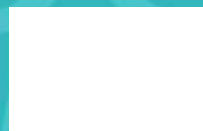
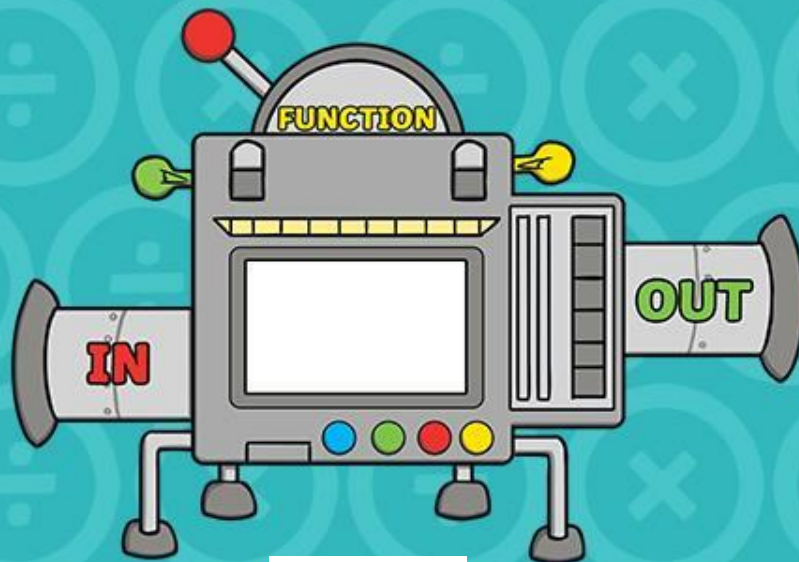




# Maths

Multiplication and Division

# The Multiplying Machine



# Aim

- I can calculate mathematical statements for the 2, 5 and 10 times tables.

# Success Criteria

- I can multiply by 2, 5 and 10.
- I can write a repeated addition sentence.
- I can use the  $\times$  and  $\div$  symbols.

# Bingo!



Write down 6 numbers on your whiteboard. They need to be multiples of 2, 5 or 10. I will say a multiplication sentence. If you have the answer on your board, cross it off.

The first person to cross out all their numbers is the winner.



# Bingo!



Were some numbers more likely to win than others?  
Explain your thinking.

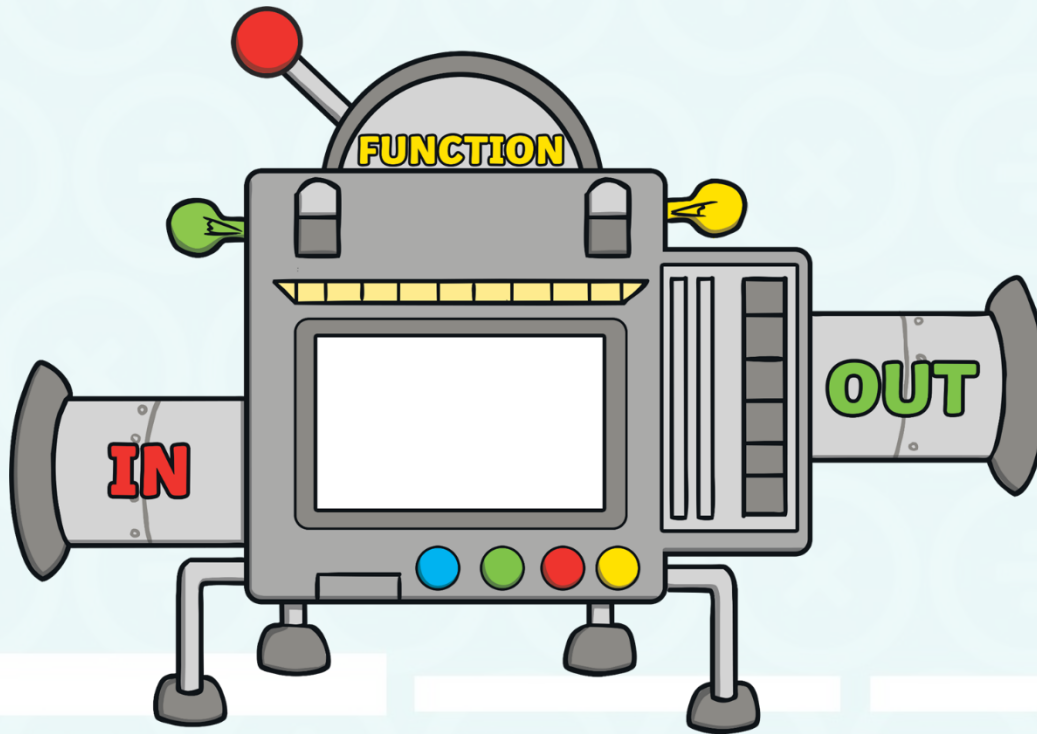
Which numbers were least likely to come up?  
Explain your thinking.

Play the game again.  
Which numbers will you choose this time?

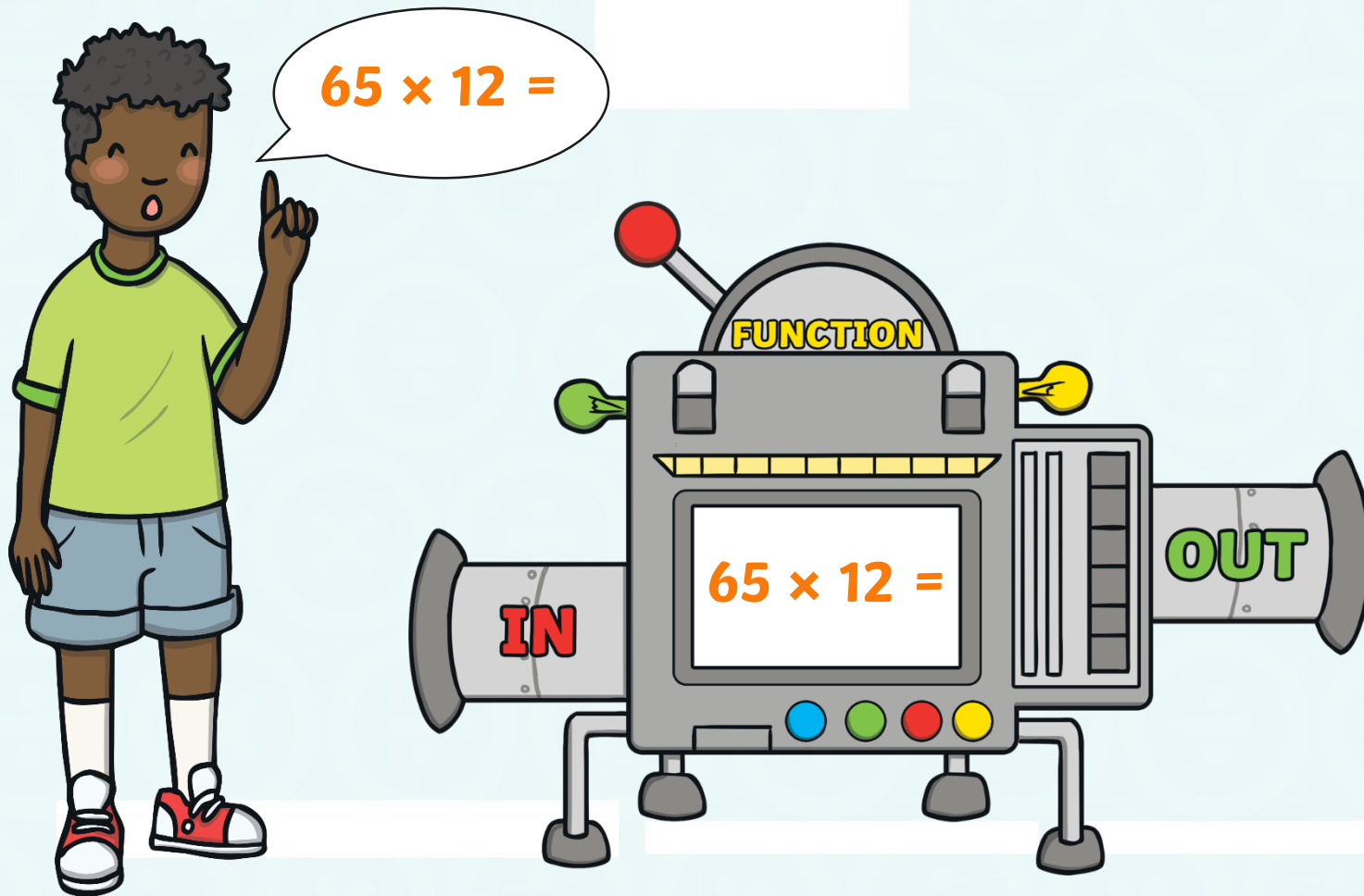
Perhaps you could think of extra rules, such as, you must choose a number that is **only** a multiple of 2 or 5?

# Matilda the Multiplying Machine

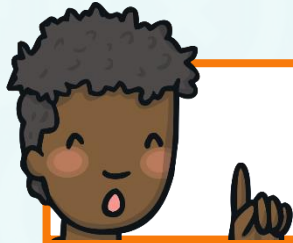
Matilda is an amazing multiplier.  
She will answer any question you ask her!



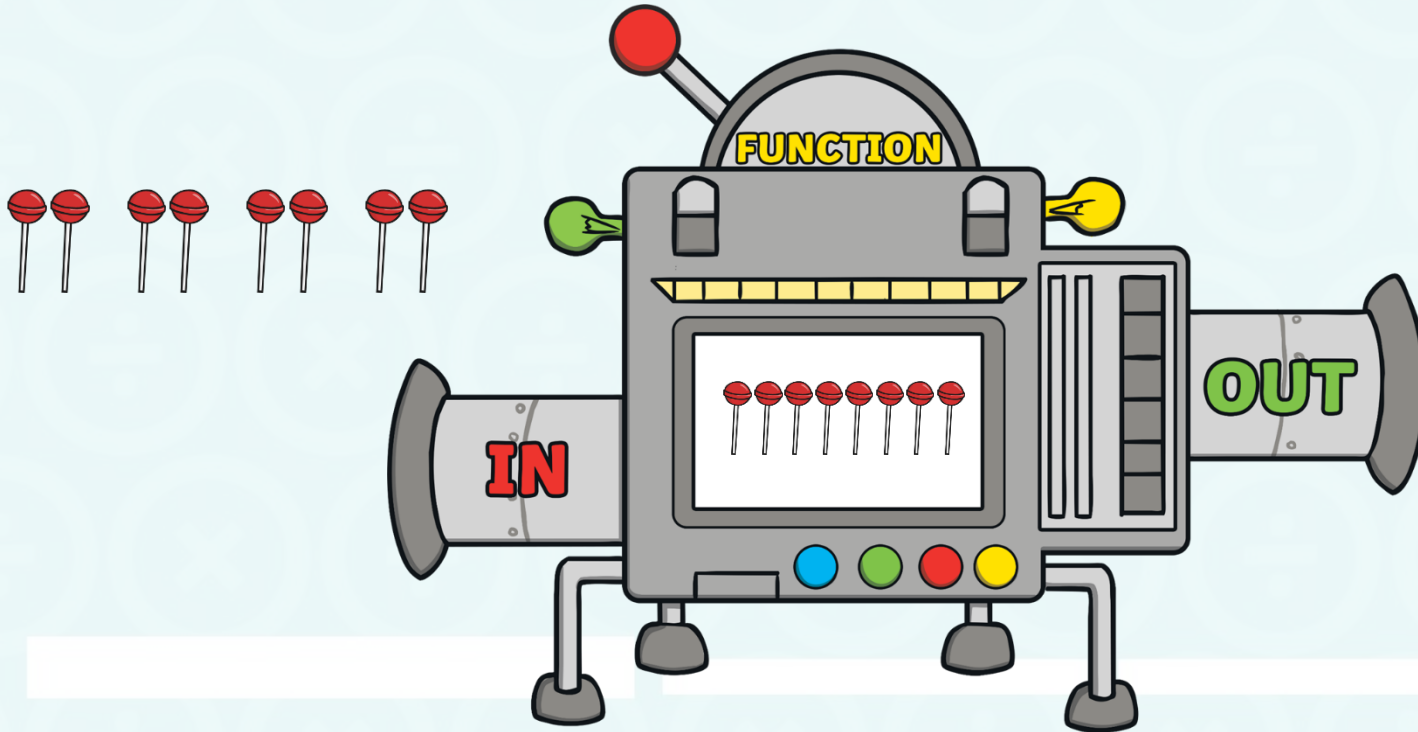
# Matilda the Multiplying Machine



# Matilda's Puzzle



What number sentence am I thinking of?

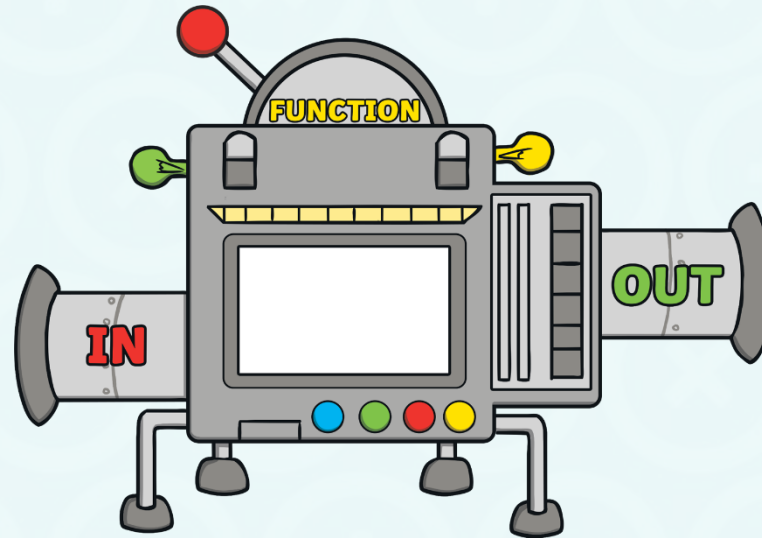




# Matilda's Puzzle



Hang on – that was addition.  
I thought Matilda was a multiplying machine?



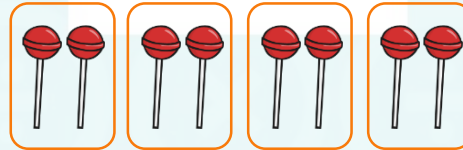
Can you explain why Matilda was able to solve:  
 $2 + 2 + 2 + 2 = ?$



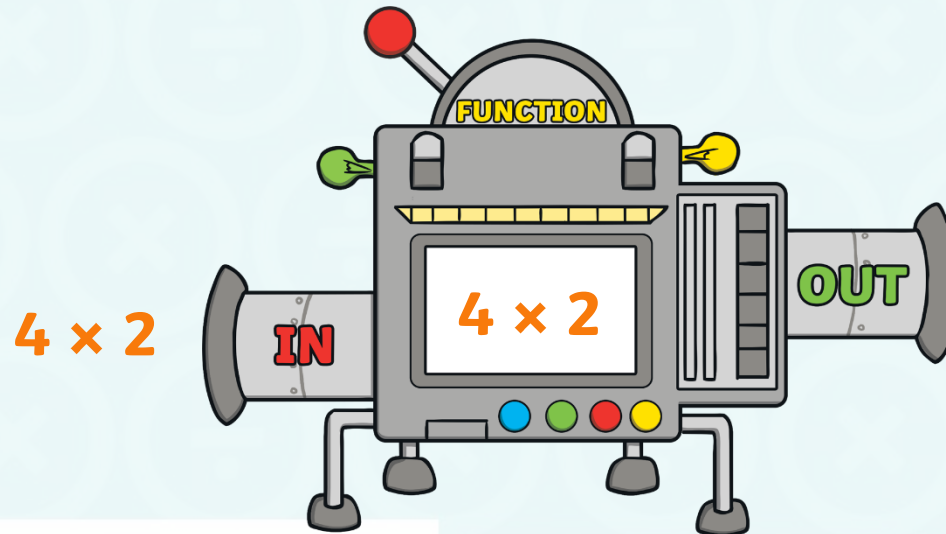


# Matilda's Puzzle

There are 4 groups of 2.



We could write this as  $4 \times 2 =$



Matilda could do this because repeated addition is just like multiplying.

# Matilda's Puzzle



$$2 + 2 + 2 + 2 =$$

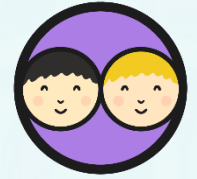
$$4 \times 2 =$$

What is the same and what is different about the 2 sentences?

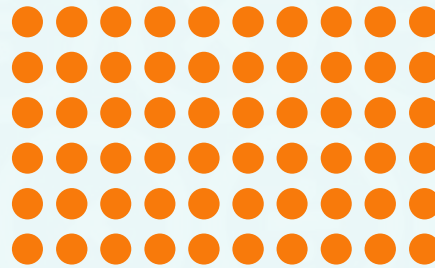
When might a multiplication sentence be better than an addition sentence?



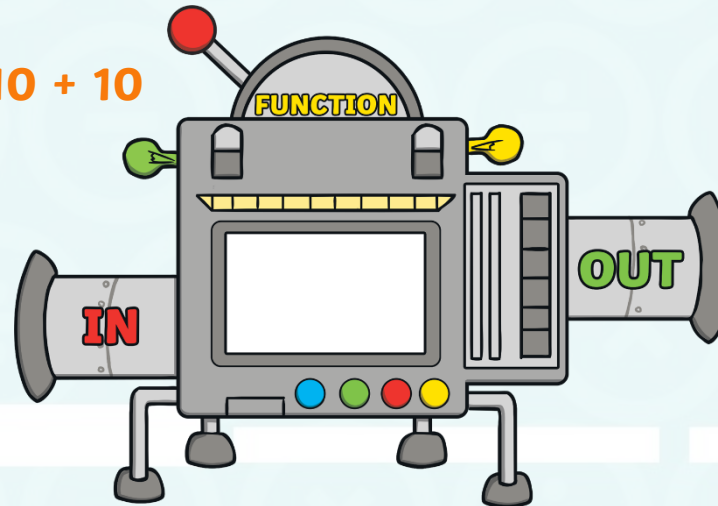
# What Am I Thinking Of?



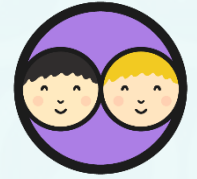
Write 2 sentences to put into my machine for what you see here.



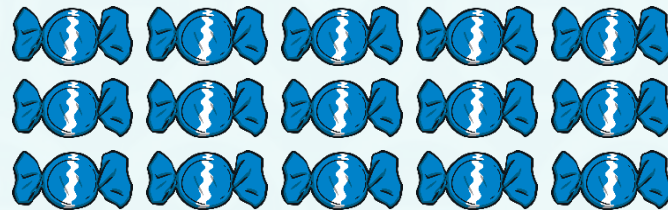
$10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10$



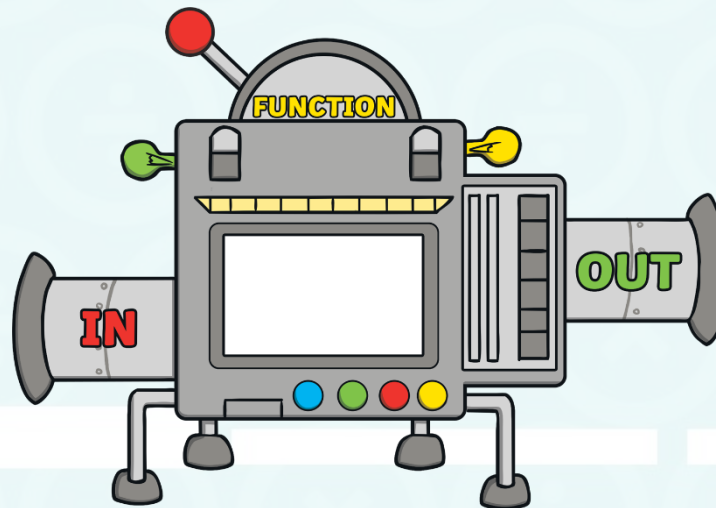
# What Am I Thinking Of?



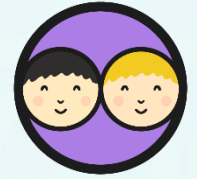
Write 2 sentences to put into my machine for what you see here.



$53 + 55 + 5$



# What Am I Thinking Of?

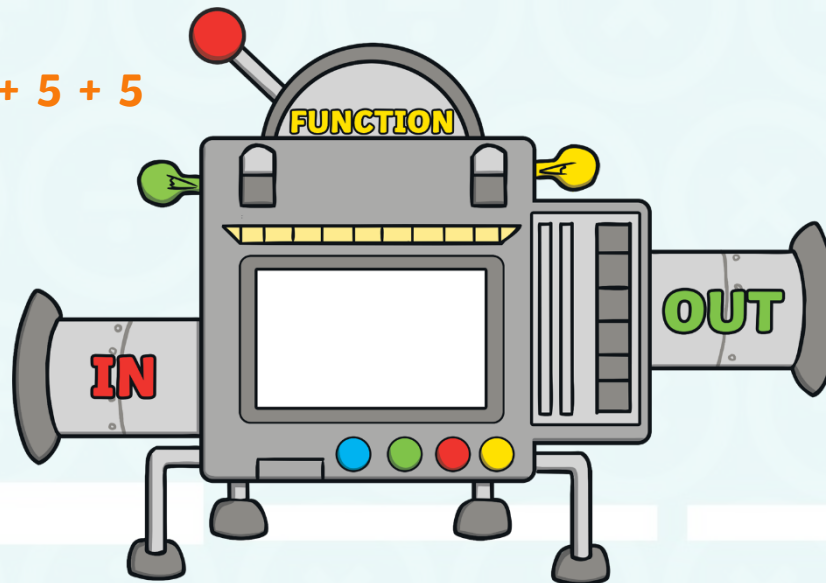


Write 2 sentences to put into my machine for what you see here.

I bake some buns. I put 5 buns in each box and fill 8 boxes.  
How many buns do I bake?



$5 + 5 + 5 + 5 + 5 + 5 + 5 + 5$



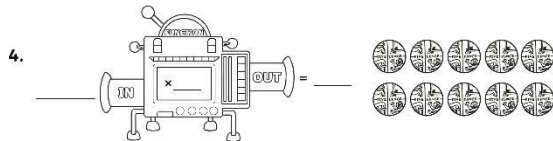
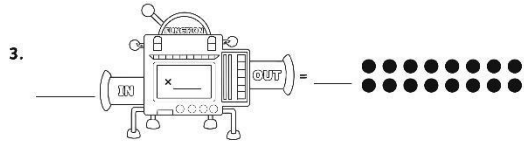
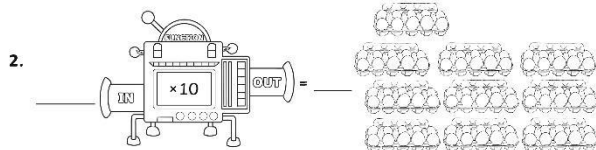
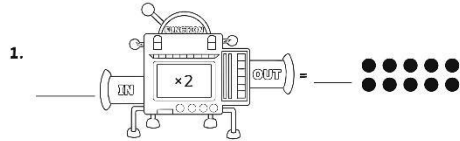
# Matilda's Multiplication



## Matilda's Multiplication

I can calculate mathematical statements for the 2, 5 and 10 times tables.

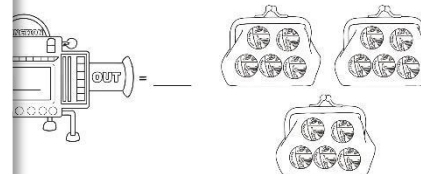
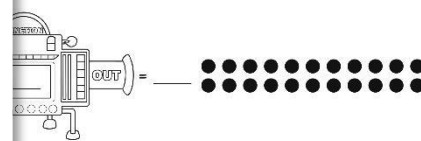
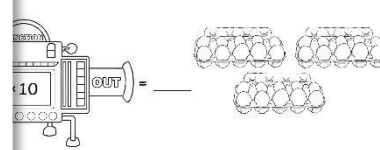
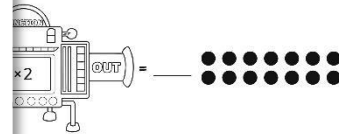
Fill in the number sentences to match Matilda's clue.



## Matilda's Multiplication

mathematical statements for the 2, 5 and 10 times tables.

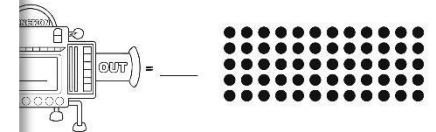
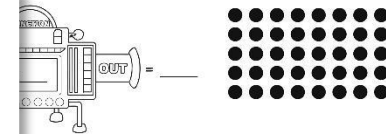
number sentences to match Matilda's clue.



## Matilda's Multiplication

mathematical statements for the 2, 5 and 10 times tables.

ences to match Matilda's clue, then write a puzzle for



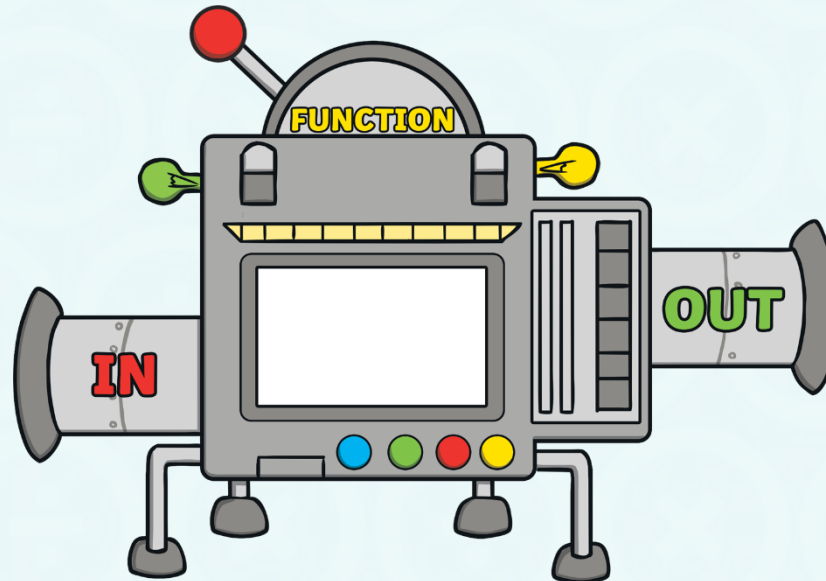
# Final Puzzle



Matilda is showing the answer.  
What multiplication question do you think she put in?



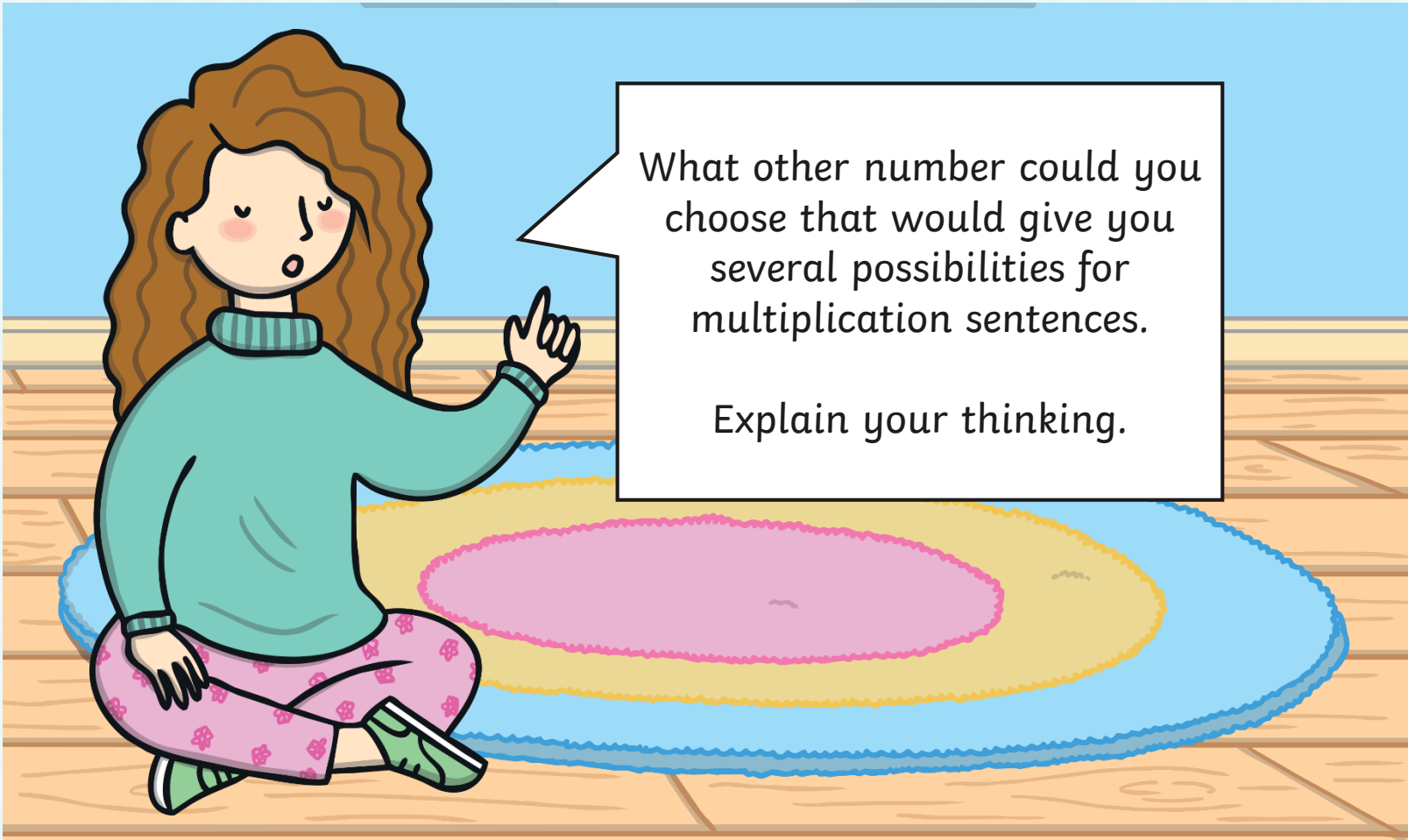
$2 \times 10 =$   
 $10 \times 2 =$   
 $4 \times 5 =$



You could also have  $1 \times 20 = 20$ .



# Final Puzzle



What other number could you choose that would give you several possibilities for multiplication sentences.

Explain your thinking.

# Aim



- I can calculate mathematical statements for the 2, 5 and 10 times tables.

# Success Criteria

- I can multiply by 2, 5 and 10.
- I can write a repeated addition sentence.
- I can use the  $\times$  and  $\div$  symbols.

