## Divide by 8

I Complete the sentences

$\underbrace{90}_{\downarrow} \underbrace{}_{\downarrow} \underbrace{}_{\downarrow} \underbrace{}_{\downarrow} \underbrace{}_{\downarrow} \underbrace{}_{\downarrow} \underbrace{}_{\downarrow} \underbrace{l \mid}_{\downarrow}$


There are $\qquad$ 16 flowers．

There are $\square$ 8 vases．

Each vase has 2 flowers．
16 shared into $\qquad$ equal groups is 2
b）GG99G日9円999999日


There are 16 glasses of milk．
There are $\square$ glasses of milk on each tray

There are $\qquad$
16 shared into $\qquad$ equal groups is8
（2）Use the arrays to help you complete the divisions． Draw on the arrays to show your workings．
a）


$$
40 \div 8=5
$$

b）

$40 \div 5=$ $\square$
（3） 32 coins are shared between 8 people． How many coins does each person get？


Complete the division
$\square$Complete the bar models and division statements.
a)


$$
24 \div 2
$$

b)

c)


What do you notice?

5 40 kg of potatoes are packed into 8 kg bags. How many 8 kg bags can be filled?
a) Match the number story to the bar model.

b) Complete the bar models.
c) Think of a number story to match this bar model.

(7) Circle the numbers that divide by 8 exactly.


How did you work this out?

Here is an array made up of triangles.
$\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \Delta \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \Delta \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \triangle \triangle \triangle \triangle \triangle$ $\triangle \triangle \triangle \Delta \triangle \Delta \triangle \Delta$
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.
8

| Question | Answer |
| :---: | :---: |
| 1 | a) $5 \times 2=10$ or $2 \times 5=10$ <br> b) $3 \times 4=12$ or $4 \times 3=12$ <br> c) $4 \times 8=32$ or $8 \times 4=32$ |
| 2 | a) $9 \times 2=18$ or $2 \times 9=18$ <br> b) $5 \times 4=20$ or $4 \times 5=20$ <br> c) $8 \times 8=64$ |
| 3 | a) 6 cm <br> b) 12 cm <br> c) 24 cm |
| 4 | a) 2 <br> 4 <br> 6 <br> 8 <br> 10 <br> b) 4 <br> 8 <br> 12 <br> 16 <br> 20 <br> c) 8 <br> 16 <br> 24 <br> 32 <br> 40 <br> The values in the 4 times-table are all twice the corresponding value in the 2 times-table. The values in the 8 times-table are all twice the corresponding value in the 4 times-table. |
| 5 | a) 24 <br> b) 20 <br> c) 56 <br> d) 24 <br> e) 32 <br> f) 22 <br> g) 36 <br> h) 80 |
| 6 | a) $2 \times 8=16$ <br> b) $4 \times 5=20$ <br> c) $24=12 \times 2$ <br> d) $8 \times 0=0$ <br> e) $2 \times 4 \times 8=64$ <br> f) $40=1 \times 5 \times 8$ or $40=2 \times 5 \times 4$ or $40=4 \times 5 \times 2$ or $40=8 \times 5 \times 1$ |


| Question | Answer |  |  |
| :---: | :--- | :--- | :--- |
| 7 | $\square=\boxed{4}$ | $\boxed{=}$ |  |
| 7 | $\square=\square$ |  |  |
| 8 | 70 |  |  |

