

## KS2 Fluency Weekly Plan

## Game/activity/challenge

Play: Prime pairs game

You will need a set of number cards to 18.

1	4	7	10	13	16
2	5	8	11	14	17
3	6	9	12	15	18

Player 1 chooses two cards that add up to a prime number. Player 2 then has to place another number card either side of that pair, so that the adjacent pair adds up to a prime number also. And so on. E.G:

The diagram illustrates the first pass of bubble sort on the array [7, 4, 15, 2]. A red line indicates the current position of the element being compared. In the first step, 7 and 4 are compared. In the second step, 4 and 15 are compared. In the third step, 4 and 15 are compared. In the fourth step, 15 and 2 are compared.

**Representation:**

**A PRIME NUMBER ONLY HAS 2 FACTORS: 1 AND ITSELF**

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

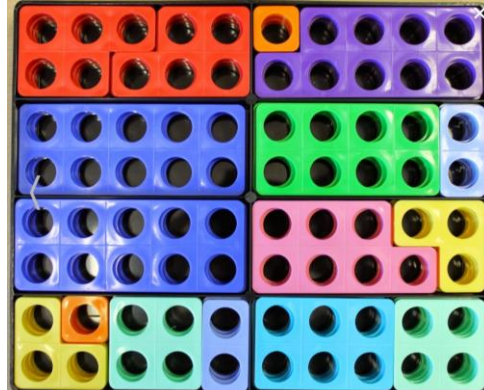
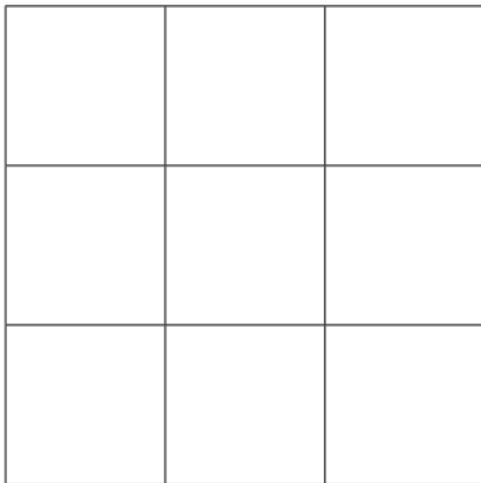
## Abstract:

Prime numbers to 100:

[illegible]

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Objective:	Key Learning Point:	Key equipment:			
	<b>Representation – 3 minutes</b>	<b>Application Task – 7 minutes</b>			
<b>Monday</b>  <b>Vocabulary development &amp; Familiarisation</b>	<p>Introduce the following maths words of the week:</p> <table border="1"> <tr> <td>factor</td> <td>divisible</td> <td>prime</td> </tr> </table> <p>(Orange = word to be carried to following week)</p> <p>Introduce the representation. Follow the instructions (I do / we do...)</p>	factor	divisible	prime	<p>Use the following stem sentence (using key words):</p> <p><i><b>A prime number only has two factors: 1 and itself.</b></i></p> <p><i><b>A prime number is only divisible by 1 and itself.</b></i></p> <p>Play: Prime pairs game</p>
factor	divisible	prime			
<b>Tuesday</b> <b>Representation &amp; Practice</b>	<p>Highlight and address the tricky points:</p> <p>There are 25 prime numbers up to 100.</p> <p>BUILD the representation using:</p> <ul style="list-style-type: none"> <li>- one hundred square</li> <li>- blank one hundred square</li> <li>- build each of the prime numbers using dienes</li> </ul>	<p>Use the following stem sentence (using key words):</p> <p><i><b>A prime number only has two factors: 1 and itself.</b></i></p> <p><i><b>A prime number is only divisible by 1 and itself.</b></i></p> <p>Play: Prime pairs game</p>			
<b>Wednesday</b> <b>Talk for Maths</b>	<p>Model a maths story:</p> <p>Jonah has 3 bags of apples. Each bag contains 11 apples. He says the total amount of apples is a prime number. Is Jonah correct?</p> <p>Could this type of story EVER be correct?</p>	<p>In pairs make up a maths story where the character in the story IS correct</p>			

<b>Thursday</b> Application & Variation	<p>What do you notice?</p> 	<p>Play: Prime pairs game</p>
<b>Friday</b> Application & Talk for Maths	<p>New game:</p> <p>Place the numbers 1, 2, 3,..., 9 one on each square of a 3 by 3 grid so that all the rows and columns add up to a prime number.</p> 	<p>Use the following stem sentence (using key words):</p> <p><i>A prime number only has two factors: 1 and itself.</i></p> <p><i>A prime number is only divisible by 1 and itself.</i></p> <p>Discussion of Key Point OR Review of game strategy –</p> <ul style="list-style-type: none"><li>Is it possible to place the numbers 1, 2, 3,..., 9 one on each square of a 3 by 3 grid so that the diagonals, as well as all rows and columns, add up to prime numbers?</li></ul>
<b>Representations / Talk</b> <a href="http://Mathsbot.com">Mathsbot.com</a> Nrich number talks <a href="http://ntimages.weebly.com/photos.html">http://ntimages.weebly.com/photos.html</a>		<b>Games –Online links</b> <a href="https://www.transum.org/Software/Game/">https://www.transum.org/Software/Game/</a> <a href="#">Maths Hub</a> <a href="#">Nrich</a> <a href="#">Love maths</a> <a href="#">I See Maths</a> <a href="#">I See Maths – Early number</a>