Ye Olde Times Table and prime factorization

Look for patterns.

Circle all of the prime numbers.

Play 'cut out a prime factor and write it down'.

As shown: Cut any of the 12 dots in half to get 2 copies of a 2 by 3 prime grid. And behold: 12 is prime factored as 2x2x3 Also shown: The 16 dot square takes 2 cuts to get 2x2 copies of a 2 by 2 grid. And behold: 16 is prime factored as 2x2x2x2. Shade in all of the numbers that are the products of 2 primes as shown for 15.

How interesting! The perfect squares seem to be separated by the odd integers!

Write each compound number as the product of primes.

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	2	4	О	8	10	12	14	16	18	20
• • • •	2	2x2	2x3	2x2x2	2x5	2x2x3	2x7	2x2x2x2	2x3x3	2x2x5
	3	6	9	12	15	18	21	2/	27	30
	3		3x3	2x2x3	3x5	2x3x3	2 1 3x7	2x2x2x3	3x3x3	2x3x5
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			•••	** ** ** ** ** ** ** ** ** ** ** ** **	••••	•••				
•	5	10	15	20	25	30	35	40	45	50
	5	2x5	3x5	2x2x5	5x5	2x3x5	5x7	2x2x2x5	3x3x5	2x5x5
		***************************************						00 00 00 00	••• ••• •••	
•	6	12	18	24	30	36	42	48	54	60
• • • •	2x3	2x2x3	2x3x3	2x2x2x3	2x3x5	2x2x3x3	2x3x7	2x2x2x2x3	2x3x3x3	2x2x3x5
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	9	00 00 00 00	27	36	45	54	63	72	81	90
:::		00 00 00 00 00		60 60 63 63 63	••••	*** *** *** *	3x3x7	***************************************		
:::	3x3	* :: :: :: ::	3x3x3	2x2x3x3	3x3x5	2x3x3x3		2x2x2x3x3	3x3x3x3	2x3x3x5
	10	20	30	40	50	60	70	80	90	100
	2x5	00 00 00 00 00	2x3x5	2x2x2x5	2x5x5	2x2x3x5	2x5x7	2x2x2x2x5	2x3x3x5	2x2x5x5