



Maths | Year 3 | Multiplication and Division | Applying the Facts | Lesson 2 of 2: Finding Patterns

# **Finding Patterns**

	_	7			-				
1	2	3	4	5	6	7	8	٩	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



# Aim

• I can explore patterns in the multiplication tables.

# **Success Criteria**

- I can find multiples of 2, 3, 4 and 8.
- I can predict and continue patterns.
- I can explain the patterns I see.
- I can investigate what happens when multiples of numbers are added together.



#### **Fact Maps**



Your teacher will tell you which fact to use.

Add as many facts to your map as you can!

a)	b)	c)
3 x 4 = 12	7 x 8 = 56	8 x 9 = 72
d)	e)	f)
2 x 12 = 24	12 x 4 = 48	9 x 4 = 36



#### Patterns in the 3s



1	2	3	4	5	6	7	8	q	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
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91	92	93	94	95	96	97	98	99	100

Which numbers should be coloured to complete the pattern up to 12 x 3?



#### Patterns in the 3s



1	2	3	4	5	6	7	8	q	10
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21	22	23	24	25	26	27	28	29	30
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41	42	43	44	45	46	47	48	49	50
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If you continue the pattern can you predict the multiples of 3 up to 100?



#### Patterns in the 3s



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Did you predict the pattern correctly?





#### Patterns in the 2s and 4s

1	2	3	4	5	6	7	8	٩	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
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81	82	83	84	85	86	87	88	89	90
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What pattern do you see here?

Can we circle the multiples of 4?

What pattern do you think that will make?

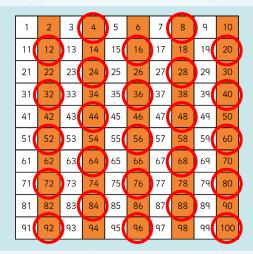


### Patterns in the 2s and 4s



#### Words to help you:

- odd
- even
- halve
- double



Fill in the blanks to explain what you found out.

To find the multiples of 4, you

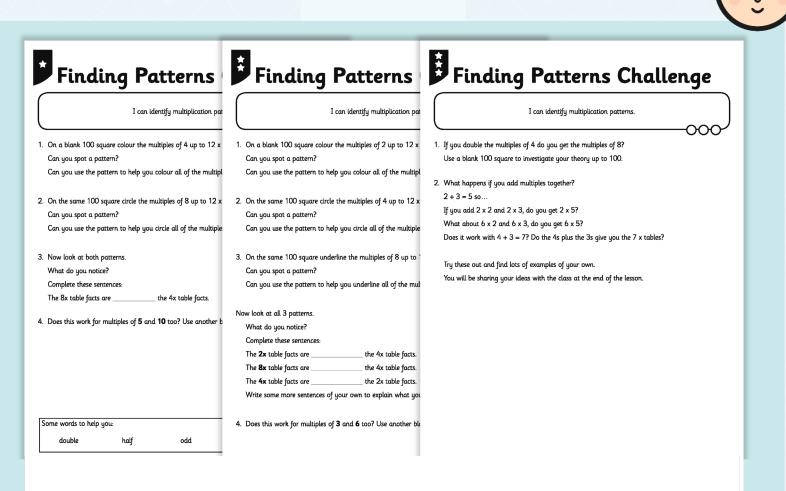
the multiples of 2.

There is a column of unshaded numbers between the 2s and 4s because these are the \_\_\_\_\_ numbers and multiples of 2 and 4 are always \_\_\_\_\_.

Can you think of a sentence of your own to explain the pattern?



### **Finding Patterns**





#### What Did You Find Out?

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What happens when you add tables together?



# Aim

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