(1) Complete the multiplication.

b)


$$
4 \times 3
$$

2 Complete the number sentences
a) $6 \times 4=24$
b) $4 \times 3=12$
c) $28=7 \times 4$
d) $4 \times 12=48$
e) $0 \times 4=0$
f) $4 \times 9=36$
g) $24 \div 4=6$
h) $8 \div 4=2$
i) $0 \div 4=0$
j) $44 \div 11=4$
k) $20 \div 4=5$

1) $1 \times 4=4$

Complete the number sentences.
a) $2 \times 4=8$

$$
4 \times 4=16
$$

$$
8 \times 4=32
$$

$$
\text { c) } 3 \times 4=12
$$

$$
3 \times 8=24
$$

$$
3 \times 12=36
$$

b) $8=4 \times 2$

$$
\begin{aligned}
& 16=4 \times 4 \\
& 32=4 \times 8
\end{aligned}
$$

What patterns do you notice?

5 Write <, > or = to compare the statements
a) $48 \div 12$

d) $4 \div 4 \ll$
$4 \times 4$
b)

e) $1 \times 4=4 \times 1$
c)
c) $16 \div 4 \longleftarrow 4 \times 4$
f) $4 \times 2 \backsim 32 \div 4$

6
A paper clip is 4 cm long


How long are 6 of these paper clips?

Dexter buys 10 mugs and 4 key rings. How much money does he spend in total?


Here is an array made up of triangles.
$\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \Delta \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \Delta \triangle \Delta \triangle \Delta$
a) What multiplication sentence can you see?

b) What division sentence can you see?

4. Complete the calculations.

Try to do the calculations in your head.
a) $6 \times 8=48$
e) $72 \div 8=$ $\square$
b) $8 \times 7=56$
f) $88 \div 11=8$
c) $10 \times 8=80$
g) $40 \div 8=5$
d) $32=8 \times 4$
h) $8 \times 1=8$

What multiplication can you see?


6 Complete the multiplications.
a) $2 \times 8=16$
$4 \times 8=32$
$8 \times 8=64$
b) $8=8 \times \square$
$16=8 \times 2$
$32=8 \times 4$


What patterns do you notice?

7 a) Amir draws 7 jumps of 8 on a number line.


What number does Amir end on? 56

Explain how you worked it out.
b) This time, Amir makes 7 jumps of 8, but starts from 1


What number does Amir end on this time? 57

Explain how you know.

8 Boats can be hired on a lake.
There are 5 large boats and 8 small boats on the lake.

Each boat is full.
How many people are on the lake?

## 72

8 Put the numbers into the sorting diagram.

Are any of the parts empty? Why?
Talk about it with a partner.
Talk about it with a partner.

Multiply 2-digits by 1-digit (2)

D There are 23 marbles in a jar. There are 5 jars.


| Tens | Ones |
| :---: | :---: |
| 凹mim ummme | - - |
|  | - - |
| - | - - |
|  | - - |
|  | - - |

How many marbles are there in total?
$5 \times 3$ ones $=15$
$5 \times 2$ tens $=100$
$15+100=115$
$5 \times 23=115$
There are 115 marbles in total.
2. Work out $4 \times 15$

| Tens | Ones |
| :--- | :---: |
| 10 | 1 |
| 10 | 1 |
| 10 | 1 |
| 10 | 1 |
| 10 |  |

$4 \times 5=20$
$4 \times 10=40$
$4 \times 15=60$
(3) Complete the multiplications.
a) $4 \times 24=96$
b) $3 \times 17=51$
c) $3 \times 25=75$
d) $34 \times 4=136$

| Tens | Ones |
| :--- | :--- |
| 10 | 10 |
| 10 | 10 |
| 10 | 10 |
| 10 | 1 |


| Tens | Ones |
| :---: | :---: |
| (10) (10) 10 | (1) 1 (1) |
| (10) (10) 10 | (1) 1 (1) |
| (10) (10) 10 | (1) 1 1 1 |
| $\text { (10) (10) } 10$ | (1) 1 (1) |


(5) Work out the multiplications
a) $25 \times 5$

c) $5 \times 26$

b) $35 \times 6$
d) $4 \times 36$

(6)

Tommy works out $37 \times 2$


What mistake has Tommy made? Work out the correct answer.
(7) Find the missing numbers.

(8) Here are some digit cards. $1 . \boxed{2} \boxed{3} \boxed{4} \boxed{5}$
a) Use the digit cards to create a multiplication and work out the answer.

$$
\text { E.g. } \quad 3 \boxed{2} \times 5=160
$$

b) Work with a partner to find calculations that have:

- an odd product
- an even product
- an exchange in the ones column
- an exchange in the ones and tens columns.

Divide 2-digits by 1-digit (2)

Rosie has 56 pencils.
a) Draw base 10 to represent the pencils.


Rosie shares the 56 pencils equally between 4 pots.
b) Draw base 10 on the place value grid to share the pencils.

c) How many pencils are in each pot?
d) Did you have to make an exchange?

Eva has this money.


She wants to share the money equally between 3 people.
a) Use the place value chart to show how Eva can share the money.

| Tens | Ones |
| :---: | :---: |
| $E 10$ | E1 EI EI EI |
| $E 10$ | EI EI EI EI EI EI EI |
| $E 10$ |  |

b) How much money does each person get?
(3) Divide 72 by 3

000000000

| Tens | Ones |
| :---: | :---: |
| 10 (10) (1) (1) (1) (1) (1) (1) |  |
| 10 |  |
| 10 | 1 |

Use the place value counters to help you.

$$
72 \div 3=24
$$

4. Use base 10 or counters to work out the divisions.
a) $45 \div 3=15$
b) $57 \div 3=19$
c) $92 \div 4=23$
(5) Rosie and Tommy are working out $52 \div 4$

They both use a part-whole model.

a) Whose part-whole model will help them with the division?


How do you know?

b) Use a part-whole model to work out $52 \div 4$
6) Use the part-whole models to complete the divisions.
a) $48 \div 3=16$


$$
\begin{aligned}
& 30 \div 3=10 \\
& 18 \div 3=6 \\
& 48 \div 3=16
\end{aligned}
$$

b) $96 \div 4=24$
c) $65 \div 5=13$

d) $75 \div 3=25$
(7) Here are 3 divisions.

```
96\div8
```

$$
96 \div 4
$$

$96 \div 2$
a) What is the same about the questions? What is different?
b) Complete the divisions.

$$
96 \div 8=12 \quad 96 \div 4=24 \quad 96 \div 2=48
$$

c) What do you notice? Talk about it with a partner.

## Scaling

Aisha has some fruit.

## $\infty \lll$ <br> 3 h 3 h 3 h 3 h 3 h

Complete the sentences to describe the fruit.
There are 3 apples.
There are 9 strawberries.
There are 3 times as many strawberries as apples.
2) Huan is comparing 2 pieces of ribbon.


Complete the sentences to describe the ribbon.
The spotty ribbon measures 4 cm
The plain ribbon measures 16 cm
The plain ribbon is $\square$ times as long as the spotty ribbon.
(3)

Match the bar models to the statements.
Write the missing statement.


There are 3 purple balloons.
There are 4 times as many pink balloons.
Complete the bar model to show how many pink balloons there are.
purple 3
pink
The red rope is 8 m long.
The blue rope is 5 times as long.
a) Label and complete the bar model.

b) How long is the blue rope?

The blue rope is 40 m long.

Ron has 5 bananas.
Esther has 6 times as many bananas as Ron.
Draw a bar model to work out how many bananas Esther has got.

7) Complete the sentences.

45 is 9 times greater than 5
$9 \times 5=45$
5 is 9 times smaller than 45
$45 \div 5=9$

8 The children are weighing out flour.


Use the clues to work out which child used which scales.

- Eva has twice as much as Alex.
- Dexter has 9 times as much as Alex.
- Annie has 3 times as much as Eva.
- Tommy has twice as much as Eva and 4 times as much as Alex.

|  | Alex | Eva | Dexter | Annie | Tommy |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Scales | $D$ | $E$ | $B$ | $A$ | $C$ |

Esther has got 30 bananas.

