Paws

I can recall and use facts from the $4 \times$ table.

Instructions
Complete the facts on the flaps. Underneath each flap, write the other multiplication and division facts that go with it.


## Paws

I can recall and use facts from the $4 \times$ table.
000

1. Draw bones around the multiples of 4 .

| 24 | 26 | 20 | 10 | 9 |
| :---: | :---: | :---: | :---: | :---: |
| 13 | 39 | 34 | 28 | 23 |
| 32 | 15 | 12 | 21 | 8 |
| 13 | 16 | 38 | 44 | 17 |
| 40 | 29 | 6 | 11 | 46 |
| 31 | 24 | 35 | 36 | 33 |
| 27 | 37 | 48 | 18 | 31 |
| 22 |  |  |  |  |

2. Solve the multiplication and division problems.
a. $40 \div 4=\square$
b. $12 \div 4=\square$
c. $12 \times 4=\square$
d. $3 \times 4=\square$
e. $9 \times 4=\square$
f. $48 \div 4=\square$
g. $4 \times 0=\square$
h. $6 \times 4=\square$
i. $8 \times 4=\square$
j. $11 \times 4=\square$
k. $16 \div 4=\square$
l. $4 \div 4=$ $\square$
3. How many paws do 6 dogs have altogether?
4. I counted 44 paws. How many dogs were there?

5. Write 3 more number problems about dogs and see if your talk partner can solve them.

## Paws

I can recall and use facts from the $4 \times$ table.
000

1. Draw a bone around the numbers in each set which are not multiples of 4 .

a. | 4 | 20 | 7 | 44 | 18 | 16 | 22 | 48 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

b.

| 20 | 32 | 8 | 15 | 36 | 12 | 10 | 52 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

c.

| 8 | 3 | 31 | 12 | 24 | 26 | 28 | 30 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. Complete these number sequences.
a.

b.

$\square$
$\square$
$\square$

Did you know that you can divide by 4 by halving then halving again?
3. Using Bruno the dog's top tip, can you divide these numbers by 4?
a. 80
b. 88
c. 64
d. 104


## Paws Answers

1. Draw bones around the multiples of 4 .

| 4 | 26 | 20 | 10 | 9 |
| :---: | :---: | :---: | :---: | :---: |
| 13 | 39 | 34 | 28 | 23 |
| 32 | 15 | 12 | 21 | 8 |
| 13 | 16 | 38 | 44 | 17 |
| 40 | 19 | 6 | 11 | 46 |
| 31 | 29 | 25 | 36 | 33 |
| 27 | 24 | 35 | 42 | 14 |
| 22 | 37 | 48 | 18 | 31 |

2. Solve the multiplication and division problems.
a. $40 \div 4=10$
b. $12 \div 4=3$
c. $12 \times 4=48$
d. $3 \times 4=12$
e. $9 \times 4=36$
f. $48 \div 4=12$
g. $4 \times 0=0$
h. $6 \times 4=24$
i. $8 \times 4=32$
j. $11 \times 4=44$
k. $16 \div 4=4$
l. $4 \div 4=1$
3. How many paws do 6 dogs have altogether?

4. Write 3 more number problems about dogs and see if your talk partner can solve them.

Multiple answers possible.

## Paws Answers

1. Draw a bone around the numbers in each set which are not multiples of 4 .
a.

b.

| 20 | 32 | 8 |  | 15 | 36 | 12 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 52 |  |  |  |  |  |  |  |

C.

2. Complete these number sequences.
a. 0 ,

8

24, $\square$ 32

4,
48
b.

28, $\square$
20,
$\square$
16, $\square$
$\square$

3. Using Bruno the dog's top tip, can you divide these numbers by 4 ?
a. $80=20$
C. $\quad 64=16$
b. $\quad 88=22$
d. $\quad 104=26$

1)
a) 12
b) 7
c) 48
2)

| $6 \times 4=24$ | $\checkmark$ |
| :---: | :---: |
| $4 \div 6=24$ | X |
| $4 \times 6=24$ | $\checkmark$ |
| $24 \div 4=6$ | $\checkmark$ |
| $6 \div 4=24$ | X |

3) 

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

1) Paulo is right. The multiples in the four times table increase by 4 each time. 4 is an even number. If you add two even numbers, you will get an even number. As you are always adding an even number, the pattern will continue to be even numbers.
2) 

a) This model correctly shows $6 \times 4=24$.
b) This model is incorrect. The answer should be 12.
c) Paulo has made a mistake. The calculation shows 5 lots of 4 , which is 20.
d) Paulo has made a mistake. Although the towers contain 16 cubes, which is a multiple of the 4 times table, the towers are not in equal groups of 4 .
e) This model correctly shows $8 \times 4=32$.
f) This model correctly shows $24 \div 4=6$.

1) Raul has 15 biscuits.
2) Raul could have between 31 and 39 toys.

| Packs of 3 | Packs of 4 | Total Number of Toys |
| :---: | :---: | :---: |
| 1 | 9 | $\begin{aligned} & 1 \times 3=3 \\ & 9 \times 4=36 \\ & 36+3=39 \end{aligned}$ |
| 2 | 8 | $\begin{aligned} & 2 \times 3=6 \\ & 8 \times 4=32 \\ & 32+6=38 \end{aligned}$ |
| 3 | 7 | $\begin{aligned} & 3 \times 3=9 \\ & 7 \times 4=28 \\ & 28+9=37 \end{aligned}$ |
| 4 | 6 | $\begin{aligned} & 4 \times 3=12 \\ & 6 \times 4=24 \\ & 24+12=36 \end{aligned}$ |
| 5 | 5 | $\begin{aligned} & 5 \times 3=15 \\ & 5 \times 4=20 \\ & 20+15=35 \end{aligned}$ |
| 6 | 4 | $\begin{aligned} & 6 \times 3=18 \\ & 4 \times 4=16 \\ & 18+16=34 \end{aligned}$ |
| 7 | 3 | $\begin{aligned} & 7 \times 3=21 \\ & 3 \times 4=12 \\ & 21+12=33 \end{aligned}$ |
| 8 | 2 | $\begin{aligned} & 8 \times 3=24 \\ & 2 \times 4=8 \\ & 24+8=32 \end{aligned}$ |
| 9 | 1 | $\begin{aligned} & 9 \times 3=27 \\ & 1 \times 4=4 \\ & 27+4=31 \end{aligned}$ |

1) Complete these statements:

1 dog has 4 paws.
a) 3 dogs have $\qquad$ paws.
b) $\qquad$ dogs have 28 paws.
c) 12 dogs have $\qquad$ paws.

2) Which calculations match this representation?

| $18$ |  | $180$ |  | $18$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $18$ |  | $18$ |  | $18$ |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |


| $6 \times 4=24$ |
| :--- |
| $4 \div 6=24$ |
| $4 \times 6=24$ |
| $24 \div 4=6$ |
| $6 \div 4=24$ |

3) Complete these calculations.

| $1 \times \ldots=4$ | $7 \times 4=$ |
| :--- | :--- |
| $\times 4=8$ | $9 \times 4=$ |
| $3 \times 4=\ldots$ | $\times 4=32$ |
| $4 \times \ldots \times 4=40$ |  |
| $5 \times 4=$ | $11 \times 4=$ |

1) Paulo says, "There are no odd numbers in the answers to the four times table."

Do you agree? Explain why.
$\qquad$
$\qquad$
2) Paulo has represented some facts from the four times table in different ways. He has got some of them wrong. Tick or cross each representation and then explain the mistakes he has made.

$\qquad$
$\qquad$
$\qquad$
$\qquad$
b) $\quad 2 \times 2 \times 3=24$ $\square$ e) There are four lots of 4 in 16. There are two lots of 16 in 32 . This means that there are eight lots of 4 in 32 .
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$ c) $4+4+4+4+4=16 \quad \square$

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

1) Raul is sorting dog biscuits into packets. He has fewer than 20 biscuits in total.

If he put 4 biscuits in each packet, he would have 3 biscuits left over.
If he put 5 biscuits in each packet, he would not have any biscuits left over.
How many dog biscuits does Raul have?

2) Raul has bought some packets of dog toys. He has some packets of 3 toys and some packets of 4 toys. He has 10 packets of toys altogether. How many toys might he have in total? Find all the possibilities.


1) Complete these statements:

1 dog has 4 paws.
a) 3 dogs have $\qquad$ paws.
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2) Which calculations match this representation?

| Q ${ }^{\text {a }}$ | 13.0 | O2, 0 | O2, 0 | Q3 ${ }^{\text {a }}$ | Q3 ${ }^{\text {a }}$ | $6 \times 4=24$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $4 \div 6=24$ |
|  |  |  |  |  |  | $4 \times 6=24$ |
|  |  |  |  |  | $0 \times d$ | $24 \div 4=6$ |
| 13 co | O30 | O2, go | O ${ }^{\text {a }}$ | O2, 0 | Q ${ }^{\text {a }}$ | $6 \div 4=24$ |

3) Complete these calculations.

| $1 \times \ldots=4$ | $7 \times 4=$ |
| :--- | :--- |
| $\times 4=8$ | $9 \times 4=$ |
| $3 \times 4=\ldots$ | $\times 4=32$ |
| $4 \times \ldots=16$ | $11 \times 4=$ |
| $5 \times 4=\ldots$ | $\times 4=48$ |

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a) 3 dogs have $\qquad$ paws.
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2) Which calculations match this representation?

| Q3.a | O30 | O2, 0 | Q3 0 | Q3 0 | Q3 ${ }^{\text {a }}$ | $6 \times 4=24$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0 | 0 |  |  | $4 \div 6=24$ |
|  |  |  |  |  |  | $4 \times 6=24$ |
|  |  |  |  |  | O ${ }^{\text {a }}$ | $24 \div 4=6$ |
| sol | O3 do | Onso | O ${ }^{\text {a }}$ | On ${ }^{\text {a }}$ | On go | $6 \div 4=24$ |

3) Complete these calculations.

| $1 \times \ldots=4$ | $7 \times 4=$ |
| :--- | :--- |
| $-\times 4=8$ | $9 \times 4=$ |
| $3 \times 4=\ldots$ | $\times 4=32$ |
| $4 \times \ldots=16$ | $11 \times 4=$ |
| $5 \times 4=\ldots$ | $\times 4=40$ |

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How many dog biscuits does Raul have? Find all the possibilities.
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