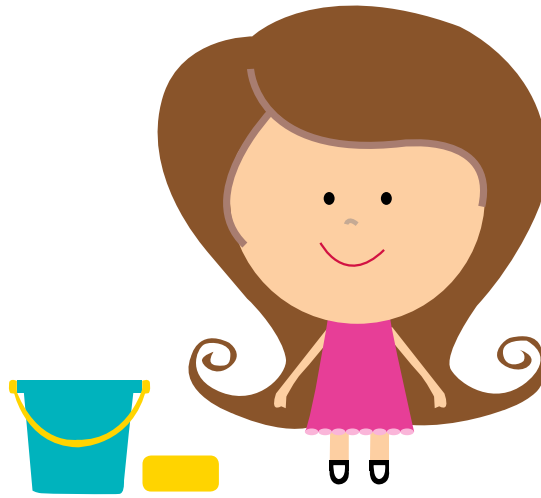


Times Tables Funpack



2x table puzzle 1



Sally is at the fair. She has a bucket of wet sponges. She is allowed to throw any number of sponges at the frogs to knock them over, but she needs to get a score of 10 to win.

What combination of frogs would get her a score of 10?
There is more than one possibility. See if you can work them out below.

Answer: There are 3 combinations: 4, 2, 2
4, 4, 2
2, 2, 2, 2, 2

2x table puzzle 2

Sally finds a stall at the fair where there is a pool full of ducks. Each one has the number 2 on its back:



She is given a stick with a hook and has to hook out as many ducks as she can in one minute.

After one minute, all the 2s on the ducks she has fished out are added up.

Which scores could she NOT have got? Explain why:

SCORE	Put a tick if you think Sally could have got this score. Put a cross if you think she couldn't have. When you put a cross, explain why Sally couldn't get this score.
4	
20	
15	
8	
11	
10	
24	
12	
5	

Answers: Ticks for 4, 20, 8, 10 and 12. Crosses for 15, 11 and 5 because adding up lots of 2s would always give an even, not an odd, number. Cross for 24 because there are only 10 ducks, so the highest score she could get is 20.

2x table puzzle 3

Note to parents: It's helpful to use a stack of 2p coins and two small bags to help your child work out the different combinations in this puzzle.

At this stall at the fair, you have three hoops. You have to throw your hoops over the money bags to win what is inside. Each money bag is filled with different numbers of 2p coins.



Jasmine throws her three hoops. One of the hoops misses all the bags, but she manages to get the other two hoops around two of the bags.

She opens the bags and finds she has won 20p.

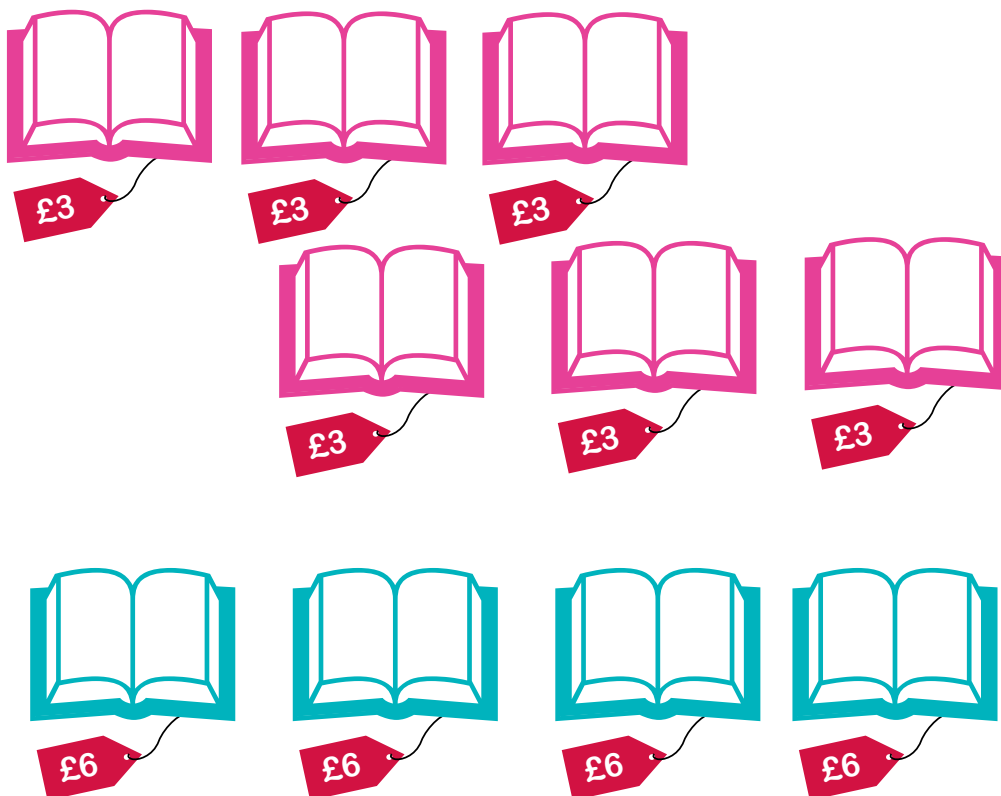
How many 2p coins could there have been in each of Jasmine's bags? See how many combinations you can find:

1ST MONEY BAG	2ND MONEY BAG

Answers: There are five combinations: 1. Bag one - one 2p and bag two - nine 2ps. 2. Bag one and bag two - two 2ps and bag two - eight 2ps. 3. Bag one - three 2ps and seven 2ps. 4. Bag one - four 2ps and bag two - six 2ps. 5. Bag one - five 2ps and bag two - five 2ps.

3x table puzzle 1

Note to parents: It may help your child to cut out the pictures of the books below, so that they can move them around to work out the different combinations. Make sure they record each combination as they go, otherwise they will forget what they have worked out!



Jack is in a bookshop. He has exactly £18 to spend.

Which of the above books could he buy?

See how many combinations you can find.

£3 + £3 + £3 + £3 + £3 + £3
 £3 + £3 + £3 + £3 + £3
 £6 + £6 + £6
 £6 + £6 + £3 + £3
 £6 + £6 + £3

Answer: There are four combinations:

Fast Factors

Suggested age range Children in year 2 (aged 6-7) and year 3 (aged 7-8)

Number of players One

How to prepare the game • Cut out all the cards on the following page.

How to play the game

Look at the Fast Factors cards on the next page. Each of the numbers in red is a multiple of the numbers following it in blue.

The numbers in blue are factors of the number in red.

Once you have cut out all the cards, space the red numbers out on a table or flat surface. Jumble up the blue numbers. Now see if you can put all the blue factors back with their multiples. How quickly can you complete the game? Time yourself and aim to beat your record every time you play.

How does this game support learning?

Fast Factors will help your child practise the 2x and 3x table, as well as reinforce the use of the correct mathematical language.

The **multiple** of a number is the product of that number and any other whole number.

A **factor** is a number that divides exactly (without a remainder) into a larger number.

Fast Factors cards

6

60

30

12

10

6

5

2

24

12

8

6

4

3

2

100

50

25

20

10

5

4

2

33

11

3

80

40

20

16

10

8

5

4

2

12

6

4

3

2

40

20

10

8

5

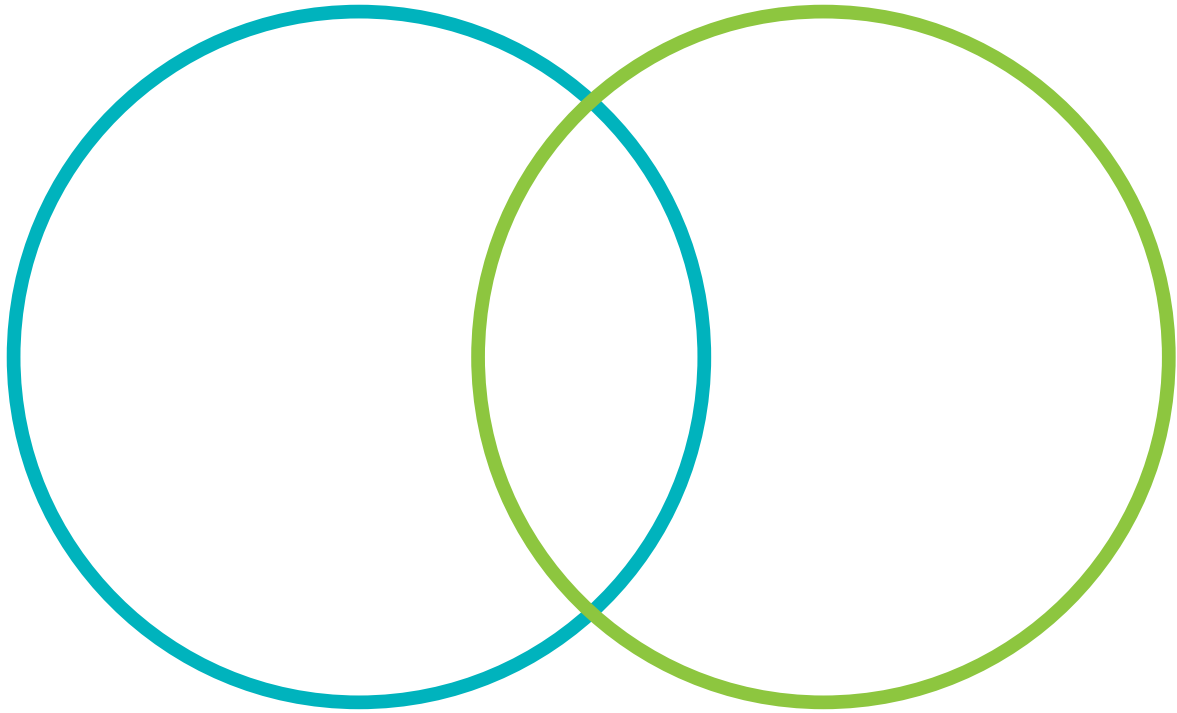
4

2

3x table puzzle 2

Number in
3 x table

Number
below 15



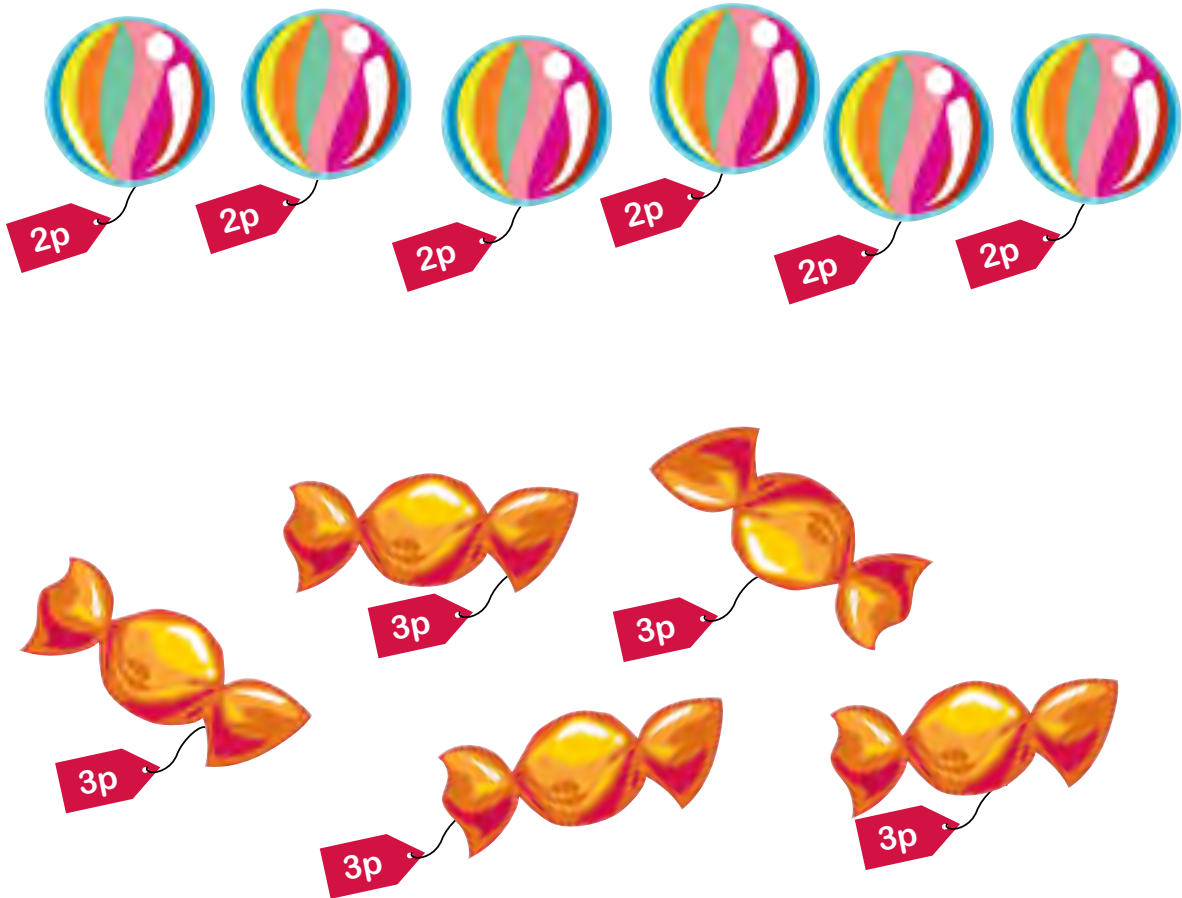
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

Cut out the number cards above. Work out where each one should go in the Venn diagram.

Answer: The numbers should be arranged as follows:
15, 18, 21, 24, 27, 30 in the Number in the 3x table circle.
3, 6, 9, 12 in the overlap.
1, 2, 4, 5, 7, 8, 10, 11, 13, 14 in the Number below 15 circle.
16, 17, 19, 20, 22, 23, 25, 26, 28, 29 outside the circles.

3x table puzzle 3

Note to parents: It may help your child to cut out the pictures of the sweets so they can move them around. Encourage a methodical way of working this out, for example: let's try first with five 3p sweets, now four 3p sweets, now three 3p sweets, etc. This allows you to work out whether you have tried each combination, rather than doing it randomly.



Jack has 12p in his pocket.

What different combinations of the sweets above could he buy?

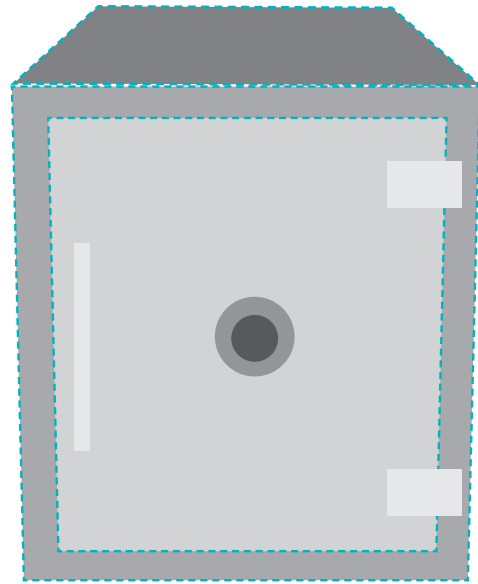
Answer: There are 3 combinations:
 $3p + 3p + 3p + 3p$
 $3p + 3p + 2p + 2p + 2p$
 $2p + 2p + 2p + 2p + 2p$

4x table puzzle 1

Elizabeth is trying to crack the code to open this safe and find out what's inside.

She has been given the following clues:

- The code has four digits
- The last digit is the answer to 1×4
- The middle two digits add up to 4
- The first digit is double the last digit
- Each digit is in the 2x table; one of them isn't in the 4x table



Work out what the code is and put the answer in the boxes.

--	--	--	--

Answer: The code is 8224. The number 2 isn't in the 4x table.

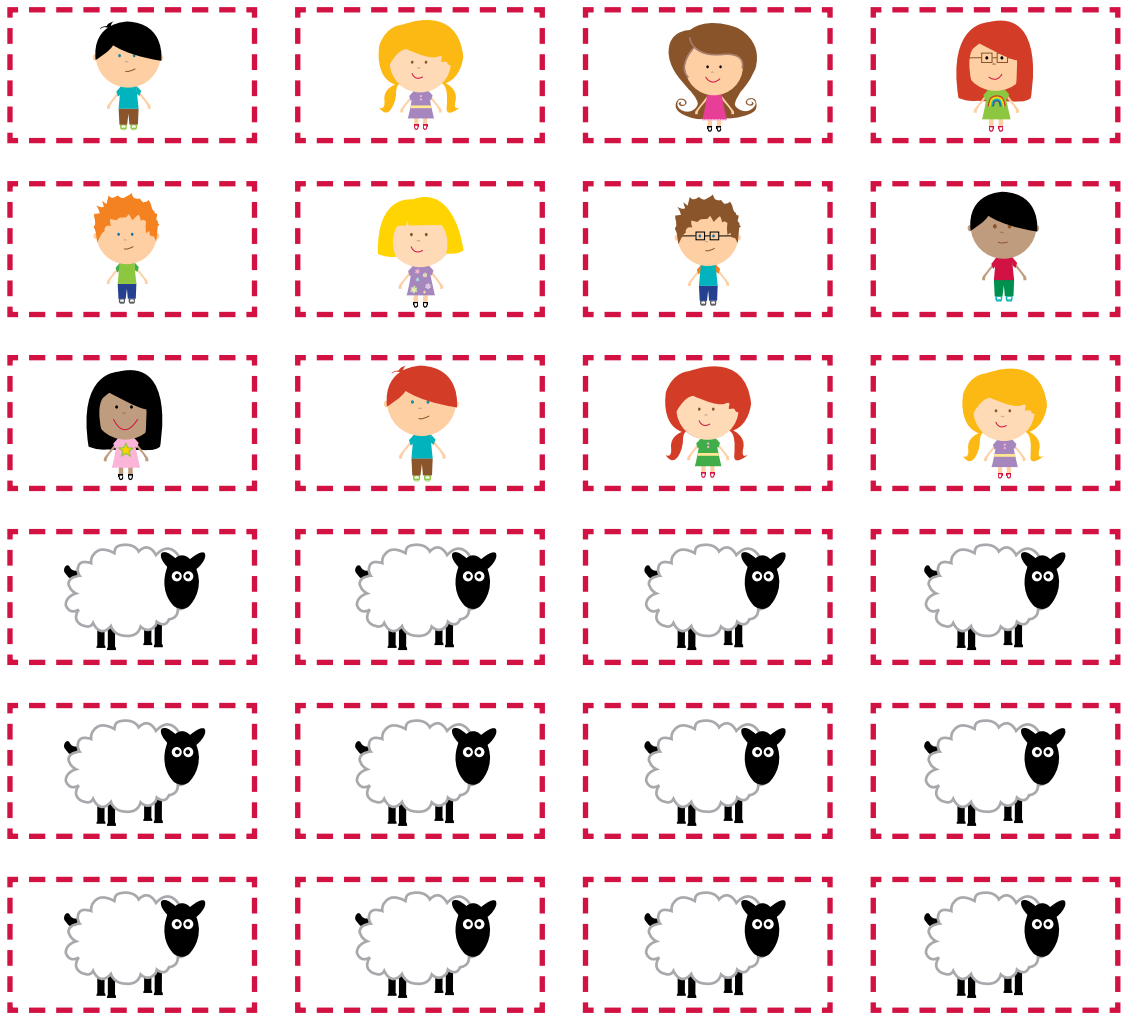
4x table puzzle 2

In a room there are 24 legs.
The room is full of sheep (each with
4 legs) and people (each with 2 legs).

How many sheep and people could there be?

There are a few different combinations.

Cut out the cards below to help you work them out.



Answer: Combinations are: 5 sheep, 2 people OR 4 sheep, 4 people OR 3 sheep, 6 people OR 2 sheep, 8 people OR 1 sheep, 10 people.

4x table puzzle 3



Chloe has £24 to spend.

How many different combinations of the above items could she buy? (She can buy as many of each item as she likes.)

Helpful hint:

To make sure you have covered every possible combination, start with the biggest number first (16) and try adding it to itself. Then concentrate on adding the next biggest number to 16, then working down to the smallest number. Once you have worked out all possible combinations regarding 16, go onto 12 and do the same thing. Then work your way down to 4. Keep checking that you are not repeating combinations!

£16 + £8
 £16 + £4 + £4
 £12 + £12
 £12 + £8 + £4
 £12 + £4 + £4 + £4
 £8 + £8 + £8
 £8 + £8 + £4
 £8 + £4 + £4 + £4
 £4 + £4 + £4 + £4 + £4 + £4

Answer: There should be nine combinations in all:

Times Tables Dominoes

Suggested age range Children aged 7 and up (from year 3).

Number of players 1 – 4

How to prepare the game

- Print off the dominoes – ideally on card.
- Cut out each domino.

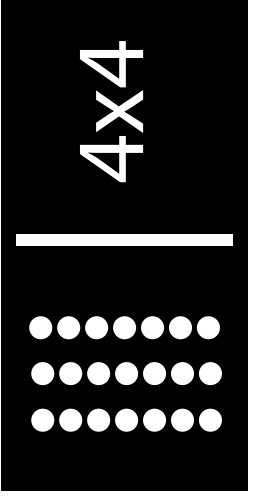
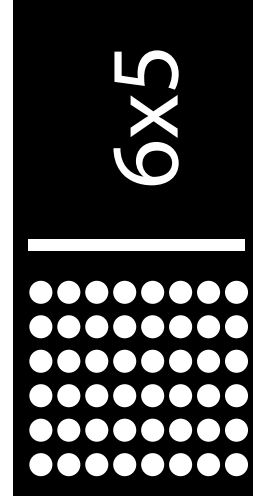
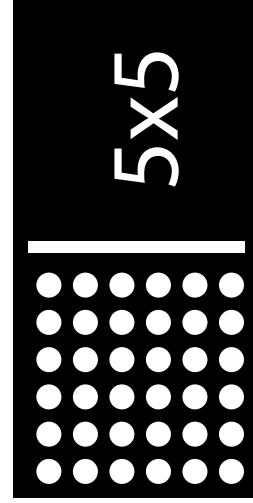
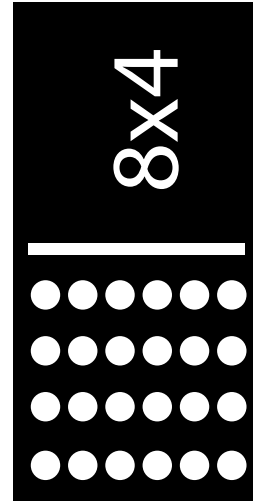
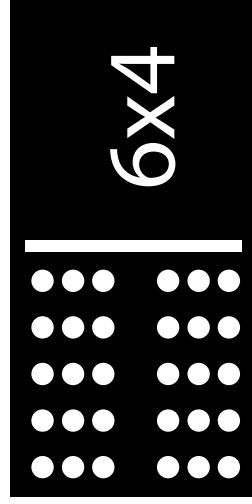
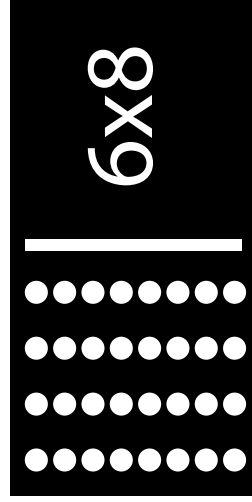
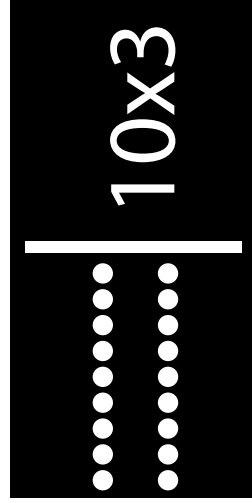
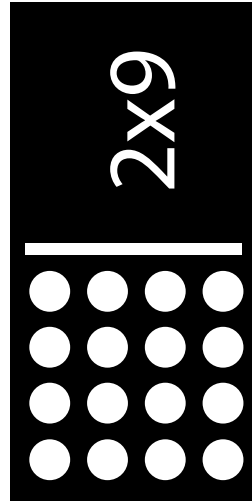
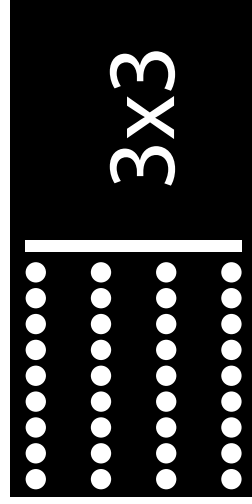
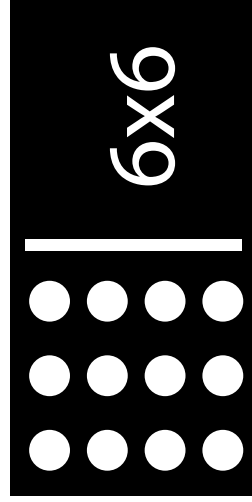
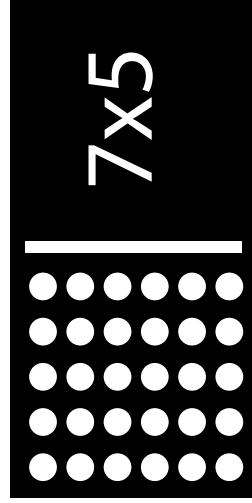
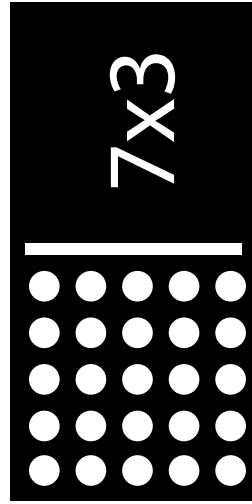
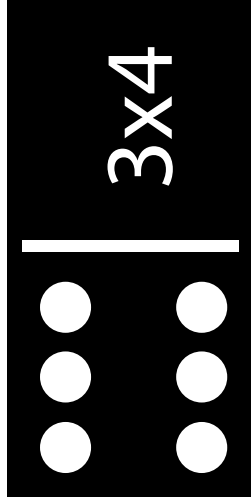
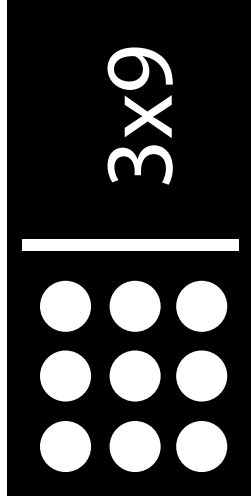
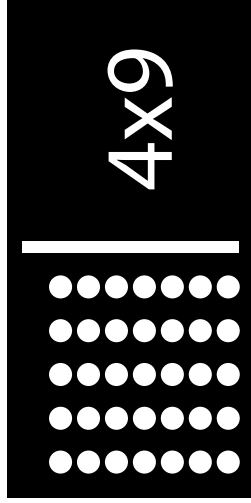
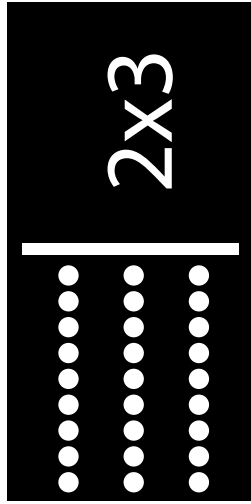
How to play the game

The dominoes are placed face down on the table and mixed up. Each player takes an even number of dominoes and keeps them hidden from the other players. The youngest player starts first and places a domino in the centre of the table. Play then works around the group in a clockwise direction. Players must match the number sentences on the dominoes (in arrays or numbers). If they cannot go, they knock on the table and play passes to the next player. The winner is the first person to get rid of all of their dominoes.

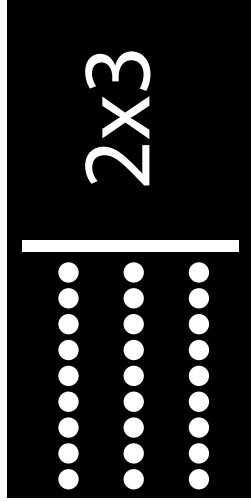
How does this game support learning?

This is a good game for children who have not quite grasped their times tables yet, as the dots help them to visualise the numbers they are making.

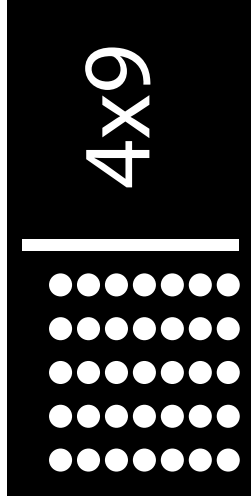
Times Tables Dominoes



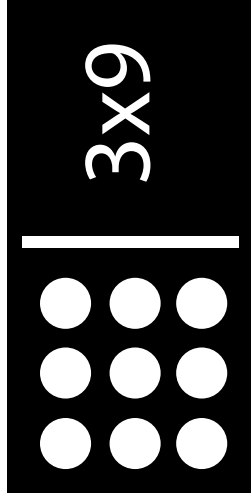
Times Tables Dominoes



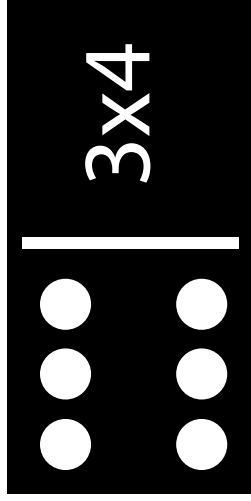
2x3



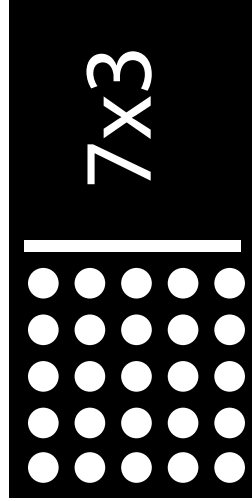
4x9



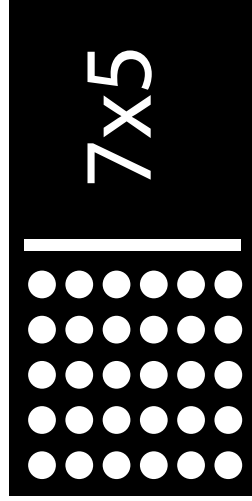
3x9



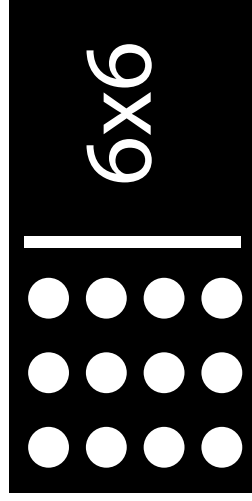
3x4



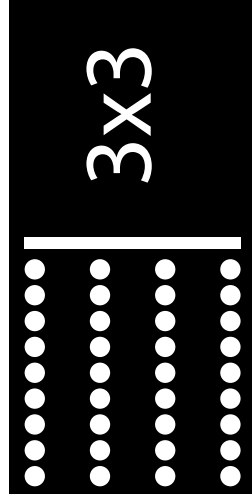
7x3



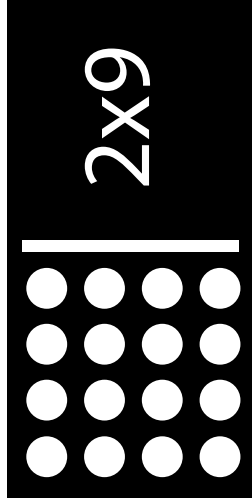
7x5



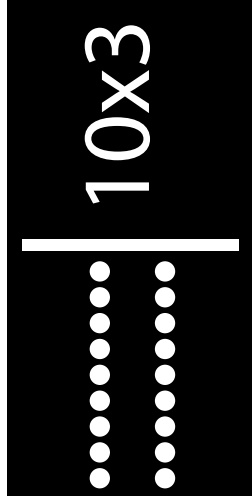
6x6



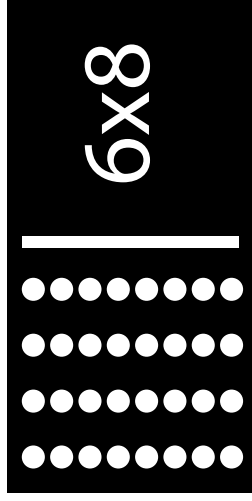
3x3



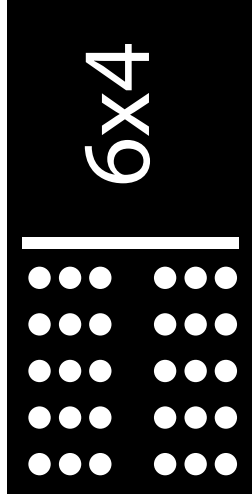
2x9



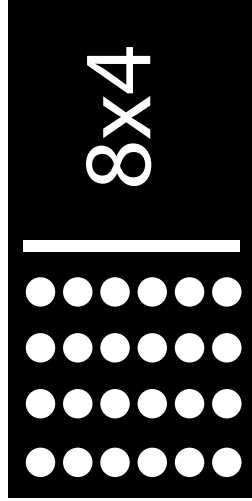
10x3



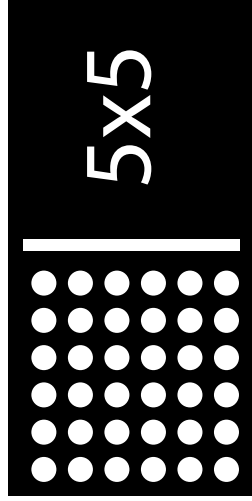
6x8



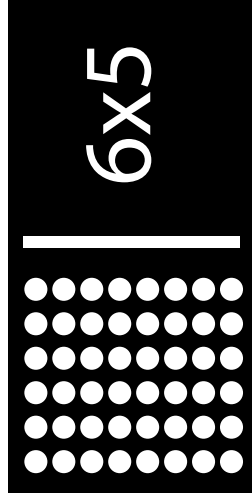
6x4



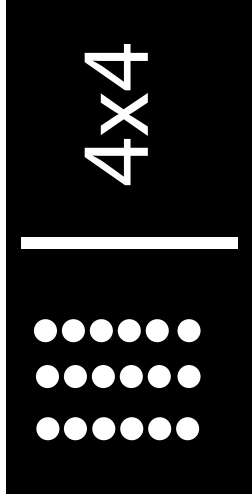
8x4



5x5



6x5



4x4

5x table puzzle 1



On a stall at the fair you are given balls to throw into these cups. Each time a ball falls into a cup, you get the number of points written on the side of the cup. You need to try to get as high a score as possible.

Five children got the following scores. Which cups must they have thrown their balls into to get these scores?

The first one is done for you:

CHILD	SCORE	CUPS BALL WAS THROWN INTO
Maya	12	5, 5, 2
Ben	20	
Akram	11	
Josh	17	
Sam	10	

Could any of the scores above have more than one possible combination? Which ones? What are the combinations?

Answer:
 Child Score Cups ball was thrown into
 Maya 12 5, 5, 2 OR 2, 2, 2, 2, 2
 Ben 20 5, 5, 5 OR 5, 5, 2, 2, 2, 2
 Akram 11 2, 2, 5
 Josh 17 5, 5, 2 OR 5, 2, 2, 2, 2, 2
 Sam 10 5, 5 OR 2, 2, 2, 2, 2

5x table puzzle 2

Josh is given two bags full of 5p coins.



The total amount of money in both the bags is 30p. How much money could be in each bag? Work out all the possible combinations in the table below:

1ST BAG	2ND BAG



It might be helpful to use actual 5p coins to help your child with this puzzle. First, get them to count out 30p in 5ps. Then ask them to find all the different ways of splitting the 5ps into two bags, recording in the table as they go. Remind them to keep telling you how much they are putting in each bag, each time, by counting the coins in 5s.

Answer:
1ST BAG
 5p
 5p, 5p (10p)
 5p, 5p, 5p (15p)
 5p, 5p, 5p, 5p (20p)
 5p, 5p, 5p, 5p, 5p (25p)
 5p, 5p, 5p, 5p, 5p, 5p (30p)
2ND BAG
 5p, 5p, 5p, 5p (20p)
 5p, 5p, 5p, 5p, 5p (25p)
 5p, 5p, 5p, 5p, 5p, 5p (30p)

5x table puzzle 3



Karen is given three darts. She throws them at the boards above.

Which **three** numbers would she need to hit, to get the following scores? She could hit the same number more than once.

For each score, there may be only one answer or there may be several possible answers.

SCORE	3 NUMBERS HIT
30	
55	
15	
40	
45	

Answer:
SCORE

30 10, 10, 10 OR 5, 10, 15 OR 20, 5, 5
55 25, 20, 10 OR 20, 20, 15 OR 25, 15, 15
15 5, 5, 5
40 5, 15, 20 OR 5, 10, 25 OR 15, 15, 10 OR 20, 10, 10
45 25, 15, 5 OR 20, 15, 10 OR 20, 20, 5 OR 10, 10, 25 OR 15, 15, 15

6x table puzzle 1

Faye is trying to crack the code to open this safe in the wall.
She has been given the following clues:

The code has four digits

The first and second digits add up to make a multiple of 6

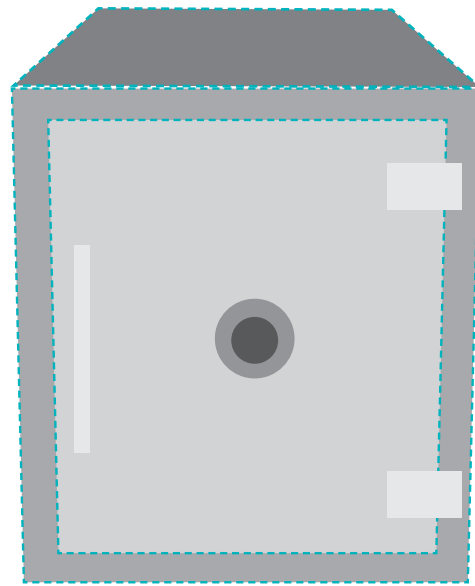
The third and fourth digits add up to make the same multiple as above

There is a difference of 6 between the first and second digits

The third and fourth digits are the same

There are no zeros in the code

The first digit is the smallest of the four



Work out what the code is and put the answer in the boxes.

--	--	--	--

Answer: The code is 3966

6x table puzzle 2



On this stall at the fair, you have a bucket of 5 wet sponges to throw at the frogs. You win a prize if you get a score of 18 or more.

This table shows the hits and misses and final scores five children made. See if you can complete the table:



CHILD	HIT	MISSES	WHICH FROGS HIT?	TOTAL SCORE	PRIZE WON?
Jack	3	2		15	
Isobel		4		3	
Nkechi				27	
Louise		2		15	
Robert			6, 6, 3, 3		

Answer:

NAME	HITS	MISSES	WHICH FROGS HIT?	TOTAL SCORE	PRIZE WON?
Robert	4	1	6, 6, 3, 3	18	Yes
Louise	3	2	6, 6, 3	15	No
Nkechi	5	0	6, 6, 6, 6, 3	27	Yes
Isobel	1	4	3	3	No
Jack	3	2	6, 6, 3	15	No

Times Tables Right or Wrong

Suggested age range 7+ (from year 3)

Number of players 2 (one caller and one player)

How to prepare the game

- Print out the tables on the next page.

How to play the game

One player needs to call out the times table number sentences on the tables on the next page. The other player says 'right' or 'wrong' depending on whether they think the caller has read out a correct sentence.

Every time the player correctly says 'right' or 'wrong', the caller gives them a tick or cross in the box next to the number sentence (they have the answers already on the table).

When you have finished, swap roles and play again on the second table. You can also make up your own tables to play with.

How does this game support learning?

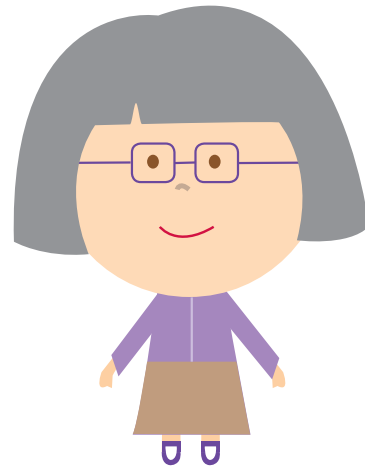
Instant recall is vital in times tables; children need to know the correct answers without stopping to think about them. This activity can be played at speed and is a different way to test knowledge and confidence.

Right or Wrong?

	Right or Wrong?	Tick box if player is correct
$3 \times 4 = 15$	Wrong	
$5 \times 5 = 30$	Wrong	
$3 \times 3 = 9$	Right	
$7 \times 4 = 28$	Right	
$3 \times 9 = 28$	Wrong	
$9 \times 10 = 90$	Right	
$7 \times 7 = 42$	Wrong	
$8 \times 11 = 90$	Wrong	
$5 \times 6 = 30$	Right	
$12 \times 2 = 24$	Right	

	Right or Wrong?	Tick box if player is correct
$3 \times 4 = 15$	Wrong	
$5 \times 5 = 30$	Wrong	
$3 \times 3 = 9$	Right	
$7 \times 4 = 28$	Right	
$3 \times 9 = 28$	Wrong	
$9 \times 10 = 90$	Right	
$7 \times 7 = 42$	Wrong	
$8 \times 11 = 90$	Wrong	
$5 \times 6 = 30$	Right	
$12 \times 2 = 24$	Right	

6x table puzzle 3



Mrs Brown the Baker makes 6 cakes on Monday.

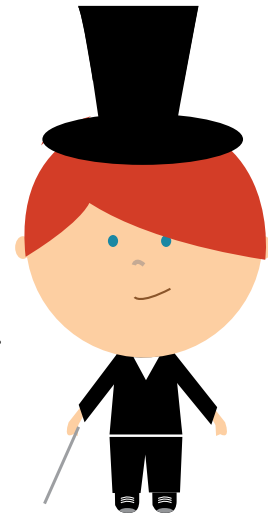
Each day after that, she makes 6 more cakes than she made the previous day. She stops baking once she has made a total of 168 cakes.

How many days does she bake for altogether?

Answer: Monday 6, Tuesday 12, Wednesday 18, Thursday 24, Friday 30, Saturday 36, Sunday 42. If you total these numbers, you get 168, so Mrs Brown bakes for seven days altogether.

7x table puzzle 1

Louise has to work out how many of each object Martin the Magician has in his box of tricks. It contains: magic wands, rabbits, packs of cards, rubber balls, handkerchiefs and hoops. He has a different number of each and each number is a multiple of 7 smaller than 84. He gives her the following clues:



There are twice as many magic wands as there are rabbits.

The number of hoops is also a multiple of 11.

There are 7 more handkerchiefs than packs of cards.

The number of rubber balls is half the number of packs of cards.

The number of rabbits is also a multiple of 5.

The total number of the handkerchiefs and packs of cards is the same as the number of rabbits.

Cut out the multiples of 7 below and then practise trying different combinations in the table to help you work this out:



Magic wands	
Rabbits	
Packs of cards	
Rubber balls	
Handkerchiefs	
Hoops	

Answer: Magic Wands 70; Rabbits 70; Packs of cards 14; Rubber balls 7; Handkerchiefs 21; Hoops 77

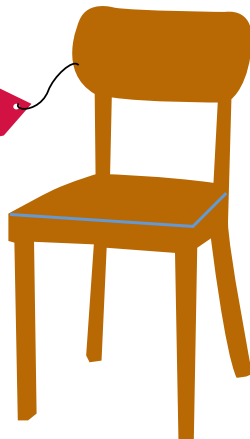
7x table puzzle 2



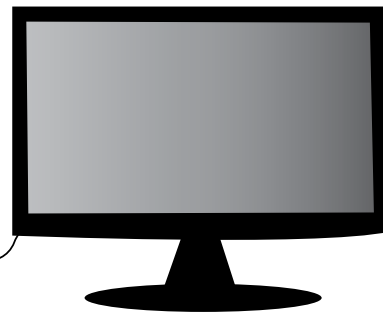
£7



£14



£21



£28

Frank has £35 to spend.

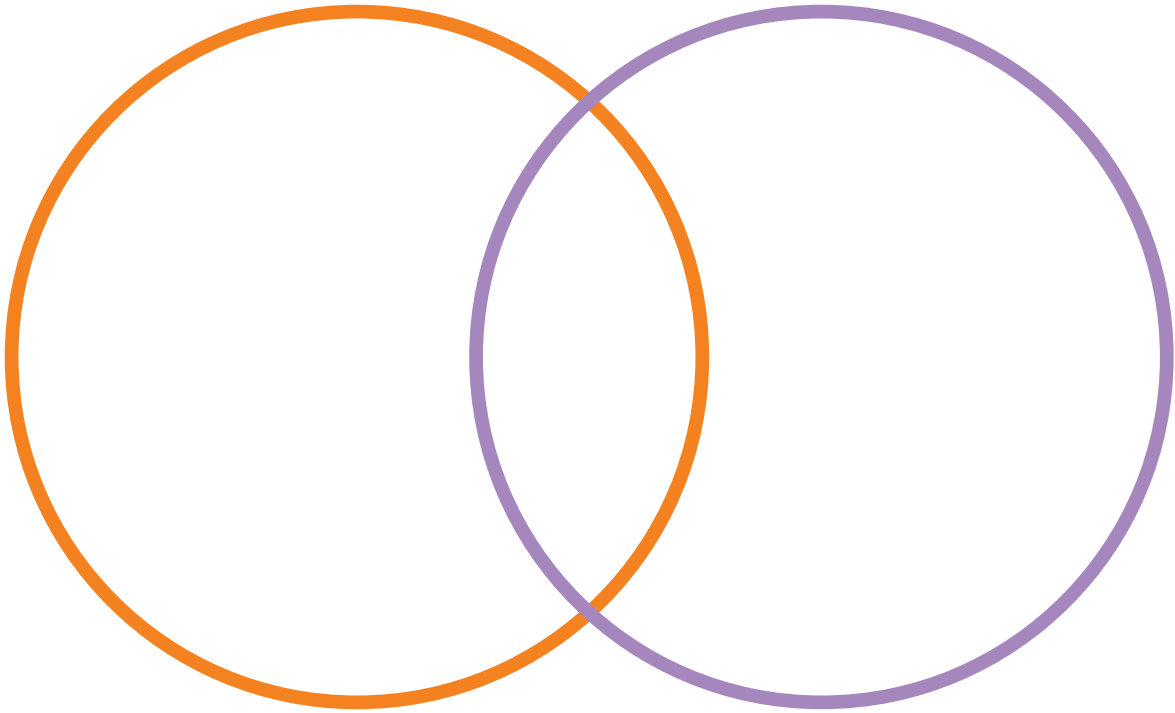
How many different combinations of the above items could he buy if he spent all his money? (He can buy as many of each item as he likes.)

Answer: There are five combinations:
TV and book, £28 + £7
Chair and flower, £21 + £14
Chair and two books, £21 + £7 + £7
Flower and three books, £14 + £7 + £7 + £7
Five books £7 + £7 + £7 + £7 + £7

7x table puzzle 3

Number in
7 x table

Even
number



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

Cut out the numbers above. Work out where each one should go in the Venn diagram.

Answer: 7, 21 in the Number in the 7x table circle.
14, 28 in the centre overlap.
2, 4, 6, 8, 10, 12, 16, 18, 20, 22, 24, 26, 30 in the Even numbers circle.
1, 3, 5, 9, 11, 13, 15, 17, 19, 23, 25, 27, 29 outside the circles.

8x table puzzle 1

Molly has a box full of packs of cans of pop. Some packs have 4 cans in them, some packs have 8 cans in them.



She knows the box contains 64 cans of pop. How many packs of 4 cans and how many packs of 8 cans could there be?

See if you can find all the combinations.

Helpful Hint:

You could draw a table to help you record your combinations. Make sure you have some kind of order to the way you work this out, or you will get in a muddle!

Answer: There are seven combinations: 1. One 8-pack and 14 4-packs, 2. Two 8-packs and 12 4-packs, 3. Three 8-packs and 10 4-packs, 4. Four 8-packs and eight 4-packs, 5. Five 8-packs and six 4-packs, 6. Six 8-packs and four 4-packs, 7. Seven 8-packs and two 4-packs.

Times Table Pairs

Suggested age range 7+ (from year 3)

Number of players One or two

How to prepare the game

- Cut out all the Times Tables Pairs cards on the next page.

How to play the game

GAME 1

See if you can match up the pairs of times tables cards that have the same answers. You can play this game on your own or with another player.

GAME 2

This game is more challenging; you need two players and one 'fact checker'.

Put all the Times Tables Pairs cards face down on a table or flat surface.

The first player starts by turning over any two cards, letting the other players see the cards. If the times tables on the two cards do not give the same answer, they need to turn the cards back.

If the times tables of the two cards turned give the same answer, they need to say what the answer is. The 'fact checker' checks if they are right using the answers on the next page. If they are correct, they can keep the pair of cards.

As the game progresses, both players should try to memorise where each card is and try to turn the correct pairs over when it is their turn.

The winner is the person with the most pairs at the end.

How does this game support learning?

- ▶ If you're looking for ways to consolidate your child's times tables learning, this game requires accuracy, speed and very good knowledge. Playing it will also add some excitement to practice time.

Times Table Pairs

5×6

8×2

50×2

10×2

4×4

10×5

5×4

3×4

7×4

6×10

10×4

6×4

2×6

8×3

25×4

8×5

14×2

25×2

3×10

12×5

Times Table Pairs: Answers

5×6 and 3×10 both equal 30

8×2 and 4×4 both equal 16

50×2 and 25×4 both equal 100

10×2 and 5×4 both equal 20

10×5 and 25×2 both equal 50

3×4 and 2×6 both equal 12

7×4 and 14×2 both equal 28

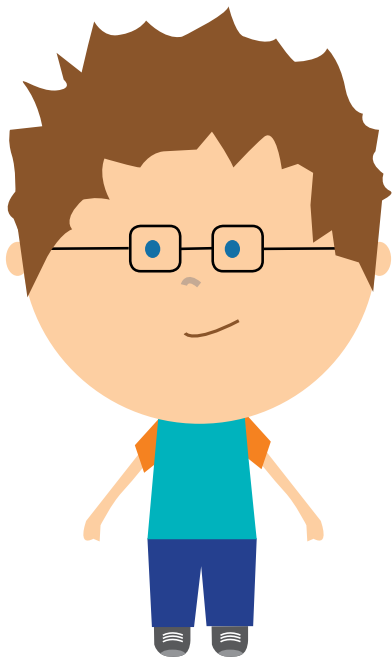
6×10 and 12×5 both equal 60

10×4 and 8×5 both equal 40

6×4 and 8×3 both equal 24

8x table puzzle 2

Daniel washes cars for 5 days. Each day, the number of cars he washes is a multiple of 8. Every day, he washes 8 more cars than the previous day. By the end of the 5 days, he has washed a total of 240 cars. How many cars did he wash each day?

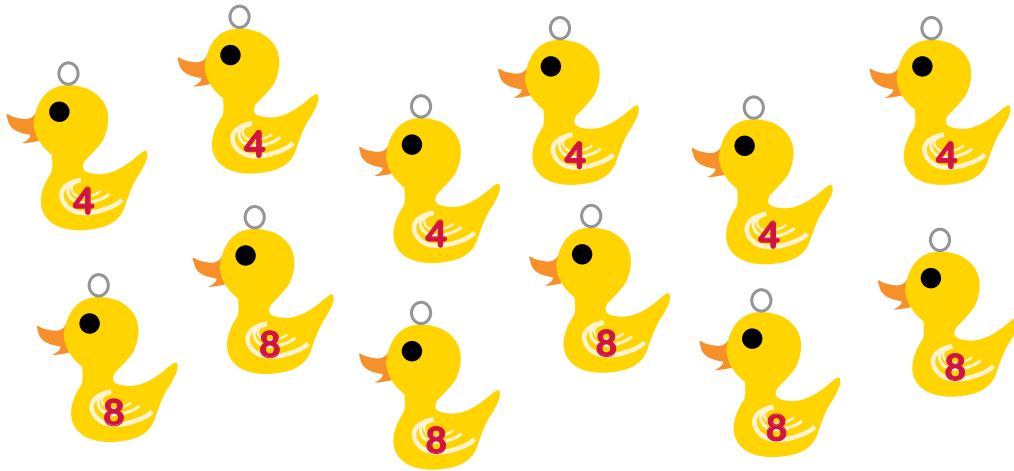


Helpful
hint:

It will help you to write down your multiples of 8 first!

Answer: Daniel washed 32 cars the first day, 40 the second day, 48 the third day, 56 the fourth day and 64 the fifth day.

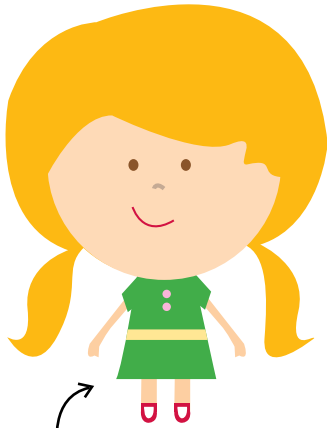
8x table puzzle 3



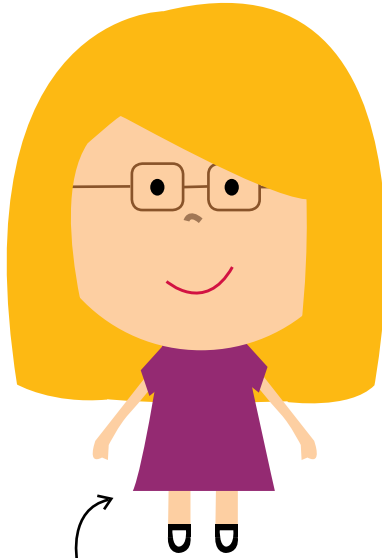
At the fair, Louise has to hook as many ducks out of the pond as she can in 3 minutes. She gets a score of 24. Which ducks could she have hooked out in the 3 minutes? See if you can find all the possible combinations.

Answers:
There are 4 combinations:
8 + 8 + 8
8 + 8 + 4 + 4
8 + 4 + 4 + 4 + 4
4 + 4 + 4 + 4 + 4 + 4

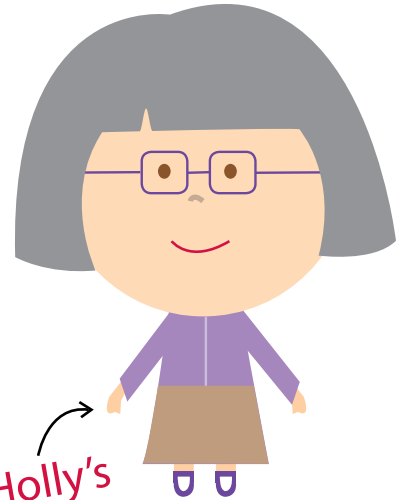
9x table puzzle 1



Holly



Holly's
mum



Holly's
granny

Holly is 9.

Holly's mum is 9 years older than Holly's aunt.

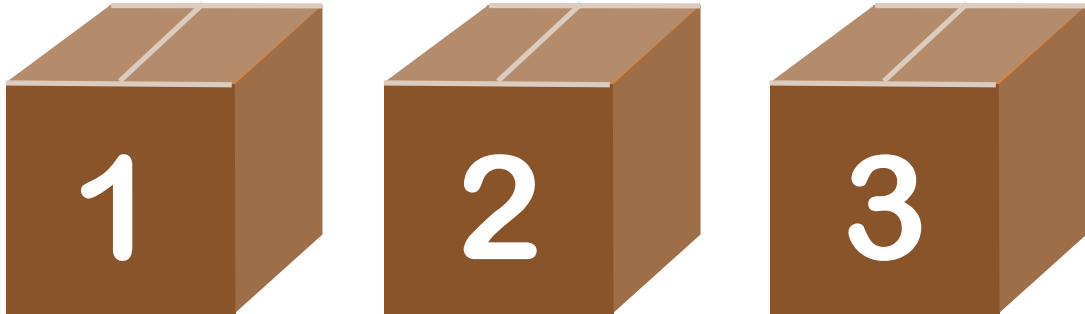
Holly's granny is 9 times the age of Holly.

Holly was born when her mum was 27.

Work out the ages of Holly's mum, aunt and granny.

Answers:
Mum is 36, Aunt is 27 and Granny is 81.

9x table puzzle 2



The weight of each box in kg is a multiple of 9 no larger than 108kg.

Box 1 weighs half of what box 2 weighs.

Box 3 weighs half of what box 1 weighs.

What could the three boxes weigh?

See if you can find all the possibilities.

Answers:
There are three possibilities:
BOX 1 BOX 2 BOX 3
18kg 36kg 9kg
36kg 72kg 18kg
54kg 108kg 27kg

9x table puzzle 3

1	2	3
8		4
7	6	5

The centre rectangle in this picture is a farmer's house. The eight rectangles around it, marked 1 – 8, are fields.

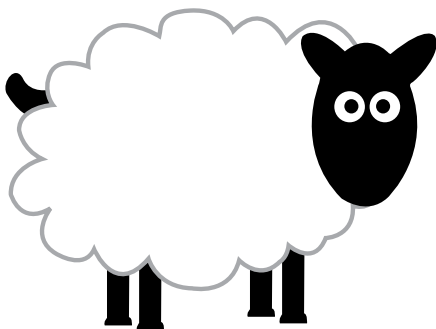
Each field contains a certain number of sheep. The number of sheep in each field is always a multiple of 9. The largest number of sheep found in a field is 27.

From the windows at the front of the house, the farmer can see fields 1, 2 and 3. He can see a total of 36 sheep.

From the windows at the right hand side of the house he can see fields 3, 4 and 5. He can see a total of 54 sheep.

From the windows at the back of the house, he can see fields 5, 6 and 7. He can see a total of 45 sheep.

From the windows at the left hand side of the house he can see fields 7, 8 and 1. He can see a total of 36 sheep.



See if you can work out how many sheep could be in each field. There will be more than one way of doing this, but you only need to find one combination.

9x table puzzle 3
Answers:
Possible combinations:

9	18	9
9		27
18	9	18

9	9	18
9		27
18	18	9

18	9	9
9		27
9	18	18

Times Tables Bingo

Suggested age range 8+ (year 4 onwards)

Number of players 3

How to prepare the game

- Cut out the two nine-square grids on the next page (or you just draw them on paper) for the players.

How to play the game

The two players need a nine-square grid each. They need to write nine numbers chosen from this list - 4, 6, 8, 10, 12, 14, 16, 18, 20, 24 - in the grid (they cannot write the same number twice).

The caller then calls out questions from the card on the next page.

If the players have the answer to the question being called, they cross them off on their grid.

The answers are on the sheet, so the caller will need to check players are crossing off the correct answers.

The first player to cross off all their numbers shouts bingo and is the winner.

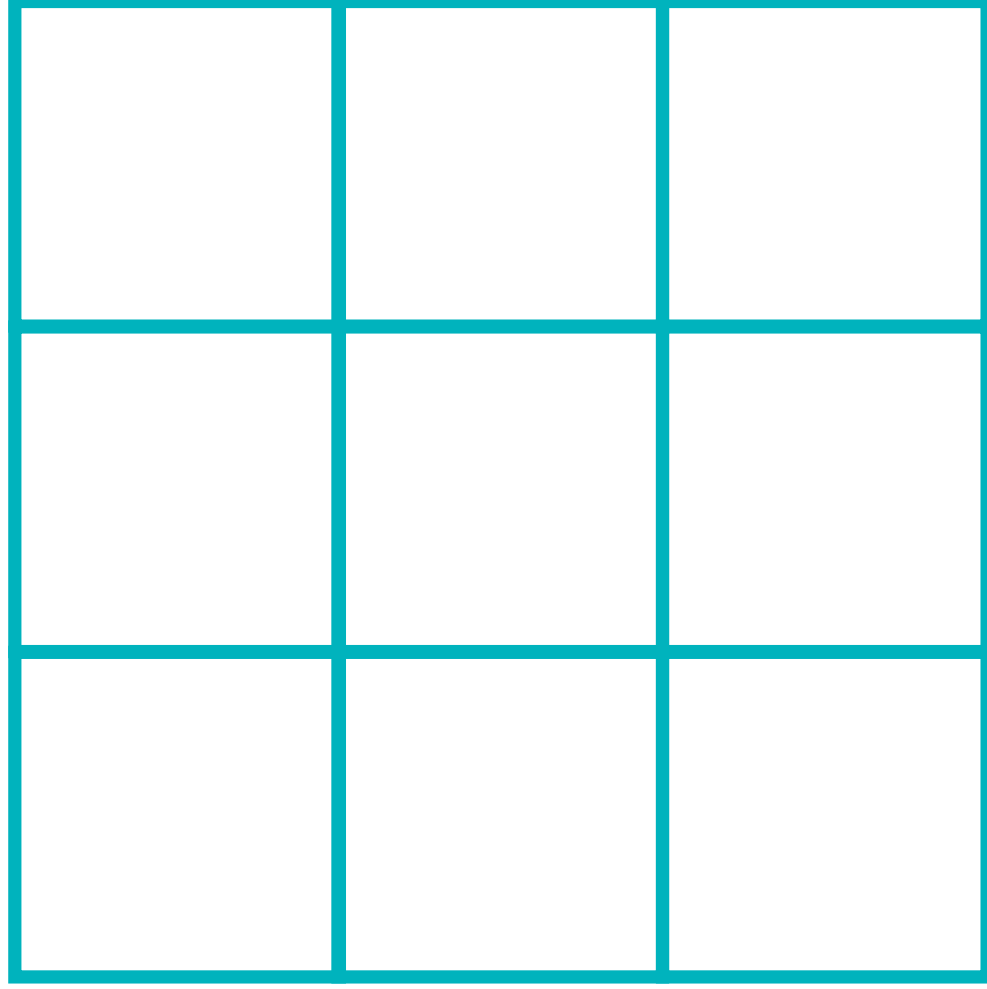
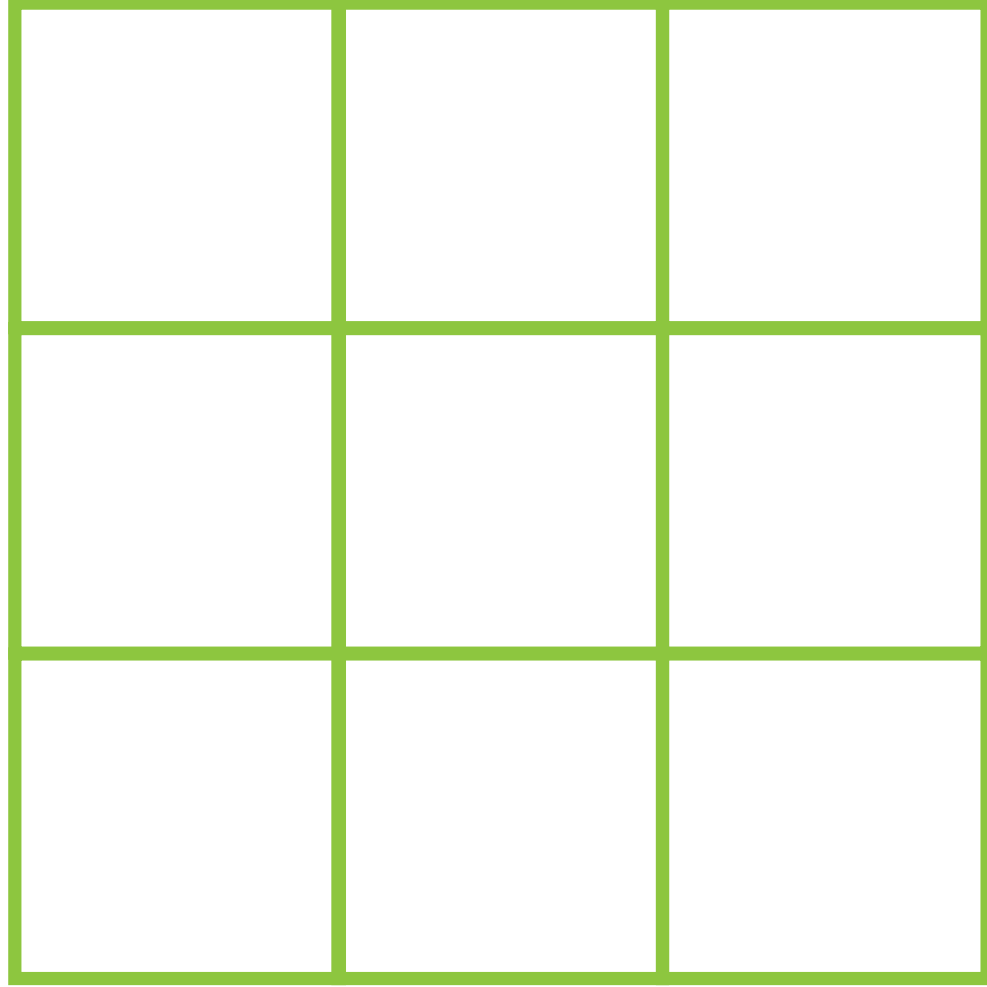
How does this game support learning?

- Make times tables drilling fun with Times Tables Bingo. You can write your own number list and caller card to test all the different tables, either one at a time or all at once.

Times Tables Bingo: caller card

3 cars are parked outside, each with 4 wheels. How many wheels are there altogether?	12
What is the perimeter of a square with sides of 4cm?	16
There are four pairs of shoes in the window of a shop. How many shoes are there?	8
6 children each eat 3 cakes. How many cakes have they eaten altogether?	18
What is 2×5 ?	10
What is 2×2 ?	4
I have bought 7 pairs of gloves. How many gloves have I got altogether?	14
What is 2×3 ?	6
I buy 6 books, each costing £4. How much have I spent?	24
What is 4×5 ?	20

Times Tables Bingo: nine-square player grids



10x table puzzle 1



Four children are given five darts each.

They have to throw the darts at the numbers above and try to get the highest score possible.

This table shows their total scores. Write down which numbers they could have hit to get these scores (there will often be more than one possible combination).

Remember that they will not always hit five numbers!

NAME	SCORE	POSSIBLE NUMBERS HIT
Carla	20	
Jane	25	
Peter	15	
Jack	30	

ANSWER:	NAME	SCORE	POSSIBLE NUMBERS HIT
	CARLA	20	10, 10 OR 10, 5, 5 OR 5, 5, 5, 5
	JANE	25	10, 10, 5 OR 10, 5, 5, 5 OR 5, 5, 5, 5, 5
	PETER	15	10, 5 OR 5, 5, 5
	JACK	30	10, 10, 10 OR 10, 10, 5, 5 OR 10, 5, 5, 5, 5

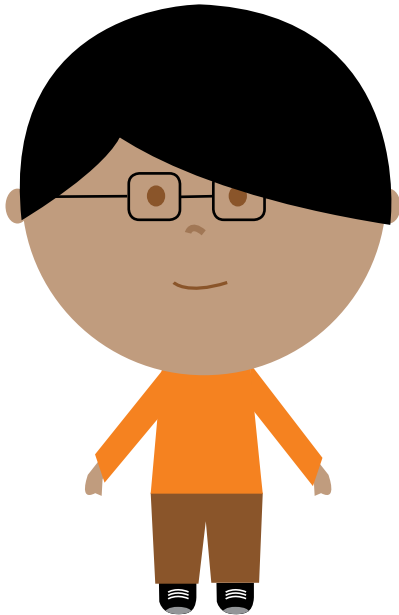
10x table puzzle 2



Sam only buys sweets on dates of the year that are a multiple of ten. Can you work out on how many days Sam buys sweets, from March to October?

Answer: March 10th, 20th, 30th, April 10th, 20th, 30th, May 10th, 20th, 30th, June 10th, 20th, 30th, July 10th, 20th, 30th, August 10th, 20th, 30th, September 10th, 20th, 30th, October 10th, 20th, 30th – so 24 days in all.

10x table puzzle 3



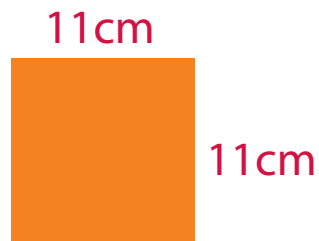
A teacher cuts up pieces of squared paper into strips that are 10 squares long. Each square measures 1cm along each side.

How many of these strips could you fit into a rectangle measuring 20cm by 60cm?

What would the surface area of this shape be?

Answer:
You would be able to fit 120 strips in the shape. The total surface area would be 1200cm squared.

11x table puzzle 1



Brian buys a set of 20 square bricks that are 11cm by 11cm.

He arranges them in a 5 by 4 rectangle.

What is the perimeter of this rectangle?

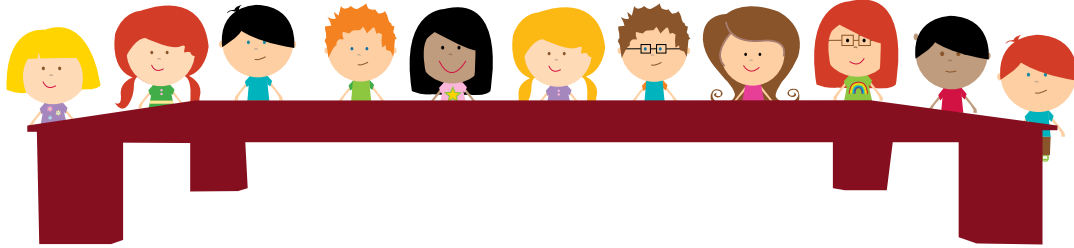
What is the area?



Draw a picture of the tiles arranged in the rectangle to help you.

The perimeter is 198cm, the area is 2420cm squared.
Answer:

11x table puzzle 2



In the school dinners hall, each table has 11 children sat at it. There are 132 children in the hall altogether.

In the packed lunch hall, each table has 11 children sat at it. There are 99 children in the hall altogether.

How many more **TABLES** of children are there in the school dinners hall than the packed lunch hall?

Answer:
There are 9 tables in the packed lunch hall and 12 tables in the school dinners hall, so there are 3 more tables in the school dinners hall.

Jumbled Times Tables

Suggested age range 7+ (year 4 onwards)

Number of players One

How to prepare the game

- Cut out the number sentences on the following page and jumble them up.

How to play the game

- Start with a pile of jumbled up number sentences cards. How fast can you get them back into the right order?

Time yourself and see if you can beat your time with your next attempt.

To check your answers, consult the answers sheet.

How does this game support learning?

- Arranging number sentences correctly will help your child practise tricky times tables and see patterns - for example, 9×3 and 3×9 have the same answer.

Jumbled Times Tables

7

8

10

9

6

7

4

9

8

11

x

x

x

x

x

x

x

x

x

x

7

9

4

3

5

8

6

5

8

5

=

=

=

=

=

=

=

=

=

=

49

72

40

27

30

56

24

45

64

55

Jumbled Times Tables - answer sheet

46

7

8

10

9

6

7

4

9

8

11

x

x

x

x

x

x

x

x

x

x

7

9

4

3

5

8

6

5

8

5

=

=

=

=

=

=

=

=

=

=

49

72

40

27

30

56

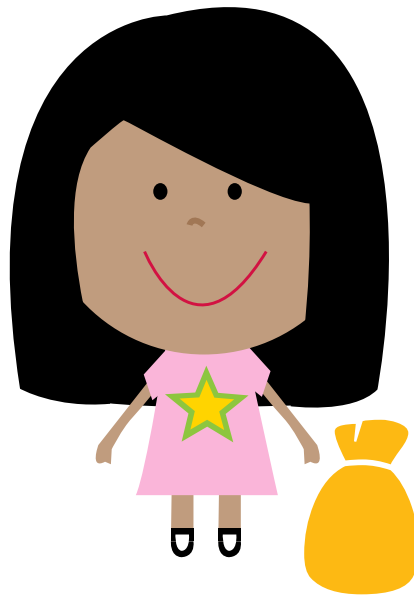
24

45

64

55

11x table puzzle 3



Louise has a bag full of 10p coins and 1p coins. There are the same number of 10p coins in the bag as there are 1p coins.

She has £1.43 altogether.

How many 10ps and 1ps are there in the bag?

Answer:
There are 13 10ps and 13 1ps.

12x table puzzle 1

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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See if you can work out the four mystery numbers above with the following clues:

Each number is a multiple of 12.

The first, third and fourth numbers have two digits.

The second number has three digits.

None of the numbers are larger than 144.

Each number contains the digit 4.

The third number is half the first number.

The last number is 60 more than the third number.

Answer:
The numbers are (in this order): 48, 144, 24, 84

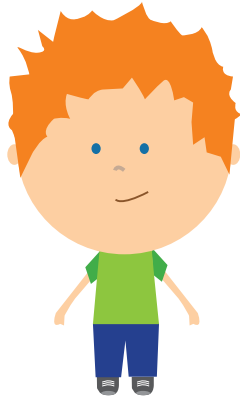
12x table puzzle 2

Cut out and re-arrange these cards into the gaps below so that the number sentence makes sense:



$$\square \square \times \square \square = \square \square \square$$

Answer:
12 x 13 = 156



12x table puzzle 3

John has a bag with blue, red, yellow, orange and green sweets in it. He's given the following clues about how many sweets of each colour there are in the bag:

Each number of sweets is a multiple of 12, no bigger than 108.

Both the number of orange sweets and the number of green sweets have the digit 4 in them.

There are less than 40 red sweets.

There are twice as many yellow sweets than red sweets.

There are more than 50 yellow sweets.

There are twice as many green sweets as orange sweets.

The number of blue sweets has three digits.

COLOUR OF SWEET	NUMBER OF SWEETS
Blue	
Red	
Yellow	
Orange	
Green	

Answer:
 Colour of Sweet
 Blue
 Red
 Yellow
 Orange
 Green
 Number of Sweets
 108
 36
 72
 24
 48

What's the Question?

Suggested age range 8+ (year 5 onwards)

Number of players 2

How to prepare the game

- Cut up the What's the Question? cards and jumble them up. Lay them face down on a flat surface.

How to play the game

This game is played backwards – so you pick a number and then you have to give a times table question that matches it. For example, if you picked up 49 you would need to say: 7×7 .

You need to play with one other player – it may be good to play with an adult so they can help you with questions if you get stuck.

Players are not allowed to use the one times table!

How does this game support learning?

- ▶ **Note to parents:** If you want to make the game harder, see if you can get your child to think about whether that is the only times table that matches the number or if there are others. Use the answers cards to check whether your child is correct.

What's the Question? cards

48

12

50

10

32

20

18

72

90

24

100

40

30

88

15

25

What's the Question? answers

$$\begin{aligned}6 \times 8 &= 48 \\4 \times 12 &= 48 \\2 \times 24 &= 48 \\3 \times 16 &= 48\end{aligned}$$

$$\begin{aligned}2 \times 6 &= 12 \\3 \times 4 &= 12\end{aligned}$$

$$\begin{aligned}10 \times 5 &= 50 \\2 \times 25 &= 50\end{aligned}$$

$$2 \times 5 = 10$$

$$\begin{aligned}8 \times 4 &= 32 \\2 \times 16 &= 32\end{aligned}$$

$$\begin{aligned}10 \times 2 &= 20 \\4 \times 5 &= 20\end{aligned}$$

$$\begin{aligned}3 \times 6 &= 18 \\2 \times 9 &= 18\end{aligned}$$

$$\begin{aligned}8 \times 9 &= 72 \\36 \times 2 &= 72 \\24 \times 3 &= 72 \\18 \times 4 &= 72 \\6 \times 12 &= 72\end{aligned}$$

$$\begin{aligned}10 \times 9 &= 90 \\2 \times 45 &= 90 \\3 \times 30 &= 90 \\18 \times 5 &= 90 \\6 \times 15 &= 90\end{aligned}$$

$$\begin{aligned}2 \times 12 &= 24 \\3 \times 8 &= 24 \\4 \times 6 &= 24\end{aligned}$$

$$\begin{aligned}2 \times 50 &= 100 \\4 \times 25 &= 100 \\5 \times 20 &= 100 \\10 \times 10 &= 100\end{aligned}$$

$$\begin{aligned}2 \times 20 &= 40 \\4 \times 10 &= 40 \\5 \times 8 &= 40\end{aligned}$$

$$\begin{aligned}2 \times 15 &= 30 \\3 \times 10 &= 30 \\5 \times 6 &= 30\end{aligned}$$

$$\begin{aligned}8 \times 11 &= 88 \\2 \times 44 &= 88 \\4 \times 22 &= 88\end{aligned}$$

$$3 \times 5 = 15$$

$$5 \times 5 = 25$$