

Finding Patterns

1	2	3	4	5	6	7	8	9	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

Patterns in the 3s



1	2	3	4	5	6	7	8	9	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

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

Patterns in the 3s



1	2	3	4	5	6	7	8	9	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

If you continue the pattern can you predict the multiples of 3 up to 100?

Patterns in the 3s



1	2	3	4	5	6	7	8	9	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

Did you predict the pattern correctly?

Patterns in the 2s and 4s



1	2	3	4	5	6	7	8	9	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

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

1	2	3	4	5	6	7	8	9	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

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



Finding Patterns

I can identify multiplication pa

1. On a blank 100 square colour the multiples of 4 up to 12 x
Can you spot a pattern?
Can you use the pattern to help you colour all of the multi
2. On the same 100 square circle the multiples of 8 up to 12 x
Can you spot a pattern?
Can you use the pattern to help you circle all of the multiple
3. Now look at both patterns.
What do you notice?
Complete these sentences:
The 8x table facts are _____ the 4x table facts.
4. Does this work for multiples of 5 and 10 too? Use another b

Some words to help you:

double half odd



Maths | Year 3 | Multi

Finding Patterns

I can identify multiplication pa

1. On a blank 100 square colour the multiples of 2 up to 12 x
Can you spot a pattern?
Can you use the pattern to help you colour all of the multi
2. On the same 100 square circle the multiples of 4 up to 12 x
Can you spot a pattern?
Can you use the pattern to help you circle all of the multiple
3. On the same 100 square underline the multiples of 8 up to
Can you spot a pattern?
Can you use the pattern to help you underline all of the mul

Now look at all 3 patterns.

What do you notice?

Complete these sentences:

The 2x table facts are _____ the 4x table facts.

The 8x table facts are _____ the 4x table facts.

The 4x table facts are _____ the 2x table facts.

Write some more sentences of your own to explain what you

4. Does this work for multiples of 3 and 6 too? Use another bl



Maths | Year 3 | Multi

Finding Patterns Challenge

I can identify multiplication patterns.

1. If you double the multiples of 4 do you get the multiples of 8?
Use a blank 100 square to investigate your theory up to 100.
2. What happens if you add multiples together?
 $2 + 3 = 5$ so...
If you add 2×2 and 2×3 , do you get 2×5 ?
What about 6×2 and 6×3 , do you get 6×5 ?
Does it work with $4 + 3 = 7$? Do the 4s plus the 3s give you the 7 x tables?

Try these out and find lots of examples of your own.
You will be sharing your ideas with the class at the end of the lesson.



Maths | Year 3 | Multiplication and Division | SolveIt | Finding Patterns Challenge

What Did You Find Out?



1	2	3	4	5	6	7	8	9	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

1	2	3	4	5	6	7	8	9	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

What happens when you add tables together?