

## Lesson Approach



This lesson uses patterns in the 3 times table to help pupils commit the 3 times table to memory easily.

To begin this lesson, show pupils the picture from the In Focus task and ask them how the cupcakes are arranged. They are arranged in 2 rows of 3, therefore, we write it as  $2 \times 3 = 6$ . Explain that  $2 \times 3$  means 2 rows of 3. Ask pupils how they would work out  $3 \times 3$  if we know  $2 \times 3 = 6$ . Draw another row of 3 cupcakes beneath the first 2 rows. Now we have 3 rows of 3, which can be written as  $3 \times 3 = 9$ . Support pupils by explaining that  $3 \times 3$  means 1 more row of 3, so if we know  $2 \times 3 = 6$ , then  $3 \times 3$  is 6 plus another row of 3, which is 9. This will help pupils see that in the 3 times table, the next number is always 3 more than the previous one. Therefore, if they know  $3 \times 3 = 9$ , they can find  $4 \times 3$  by adding 3 to 9.

The other strategy pupils can learn is the doubling of groups. If 1 group of 3 is  $1 \times 3 = 3$ , then 2 groups of 3 will be  $3 + 3 = 6$ . What is 4 groups of 3? Help pupils to see that 4 is double of 2, so if  $2 \times 3$  is 6, then  $4 \times 3$  is the same as  $6 + 6 = 12$ . Guide them to realise that this strategy applies to all the times tables.

During Guided Practice, pupils are practising the two strategies and completing a number sequence for the 3 times table.

## Maths Drill

1) Put these numbers in ascending order:

323, 443, 333, 411, 400

2) What is the next number in the sequence?

52, 55, ?, 61, 64, ?, 70

3) Haroon ordered the following numbers.  
What will be the fourth number?

358    205    410    269    496

Challenge:

Put the symbol  $<$   $>$  or  $=$  :

$$2 \times 8 \quad \_ \quad 3 \times 4$$

$$3 \times 3 \quad \_ \quad 2 \times 4$$

$$3 \times 5 \quad \_ \quad 2 \times 6$$

## Number of the Day

# 369

Write the  
number in  
words

Add 10

subtract  
10

Add 100

Draw the  
number in  
base 10

subtract  
100

Add 1000

## Multiplying by 3

- To be able to understand and learn the 3 times table
- Make equal groups of 3
- Draw pictures to represent grouping
- Counting
- Number-lines
- Base ten

Can we draw more cupcakes to find our answer?

### In Focus



2 rows of 3

$$2 \times 3 = 6$$

If we know  $2 \times 3 = 6$ , how can we tell what  $3 \times 3$  is?

# Let's Learn

Group?  
Draw?  
Use the  
equipment?

## Let's Learn

1



$$2 \times 3 = 6$$
$$3 \times 3 = 6 + 3$$



$$3 \times 3 = 9 \text{ and } 6 + 3 = 9$$

How can we transfer this knowledge to help find the missing number for question 2?

What is  $4 \times 3$ ?

How many do you need to add to 9 to make the answer?

2



$$3 \times 3 = 9$$
$$4 \times 3 = 9 + \boxed{\phantom{00}}$$



# Guided Practice

Use the pictures to help you answer the questions.

## Guided Practice

Write the missing numbers.

1

$5 \times 3 = 15$

$6 \times 3 = 15 + \square = \square$



2

$2 \times 3 = 6$

$4 \times 3 = \square$

$8 \times 3 = \square$

$9 \times 3 = \square + 3 = \square$



3

Complete the number pattern.

3, 6, 9, 12, 15,  $\square$ ,  $\square$ , 24,  $\square$ , 30

# Guided Practice Answer:

## Guided Practice

Write the missing numbers.

1  $5 \times 3 = 15$   
 $6 \times 3 = 15 + 3 = 18$



2  $2 \times 3 = 6$   
 $4 \times 3 = 12$   
 $8 \times 3 = 24$   
 $9 \times 3 = 24 + 3 = 27$



3 Complete the number pattern.

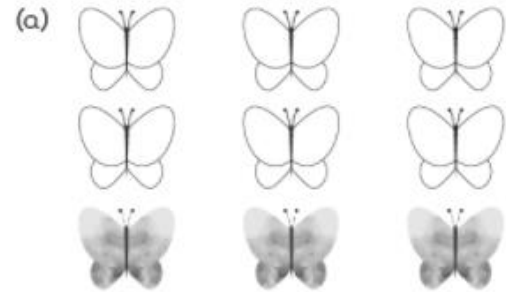
3, 6, 9, 12, 15, 18, 21, 24, 27, 30



Worksheet 2

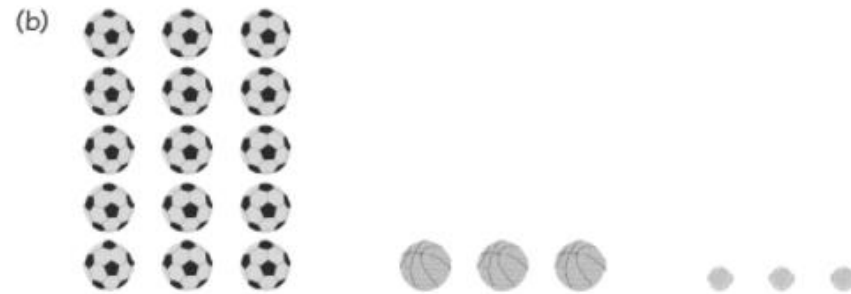
Multiplying by 3

1 Fill in the blanks.



$$2 \times 3 = 6$$

$$3 \times 3 = 6 + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$



$$5 \times 3 = 15$$

$$6 \times 3 = 15 + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$7 \times 3 = \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

2 Fill in the blanks.

(a) 3, 6, 9,  $\boxed{\phantom{00}}$ ,  $\boxed{\phantom{00}}$ , 18

(b) 21, 18,  $\boxed{\phantom{00}}$ ,  $\boxed{\phantom{00}}$ , 9

(c) 18,  $\boxed{\phantom{00}}$ , 24,  $\boxed{\phantom{00}}$ , 30

(d)  $\boxed{\phantom{00}}$ ,  $\boxed{\phantom{00}}$ , 24, 21, 18

3 Match.

$$9 \times 3$$



$$18$$

$$3 \times 6$$



$$21$$

$$3 \times 8$$



$$15$$

$$4 \times 3$$



$$27$$

$$7 \times 3$$



$$24$$

$$3 \times 5$$



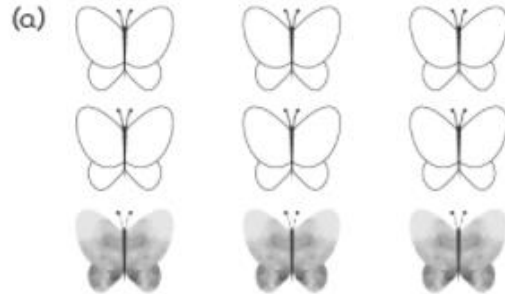
$$12$$

Complete the pages  
in your Maths No  
Problem books.

### Worksheet 2

#### Multiplying by 3

1 Fill in the blanks.



$$2 \times 3 = 6$$

$$3 \times 3 = 6 + \boxed{3} = \boxed{9}$$



$$5 \times 3 = 15$$

$$6 \times 3 = 15 + \boxed{3} = \boxed{18}$$

$$7 \times 3 = \boxed{18} + \boxed{3} = \boxed{21}$$

2 Fill in the blanks.

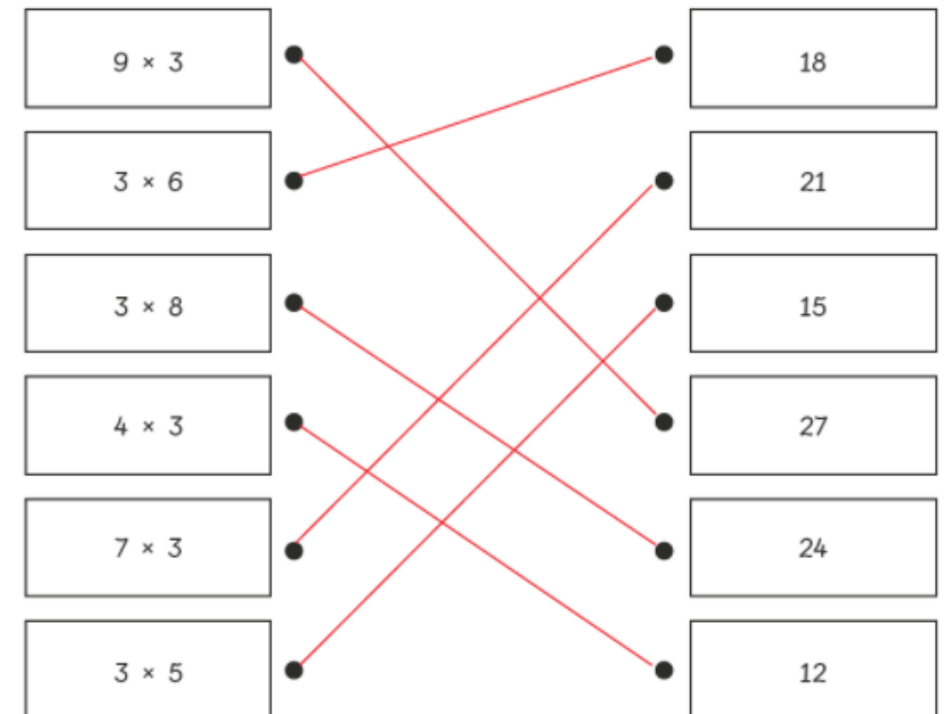
(a) 3, 6, 9,  $\boxed{12}$ ,  $\boxed{15}$ , 18

(b) 21, 18,  $\boxed{15}$ ,  $\boxed{12}$ , 9

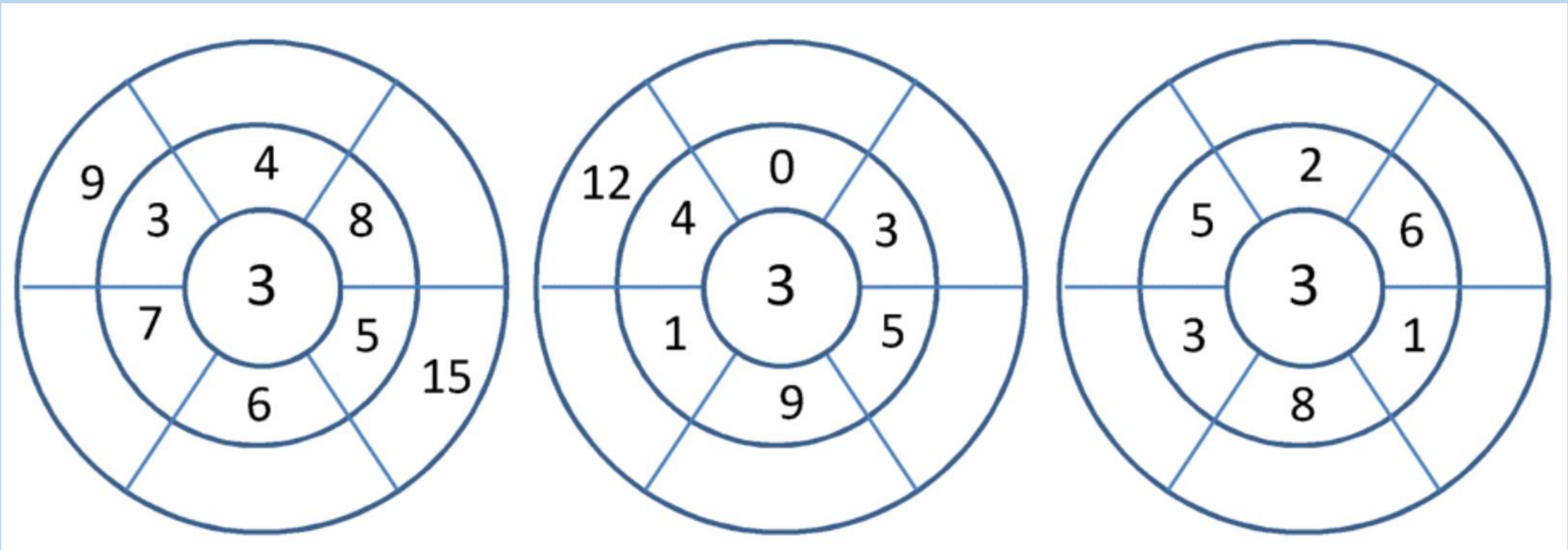
(c) 18,  $\boxed{21}$ , 24,  $\boxed{27}$ , 30

(d)  $\boxed{30}$ ,  $\boxed{27}$ , 24, 21, 18

3 Match.



# Extension



## Extension



Use a green pen to self mark your work.

