

# Homework/Extension

## Multiply by 3

### National Curriculum Objectives:

Mathematics Year 3: (3C6) Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

### Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

**Developing** Tick the correct representation. Using counting in 3s in order to multiply by 3 (up to 12 groups of 3). All questions have pictorial support where each digit is represented.

**Expected** Tick the correct representation. Using counting in 3s in order to multiply by 3 (up to 12 groups of 3). Where only one group of 3 is represented pictorially.

**Greater Depth** Tick the correct representation. Using counting in 3s in order to multiply by 3 beyond 12 groups of 3 using their knowledge of the times tables facts up to 12 groups of 3. No pictorial support provided.

Questions 2, 5 and 8 (Varied Fluency)

**Developing** Calculate the missing information. Using counting in 3s in order to multiply by 3 (up to 12 groups of 3). All questions have pictorial support where each digit is represented.

**Expected** Calculate the missing information. Using counting in 3s in order to multiply by 3 (up to 12 groups of 3). Where only one group of 3 is represented pictorially.

**Greater Depth** Calculate the missing information. Using counting in 3s in order to multiply by 3 beyond 12 groups of 3 using their knowledge of the times tables facts up to 12 groups of 3. No pictorial support provided.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

**Developing** Explain which statement is correct. Using counting in 3s in order to multiply by 3 (up to 12 groups of 3). All questions have pictorial support where each digit is represented.

**Expected** Explain which statement is correct. Using counting in 3s in order to multiply by 3 (up to 12 groups of 3). Where only one group of 3 is represented pictorially.

**Greater Depth** Explain which statement is correct. Using counting in 3s in order to multiply by 3 beyond 12 groups of 3 using their knowledge of the times tables facts up to 12 groups of 3. No pictorial support provided.

# Multiply by 3

1. Tick the representation that is the same as 5 lots of 3.

A.  = 15





B.  = 15

C.  = 15



VF  
HW/Ext

2. Class 3 recorded their scores in a quiz. For every correct answer, they scored 3 points. Complete the table.

Group	Correct Answers	Points
A.	4	 = <input type="text"/>
B.	<input type="text"/>	 = 18
C.	5	 = <input type="text"/>
D.	<input type="text"/>	 = 9



VF  
HW/Ext

3. Amy and Matt are looking at the marbles below.



Amy

I think this picture shows 11 groups of 3 marbles.



Matt

I think this picture shows 10 groups of 3 marbles.

Who is correct? Explain how you know.



RPS  
HW/Ext

# Multiply by 3

4. Tick the representation that is the same as 7 lots of 3.

A.

$$3 + 3 + 3 = 21$$

B.

$$3 + 3 + 3 + 3 + 3 + 3 + 3 = 21$$

C.



$$\boxed{\text{★★★}} \boxed{\text{★★★}} \boxed{\text{★★★}} \boxed{\text{★★★}} \boxed{\text{★★★}} \boxed{\text{★★★}} = 21$$



VF  
HW/Ext

5. Class 3 recorded their scores in a quiz. For every correct answer, they scored 3 points. Complete the table.

Group	Correct Answers	Points
A.	3	<input type="text"/> + <input type="text"/> + <input type="text"/> = <input type="text"/>
B.	<input type="text"/>	21
C.	4	<input type="text"/> + <input type="text"/> + <input type="text"/> + <input type="text"/> = <input type="text"/>
D.	<input type="text"/>	30



VF  
HW/Ext

6. Steph and Dean have a pack of 3 balls.



Steph

If we had 9 packs, we would have 21 balls.



Dean

If we had 9 packs, we would have 27 balls.

Who is correct? Explain how you know.



RPS  
HW/Ext

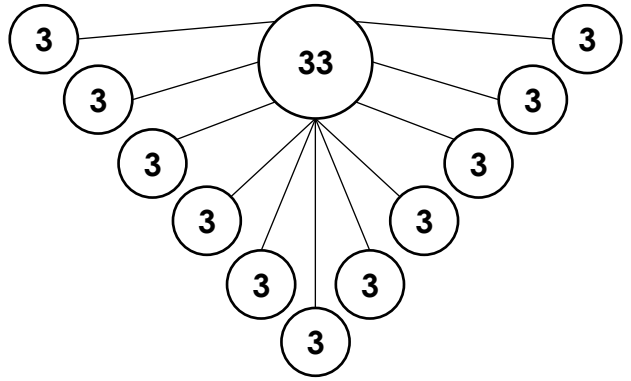
# Multiply by 3

7. Tick the representation that is the same as eleven lots of three.

A.

$$11 \times 3 = 30$$

C.



B.

$$3 \times 11 = 30$$



VF  
HW/Ext

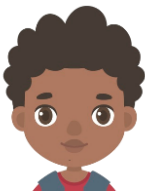
8. Class 3 recorded their scores in a quiz. For every correct answer, they scored 3 points. Complete the table.

Group	Correct Answers	Points				
A.	5	<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
B.	<input type="text"/>	<input type="text"/>	x	3	=	27
C.	6	<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
D.	<input type="text"/>	<input type="text"/>	x	3	=	12



VF  
HW/Ext

9. Alfie and Tilly have a pack of three biscuits.



Alfie

If we had seven packs, we would have twenty-four biscuits.



Tilly

If we had seven packs, we would have twenty-one biscuits.

Who is correct? Explain how you know.



RPS  
HW/Ext





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### Developing

1. **C**

2.

Group	Correct Answers	Points
A.	4	 = <span style="border: 1px solid black; padding: 2px;">12</span>
B.	<span style="border: 1px solid black; padding: 2px;">6</span>	 = 18
C.	5	 = <span style="border: 1px solid black; padding: 2px;">15</span>
D.	<span style="border: 1px solid black; padding: 2px;">3</span>	 = 9

3. **Amy is correct. The image shows 11 groups of 3 marbles.**

### Expected

4. **B**

5.

Group	Correct Answers	Points
A.	3	<span style="border: 1px solid black; padding: 2px;">3</span> + <span style="border: 1px solid black; padding: 2px;">3</span> + <span style="border: 1px solid black; padding: 2px;">3</span> = <span style="border: 1px solid black; padding: 2px;">9</span>
B.	<span style="border: 1px solid black; padding: 2px;">7</span>	21
C.	4	<span style="border: 1px solid black; padding: 2px;">3</span> + <span style="border: 1px solid black; padding: 2px;">3</span> + <span style="border: 1px solid black; padding: 2px;">3</span> + <span style="border: 1px solid black; padding: 2px;">3</span> = <span style="border: 1px solid black; padding: 2px;">12</span>
D.	<span style="border: 1px solid black; padding: 2px;">10</span>	30

6. **Dean is correct because  $3 \times 9 = 27$  not 21.**

### Greater Depth

7. **C**

8.

Group	Correct Answers	Points
A.	5	<span style="border: 1px solid black; padding: 2px;">5</span> x <span style="border: 1px solid black; padding: 2px;">3</span> = <span style="border: 1px solid black; padding: 2px;">15</span>
B.	<span style="border: 1px solid black; padding: 2px;">9</span>	<span style="border: 1px solid black; padding: 2px;">9</span> x 3 = 27
C.	6	<span style="border: 1px solid black; padding: 2px;">6</span> x <span style="border: 1px solid black; padding: 2px;">3</span> = <span style="border: 1px solid black; padding: 2px;">18</span>
D.	<span style="border: 1px solid black; padding: 2px;">4</span>	<span style="border: 1px solid black; padding: 2px;">4</span> x 3 = 12

9. **Tilly is correct because  $7 \times 3 = 21$  not 24.**