats (2 legs) | 16 | 14 | 12 | 12 | 10 | 10 | 8 | 8 | 6 | 6 | 6 | 4 | 2 | 0 | 0 | 0 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frogs (4 legs) | 0 | 1 | 2 | 0 | 3 | 1 | 4 | 2 | 5 | 3 | 1 | 6 | 7 | 8 | 2 | 0 |
| Spiders (8 legs) | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 3 | 4 |
| Total number of <br> legs | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |

## Two times table and division facts

Name:

| $2 \times 4=$ | $10 \times 2=$ |
| :--- | :--- |
| $3 \times 2=$ | $2 \times 1=$ |
| $12 \times 2=$ | $5 \times 2=$ |
| $7 \times 2=$ | $2 \times 9=$ |

Date:

Time taken:

Name:

| $20 \div 2=$ | $14 \div 2=$ |
| :--- | :--- |
| $4 \div 2=$ | $16 \div 2=$ |
| $24 \div 2=$ | $22 \div 2=$ |
| $12 \div 2=$ | $18 \div 2=$ |

Time taken:

Date:
$6 \div 2=$
$10 \div 2=$
$2 \div 2=$
$8 \div 2=$
$\qquad$
$-8$

Name:
Date:

| 2×4 | $14 \div 2=$ | $2 \times 6=$ |
| :---: | :---: | :---: |
| $10 \div 2=$ | $7 \times 2=$ | $2 x_{\text {__ }}=4$ |
| _ $\times 2=20$ | $2 \div 2=$ | $1 / 2$ of $12=$ |
| $8 \div 2=$ | $2 \times 8=$ | $2 \times 9=$ |
| $20 \div 2=$ | $2 x_{\text {__ }}=18$ | $2 \times 1=$ |
| Double $2=$ | $2 \times 10=$ | $12 \div 2=$ |
| _ $\div 2=12$ | $22 \div 2=$ | $6 \div 2=$ |
| $4 \times 2=$ | $11 \times 2=$ | $12 \times 2=$ |
|  | Time tak |  |

## Individual times table answer sheets

## Two times table sheet

| $2 \times 4=4$ | $10 \times 2=20$ | $2 \times 8=16$ |
| :--- | :--- | :--- |
| $3 \times 2=6$ | $2 \times 1=2$ | $2 \times 2=4$ |
| $12 \times 2=24$ | $5 \times 2=10$ | $11 \times 2=22$ |
| $7 \times 2=14$ | $2 \times 9=18$ | $2 \times 6=12$ |


| $20 \div 2=10$ | $14 \div 2=7$ | $6 \div 2=12$ |
| :--- | :--- | :--- |
| $4 \div 2=2$ | $16 \div 2=8$ | $10 \div 2=20$ |
| $24 \div 2=12$ | $22 \div 2=11$ | $2 \div 2=1$ |
| $12 \div 2=6$ | $18 \div 2=9$ | $8 \div 2=4$ |


| $2 \times 4=8$ | $14 \div 2=7$ | $2 \times 6=12$ | $20 \div 2=10$ | $2 \times 9=18$ | $2 \times 1=2$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $10 \div 2=5$ | $7 \times 2=14$ | $2 \times 2=4$ | Double $2=10$ | $2 \times 10=20$ | $12 \div 2=6$ |
| $10 \times 2=20$ | $2 \div 2=1$ | $\frac{1}{2}$ of $12=6$ | $24 \div 2=12$ | $22 \div 2=11$ | $6 \div 2=3$ |
| $8 \div 2=4$ | $2 \times 8=16$ | $2 \times 9=18$ | $4 \times 2=8$ | $11 \times 2=22$ | $12 \times 2=24$ |

Three times table sheet

| $3 \times 4=12$ | $10 \times 3=30$ | $3 \times 8=24$ |
| :--- | :--- | :--- |
| $3 \times 2=6$ | $3 \times 1=3$ | $3 \times 3=9$ |
| $12 \times 3=36$ | $5 \times 3=15$ | $11 \times 3=33$ |
| $7 \times 3=21$ | $3 \times 9=27$ | $3 \times 6=18$ |


| $30 \div 3=10$ | $24 \div 3=8$ | $6 \div 3=2$ |
| :--- | :--- | :--- |
| $36 \div 3=12$ | $15 \div 3=5$ | $21 \div 3=7$ |
| $9 \div 3=3$ | $33 \div 3=11$ | $3 \div 3=1$ |
| $12 \div 3=4$ | $18 \div 3=6$ | $27 \div 3=9$ |


| $3 \times 4=12$ | $12 \div 3=4$ | $5 \times 3=15$ | $30 \div 3=10$ | $6 \times 3=18$ | $18 \div 3=6$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $27 \div 3=9$ | $7 \times 3=21$ | $3 \times 3=9$ | $1 \times 3=3$ | $21 \div 3=7$ | $15 \div 3=5$ |
| $10 \times 3=30$ | $3 \div 3=1$ | $24 \div 3=8$ | $36 \div 3=12$ | $33 \div 3=11$ | $1 / 2$ of $6=3$ |
| $9 \div 3=3$ | $3 \times 8=24$ | $3 \times 9=27$ | Double $3=6$ | $11 \times 3=33$ | $12 \times 3=36$ |

## Four times table sheet

| $3 \times 4=12$ | $10 \times 4=40$ | $4 \times 8=32$ |
| :--- | :--- | :--- |
| $4 \times 2=8$ | $4 \times 1=4$ | $4 \times 4=16$ |
| $12 \times 4=48$ | $5 \times 4=20$ | $11 \times 4=44$ |
| $7 \times 4=28$ | $4 \times 9=36$ | $4 \times 6=24$ |


| $40 \div 4=10$ | $24 \div 4=6$ | $32 \div 4=8$ |
| :--- | :--- | :--- |
| $48 \div 4=12$ | $4 \div 4=1$ | $28 \div 4=7$ |
| $16 \div 4=4$ | $20 \div 4=5$ | $36 \div 4=9$ |
| $12 \div 4=3$ | $8 \div 4=2$ | $44 \div 4=11$ |


| $28 \div 4=7$ | $16 \div 4=4$ | $4 \div 4=1$ | $40 \div 4=10$ | $1 \times 4=4$ | $32 \div 4=8$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $4 \times 4=16$ | $24 \div 4=6$ | Double $4=8$ | $48 \div 4=12$ | $4 \times 8=32$ | $3 \times 4=12$ |
| $44 \div 4=11$ | $5 \times 4=20$ | $11 \times 4=44$ | $10 \times 4=40$ | $20 \div 4=5$ | $36 \div 4=9$ |
| $7 \times 4=28$ | $4 \times 9=36$ | $12 \div 4=3$ | $1 / 2$ of $8=4$ | $4 \times 6=24$ | $12 \times 4=48$ |

## Challenge sheets - contents page

The Challenge sheets are a fun and a focussed way to cover all of the times tables.
They increase in difficulty both through coverage and the number of sums to be answered within a suggested time limit of five minutes.

| Title | Objectives covered |
| :--- | :--- |
| Challenge sheet $\mathbf{1}$ | $2,5,10$ multiplication facts |
| Challenge sheet $\mathbf{2}$ | $2,5,10$ division facts |
| Challenge sheet $\mathbf{3}$ | $2,5,10$ multiplication and division facts |
| Challenge sheet $\mathbf{4}$ | $3,4,8$ multiplication facts |
| Challenge sheet 5 | $3,4,8$ division facts |
| Challenge sheet 6 | $3,4,8$ multiplication and division facts |
| Challenge sheet 7 | $2,3,4,5,6,7,8,9,10$ multiplication facts |
| Challenge sheet $\mathbf{8}$ | $2,3,4,5,6,7,8,9,10$ division facts |
| Challenge sheet $\mathbf{9}$ | $2,3,4,5,6,7,8,9,10$ multiplication and division facts |
| Challenge sheet $\mathbf{1 0}$ | Multiplication facts up to $12 \times 12$ |
| Challenge sheet $\mathbf{1 1}$ | Division facts up to $12 \times 12$ |
| Challenge sheet $\mathbf{1 2}$ | Multiplication and division facts up to $12 \times 12$ |
| Challenge sheet $\mathbf{1 3}$ | Multiplication and division facts up to $12 \times 12$ extra |
| Class assessment sheet | Record the progress of your class/ es |
| Answer sheet $\mathbf{1}$ | Answers to Challenge sheets 1,2 and 3 |
| Answer sheet 2 | Answers to Challenge sheets 4,5 and 6 |
| Answer sheet 3 | Answers to Challenge sheets 7 and 8 |
| Answer sheet 4 | Answers to Challenge sheets 9 and 10 |
| Answer sheet 5 | Answers to Challenge sheets 11 and 12 |
| Answer sheet 6 | Answers to Challenge sheet 13 |

Name: Date:

## Challenge sheet 1

Find the answers to the following questions.
$1.2 \times 9=$ 16. $5 \times 5=$
$2.3 \times 5=$ 17. $7 \times 10=$$3.2 \times 8=$18. $11 \times 2=$
$4.7 \times 5=$19. $10 \times 2=$
$5.10 \times 4=$ $20.5 \times 6=$
$6.12 \times 2=$ $21.5 \times 8=$
$7.12 \times 10=$$22.2 \times 2=$
$8.6 \times 2=$$9.3 \times 10=$24. $5 \times 1=$
10. $3 \times 2=$25. $6 \times 10=$
11. $10 \times 5=$ 26. $10 \times 10=$
$12.5 \times 4=$ 27. $5 \times 5=$
13. $12 \times 5=$ ..... 28. $11 \times 10=$
$14.7 \times 2=$ 29. $5 \times 9=$15. $5 \times 10=$30. $10 \times 8=$
Time taken:

## Class assessment sheet

|  | Challenge |  |  |  |  |  |  |  |  |  |  |  |  |
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## Answer sheet 1

## Challenge sheet 1 answers

$1.2 \times 9=18$
16. $5 \times 5=25$
$2.3 \times 5=15$
$17.7 \times 10=70$
$3.2 \times 8=16$
$18.11 \times 2=22$
$4.7 \times 5=35$
19. $10 \times 2=20$
$5.10 \times 4=40$
20. $5 \times 6=30$
$6.12 \times 2=24$
21. $5 \times 8=40$
$7.12 \times 10=120$
22. $2 \times 2=4$
8. $6 \times 2=12$
23. $11 \times 5=55$
$9.3 \times 10=30$
24. $5 \times 1=5$
$10.3 \times 2=6$
25. $6 \times 10=60$
11. $10 \times 5=50$
26. $10 \times 10=100$
12. $5 \times 4=20$
27. $5 \times 5=25$
13. $12 \times 5=60$
28. $11 \times 10=110$
14. $7 \times 2=14$
29. $5 \times 9=45$
15. $5 \times 10=50$
30. $10 \times 8=80$

Challenge sheet 2 answers
$\begin{array}{ll}\text { 1. } 22 \div 2=11 & \text { 16. } 10 \div 5=2\end{array}$
2. $70 \div 10=7$
17. $16 \div 2=8$
3. $55 \div 5=11$
18. $110 \div 10=11$
4. $4 \div 2=2$
19. $35 \div 5=7$
5. $30 \div 5=6$
20. $120 \div 10=12$
6. $30 \div 10=3$
21. $5 \div 5=1$
7. $18 \div 2=9$
22. $40 \div 10=4$
8. $60 \div 5=12$
23. $24 \div 2=12$
9. $20 \div 2=10$
24. $20 \div 10=2$
10. $40 \div 5=8$
25. $8 \div 2=4$
11. $45 \div 5=9$
26. $20 \div 5=4$
12. $14 \div 2=7$
27. $6 \div 2=3$
13. $25 \div 5=5$
28. $15 \div 5=3$
14. $12 \div 2=6$
29. $2 \div 2=1$
15. $50 \div 10=5$
30. $90 \div 10=9$

## Challenge sheet 3 answers

$1.10 \times 4=40$
$2.35 \div 5=7$
$3.20 \div 10=2$
$4.7 \times 10=70$
$5.30 \div 3=10$
$6.5 \times 9=45$
$7.11 \times 5=55$
$8.10 \times 4=40$
$9.2 \times 4=8$
$10.10 \div 2=5$
$11.10 \times 2=20$
$12.8 \div 2=4$
$13.10 \times 8=80$
$14.60 \div 5=12$
$15.4 \times 2=8$
16. $25 \div 5=5$
31. $6 \times 10=60$
17. $2 \times 8=16$
32. $10 \times 9=90$
18. $2 \times 9=18$
33. $5 \times 3=15$
19. $20 \div 2=10$
34. $10 \times 9=90$
20. $10 \times 8=80$
35. $7 \times 2=14$
$21.120 \div 10=12$
36. $12 \times 2=24$
22. $11 \times 2=22$
37. $100 \div 10=10$
23. $12 \times 5=60$
38. $10 \times 12=120$
24. $14 \div 2=7$
39. $15 \div 5=3$
25. $5 \times 8=40$
40. $2 \times 2=4$
26. $2 \div 2=1$
41. $50 \div 10=5$
27. $7 \times 10=70$
42. $2 \times 9=18$
28. $50 \div 5=10$
43. $30 \div 5=6$
29. $2 \times 10=20$
44. $5 \times 9=45$
30. $22 \div 2=11$
45. $6 \div 2=3$

