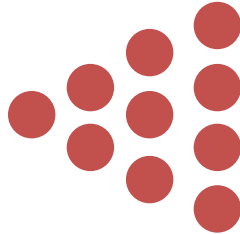


Y5 Learning at home activity sheet #1

Problem 1:

In this diagram, there are 10 counters.
They look like a fish swimming to the left.

What is the smallest number of counters that you need to move to make the fish swim to the right?



Problem 2:

One third of the animals in the barn are chickens. The rest are pigs.

There are 20 legs in all.

How many pigs are there?

Problem 3:

Can you make all of the numbers from 1 to 10 using each of the numbers 1, 2, 3, 4 once and only once? You can use +, -, x, ÷ and brackets as many times as you need to. For example, $4 = (4 - 2) \times (3 - 1)$



Number facts:

Have a family member test you on some of the number facts from the attached sheet. They can ask you any of the sums on each card. Choose two or three that you found more difficult and practice them a few times every day, so that you can answer any of the questions quickly.



Quick questions:

1. Which is more, $\frac{2}{3}$ or $\frac{3}{4}$?
2. What is the area of a square with sides 2cm long?
3. What is the smallest odd number with three-digits?
4. How many millimetres are there in a metre?
5. Which is more, 1.9 or 3?
6. How many sides does a hexagon have?
7. If you toss a coin and it lands heads, is it more likely to be heads or tails the next time you toss it?
8. How many \$2.50 toys can you buy for \$10?
9. What is one half of one half?
10. What is 23×5 ?



Measurement estimating challenge:

- Find 5 things that weigh about one kilogram (some of these may be collections, for example, 5 apples).
- Find five things that measure about 1 centimetre.
- Find five things that measure about 10 centimetres.
- Find five things that measure about 1 metre.



Project:

Design a repeating pattern that completely covers a page of paper. You may want to use simple shapes like triangles, squares, rectangles or hexagons, or you may prefer to use more interesting shapes.

Tip: If you chop an interesting-shaped piece off one side of a square and stick it on the opposite side, you can repeat the new shape to cover the page!



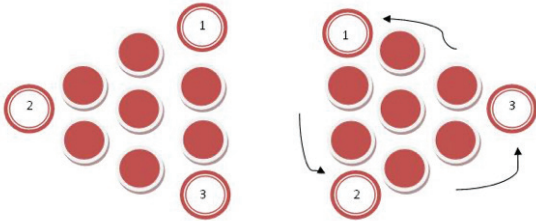
Learning at home: Notes for whānau

When your child finishes each activity, ask them to add a mouth to the face to show how they felt about that activity.



Problem 1:

You can make the fish swim in the opposite direction by moving just three counters.



Can you do this in any other way?

Problem 2:

The easiest way to solve this problem is by guess and check. If there are 20 legs altogether, the most pigs there could be is 5. But then there would be no chickens. If there are 4 pigs, then that uses 16 legs, so there are 4 legs left for chickens, making 2 chickens. If there are 4 pigs and 2 chickens, then one third of the animals are chickens.

Problem 3:

There are many possibilities for some of these numbers. We will only give one answer here.

$$1 = (2 - 1) \div (4 - 3)$$

$$2 = 2 \times (4 - 3) \div 1$$

$$3 = [2 + (4 - 3)] \div 1$$

$$4 = (4 - 2) \times (3 - 1)$$

$$5 = (4 + 3 - 2) \times 1$$

$$6 = 4 + 3 - 2 + 1$$

$$7 = (4 + 3) \times (2 - 1)$$

$$8 = 4 + 3 + 2 - 1$$

$$9 = (4 + 3 + 2) \times 1$$

$$10 = 4 + 3 + 2 + 1$$

Quick questions:

1. $\frac{3}{4}$
2. 4cm^2
3. 101
4. 1000
5. 3
6. 6
7. Equally likely
8. 4
9. One quarter ($\frac{1}{4}$)
10. 115

$2 \times 2 = 4$ $4 \div 2 = 2$	$2 \times 3 = 6$ $3 \times 2 = 6$ $12 \div 4 = 3$ $12 \div 2 = 4$
$2 \times 4 = 8$ $4 \times 2 = 8$ $8 \div 4 = 2$ $8 \div 2 = 4$	$2 \times 5 = 10$ $5 \times 2 = 10$ $10 \div 5 = 2$ $10 \div 2 = 5$
$2 \times 6 = 12$ $6 \times 2 = 12$ $12 \div 6 = 2$ $12 \div 2 = 6$	$2 \times 7 = 14$ $7 \times 2 = 14$ $14 \div 7 = 2$ $14 \div 2 = 7$
$2 \times 8 = 16$ $8 \times 2 = 16$ $16 \div 8 = 2$ $16 \div 2 = 8$	$2 \times 9 = 18$ $9 \times 2 = 18$ $18 \div 9 = 2$ $18 \div 2 = 9$
$2 \times 10 = 20$ $10 \times 2 = 20$ $20 \div 10 = 2$ $20 \div 2 = 10$	

$5 \times 3 = 15$ $3 \times 5 = 15$ $15 \div 5 = 3$ $15 \div 3 = 5$	$5 \times 4 = 20$ $4 \times 5 = 20$ $20 \div 4 = 5$ $20 \div 5 = 4$
$5 \times 5 = 25$ $25 \div 5 = 5$	$5 \times 6 = 30$ $6 \times 5 = 30$ $30 \div 6 = 5$ $30 \div 5 = 6$
$5 \times 7 = 35$ $7 \times 5 = 35$ $35 \div 7 = 5$ $35 \div 5 = 7$	$5 \times 8 = 40$ $8 \times 5 = 40$ $40 \div 8 = 5$ $40 \div 5 = 8$
$5 \times 9 = 45$ $9 \times 5 = 45$ $45 \div 9 = 5$ $45 \div 5 = 9$	$5 \times 10 = 50$ $10 \times 5 = 50$ $50 \div 10 = 5$ $50 \div 5 = 10$
$10 \times 3 = 30$ $3 \times 10 = 30$ $30 \div 10 = 3$ $30 \div 3 = 10$	$10 \times 4 = 40$ $4 \times 10 = 40$ $40 \div 10 = 4$ $40 \div 4 = 10$

$$10 \times 6 = 60$$

$$6 \times 10 = 60$$

$$60 \div 10 = 6$$

$$60 \div 6 = 10$$

$$10 \times 7 = 70$$

$$7 \times 10 = 70$$

$$70 \div 10 = 7$$

$$70 \div 7 = 10$$

$$10 \times 8 = 80$$

$$8 \times 10 = 80$$

$$80 \div 10 = 8$$

$$80 \div 8 = 10$$

$$10 \times 9 = 90$$

$$9 \times 10 = 90$$

$$90 \div 10 = 9$$

$$90 \div 9 = 10$$

$$10 \times 10 = 100$$

$$10 \times 10 = 100$$

$$100 \div 10 = 10$$

$$100 \div 10 = 10$$