

# Reasoning and Problem Solving

## Step 8: The 5 Times Table

### National Curriculum Objectives:

Mathematics Year 2: (2C6) [Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers](#)

Mathematics Year 2: (2C7) [Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication \( \$\times\$ \), division \( \$\div\$ \) and equals \(=\) signs](#)

### Differentiation:

Questions 1, 4 and 7 (Problem Solving)

**Developing** Use the cards to complete the calculation and identify the card which cannot be used. Uses knowledge of the 5 times tables and includes number track as support.

**Expected** Use the cards to complete the calculation and identify the card which cannot be used. Uses knowledge of the 5 times tables.

**Greater Depth** Use the cards to complete the calculation and identify the card which cannot be used. Uses knowledge of the 5 times tables and related multiplication facts.

Questions 2, 5 and 8 (Reasoning)

**Developing** Solve a word problem and explain the answer. Uses knowledge of the 5 times tables and includes pictorial and number track as support.

**Expected** Solve a word problem and explain the answer. Uses knowledge of the 5 times tables.

**Greater Depth** Solve a word problem and explain the answer. Uses knowledge of the 5 times tables and related multiplication facts.

Questions 3, 6 and 9 (Problem Solving)

**Developing** Find all possibilities using the given clues. Uses knowledge of the 5 times tables and includes number track as support.

**Expected** Find all possibilities using the given clues. Uses knowledge of the 5 times tables.

**Greater Depth** Find 3 possibilities using the given clues. Uses knowledge of the 5 times tables and related multiplication facts.

More [Year 2 Multiplication and Division](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

## The 5 Times Table

1a. Fill in the missing boxes using the digit cards. Use the number track to help you.

5	10	15	20	25	30	35	40	45	50	55	60
---	----	----	----	----	----	----	----	----	----	----	----

3	10	1	15	5
---	----	---	----	---

$$\boxed{\phantom{00}} \times 5 = \boxed{\phantom{00}}$$

Which card cannot be used?



PS

## The 5 Times Table

1b. Fill in the missing boxes using the digit cards. Use the number track to help you.

5	10	15	20	25	30	35	40	45	50	55	60
---	----	----	----	----	----	----	----	----	----	----	----

45	25	5	9	30
----	----	---	---	----

$$\boxed{\phantom{00}} \times 5 = \boxed{\phantom{00}}$$

Which card cannot be used?



PS

2a. Seth is baking cookies for 5 of his friends.

5	10	15	20	25	30	35	40	45	50	55	60
---	----	----	----	----	----	----	----	----	----	----	----

He wants to bake them 5 cookies each.



How many cookies does he need to bake? Explain your answer.



R

2b. Tia is sharing marbles out between 7 on her friends.

5	10	15	20	25	30	35	40	45	50	55	60
---	----	----	----	----	----	----	----	----	----	----	----

She wants to give them 5 marbles each.



How many marbles must Tia have to share out? Explain your answer.



R

3a. I am thinking of a number in the 5 times tables.

5	10	15	20	25	30	35	40	45	50	55	60
---	----	----	----	----	----	----	----	----	----	----	----

I multiplied 5 by a number that is bigger than 5 but smaller than 9.

The second digit is a 0.

What could my number be?  
Write down all the possibilities.



PS

3b. I am thinking of a number in the 5 times tables.

5	10	15	20	25	30	35	40	45	50	55	60
---	----	----	----	----	----	----	----	----	----	----	----

I multiplied 5 by a number that is bigger than 2 but smaller than 6.

The second digit is a 5.

What could my number be?  
Write down all the possibilities.



PS

## The 5 Times Table

## The 5 Times Table

4a. Fill in the missing boxes using the digit cards below.

9	8	7	45	35
---	---	---	----	----

$$\square \times 5 = \square$$

Which card cannot be used?



PS

4b. Fill in the missing boxes using the digit cards below.

50	55	10	12	60
----	----	----	----	----

$$\square \times 5 = \square$$

Which card cannot be used?



PS

5a. Danny is planting seeds to grow flowers.

He wants to plant 8 seeds into 5 flower boxes.



How many seeds with does Danny need?  
Explain your answer.



R

5b. Lisa is sharing out the glue sticks in her classroom.

There are 6 tables and each table needs 5 glue sticks.



How many glue sticks will Lisa need?  
Explain your answer.



R

6a. I am thinking of a number in the 5 times tables.

I multiplied 5 by a number that is bigger than 3 but smaller than 7.

What could my number be?  
Write down all the possibilities.



PS

6b. I am thinking of a number in the 5 times tables.

I multiplied 5 by a number that is bigger than 7 but smaller than 11.

What could my number be?  
Write down all the possibilities.

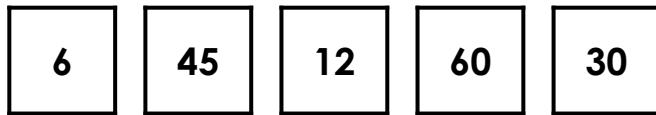


PS

## The 5 Times Table

## The 5 Times Table

7a. Using the calculation  $3 \times 5 = 15$ , create related multiplications using the digit cards below.



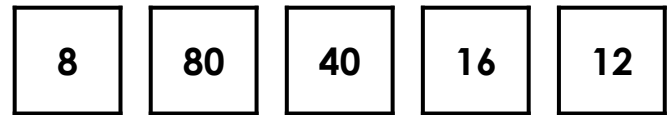
$$\square \times 5 = \square$$

Which card cannot be used?



PS

7b. Using the calculation  $4 \times 5 = 20$ , create related multiplications using the digit cards below.



$$\square \times 5 = \square$$

Which card cannot be used?



PS

8a. Bella has pack of 90 chocolate chips to decorate cookies and cupcakes.

Cookies and cupcakes get 5 chips each.

Bella decorates 11 cookies.



How many cupcakes can she decorate with the remaining chocolate chips?  
Explain your answer.



R

8b. Oscar has a bag of 75 carrots to share between the horses and pigs.

All the animals get 5 carrots each.

Oscar feeds 7 horses.



How many pigs can he feed with the remaining carrots? Explain your answer.



R

9a. I am thinking of a number in the 5 times tables.

I multiplied 5 by 2 numbers that are both bigger than 6 but smaller than 11.

I added my answers together to make my number.

What could my number be?  
Write 3 possibilities.



PS

9b. I am thinking of a number in the 5 times tables.

I multiplied 5 by 2 numbers that are both bigger than 8 but smaller than 12.

I added my answers together to make my number.

What could my number be?  
Write 3 possibilities.



PS

## Reasoning and Problem Solving The 5 Times Table

### Developing

- 1a.  $3 \times 5 = 15$ ,  $1 \times 5 = 5$ ; 10 cannot be used.
- 2a. Seth needs to bake 25 cookies because  $5 \times 5 = 25$ .
- 3a. The number could be 30 or 40 because 5 must have been multiplied by 6, 7 or 8;  $6 \times 5 = 30$ ,  $7 \times 5 = 35$ ,  $8 \times 5 = 40$ . Only 30 and 40 end in a 0.

### Expected

- 4a.  $9 \times 5 = 45$ ,  $7 \times 5 = 35$ ; 8 cannot be used.
- 5a. Danny needs 40 seeds to be able to plant 8 in 5 flower boxes because  $8 \times 5 = 40$ .
- 6a. The number could be 20, 25 or 30 because  $4 \times 5 = 20$ ,  $5 \times 5 = 25$ ,  $6 \times 5 = 30$ .

### Greater Depth

- 7a.  $6 \times 5 = 30$ ,  $12 \times 5 = 60$ ; 45 cannot be used.
- 8a. Bella can decorate 7 cupcakes because she has already used 55 of the chocolate chips;  $11 \times 5 = 55$ ,  $90 - 55 = 35$ . She has 35 chips left;  $35 = 7 \times 5$ .
- 9a. Various answers, for example: The number could be 85 because 7 and 10 are both bigger than 6 but smaller than 11;  $7 \times 5 = 35$ ,  $10 \times 5 = 50$ ,  $30 + 50 = 85$ .

## Reasoning and Problem Solving The 5 Times Table

### Developing

- 1b.  $9 \times 5 = 45$ ,  $5 \times 5 = 25$ ; 30 cannot be used.
- 2b. Tia needs 35 marbles to share with her friends because  $7 \times 5 = 35$ .
- 3b. The number could be 15 or 25 because 5 must have been multiplied by 3, 4 or 5;  $3 \times 5 = 15$ ,  $4 \times 5 = 20$ ,  $5 \times 5 = 25$ . Only 15 and 25 end in a 5.

### Expected

- 4b.  $12 \times 5 = 60$ ,  $10 \times 5 = 50$ ; 55 cannot be used.
- 5b. Lisa needs 30 glue sticks to be able to put 5 on 6 tables because  $6 \times 5 = 30$ .
- 6b. The number could be 40, 45 or 50 because  $8 \times 5 = 40$ ,  $9 \times 5 = 45$ ,  $10 \times 5 = 50$ .

### Greater Depth

- 7b.  $8 \times 5 = 40$ ,  $16 \times 5 = 80$ ; 12 cannot be used.
- 8b. Oscar can feed 8 pigs because he has already used 35 of the carrots;  $7 \times 5 = 35$ ,  $75 - 35 = 40$ . He has 40 carrots left;  $40 = 8 \times 5$ .
- 9b. Various answers, for example: The number could be 95 because 9 and 10 are both bigger than 8 but smaller than 12;  $9 \times 5 = 45$ ,  $10 \times 5 = 50$ ,  $45 + 50 = 95$ .