Maths

Prime Numbers

Downloadable Resource

Mr Ward

Warm up - Speedy Tables

How many can you do in 3 minutes?
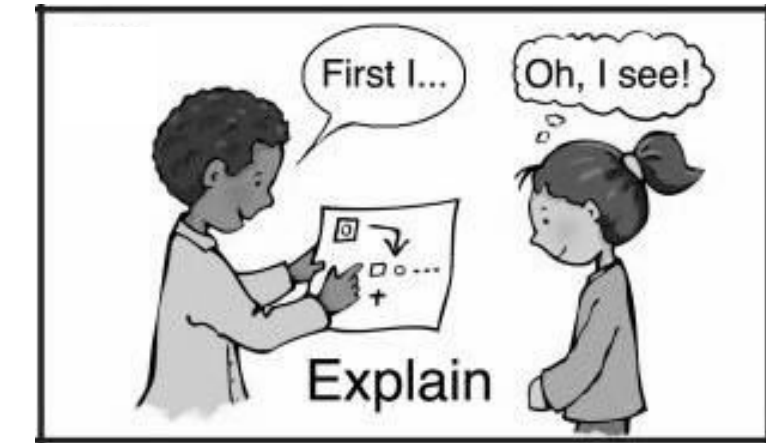
Speedy tables

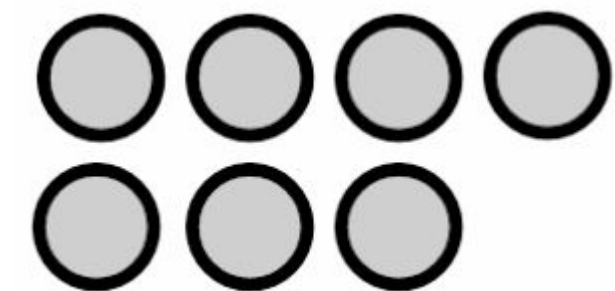| x	5	3	7	2	9	10	6	11	8	12	1	4
3												
6												
4												
8												

Let's explore

Exploring numbers creating arrays

- Place number cards face down.

- Select a number and take that number of counters.

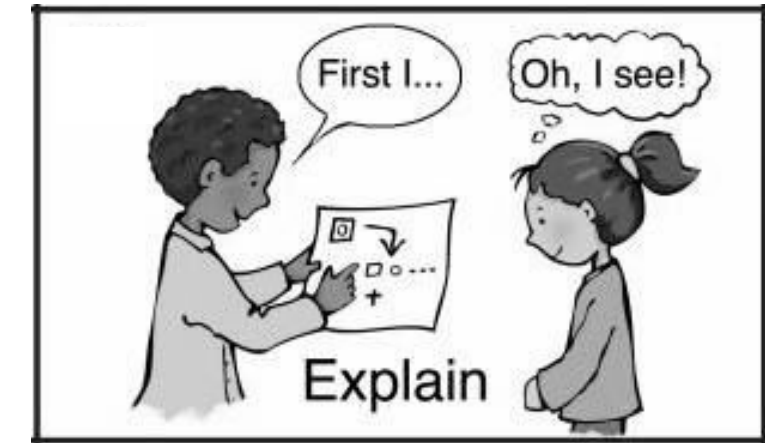- You get a point for each array that you can make with that number of counters.

What do you notice about the numbers that earn lots of points and those that don't?

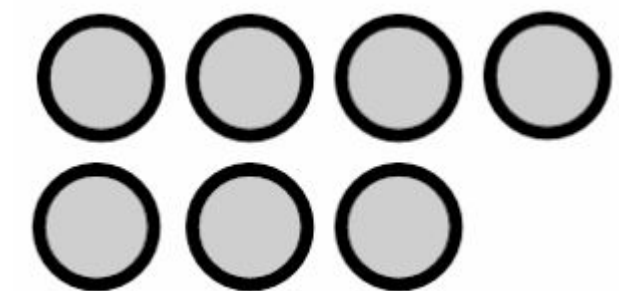| 2	3	4	5	6
7	8	9	10	11
12	13	14	15	16
17	18	19	20	

Let's explore

Exploring numbers creating arrays

Pupil A: I have selected the number six. I can make two arrays. A 2 × 3 array and a 1 × 6 array.

Pupil B: I have selected the number 13. I can make one array with 13 rows and one column.

2	3	4	5	6
7	8	9	10	11
12	13	14	15	16
17	18	19	20	

Prime Time!

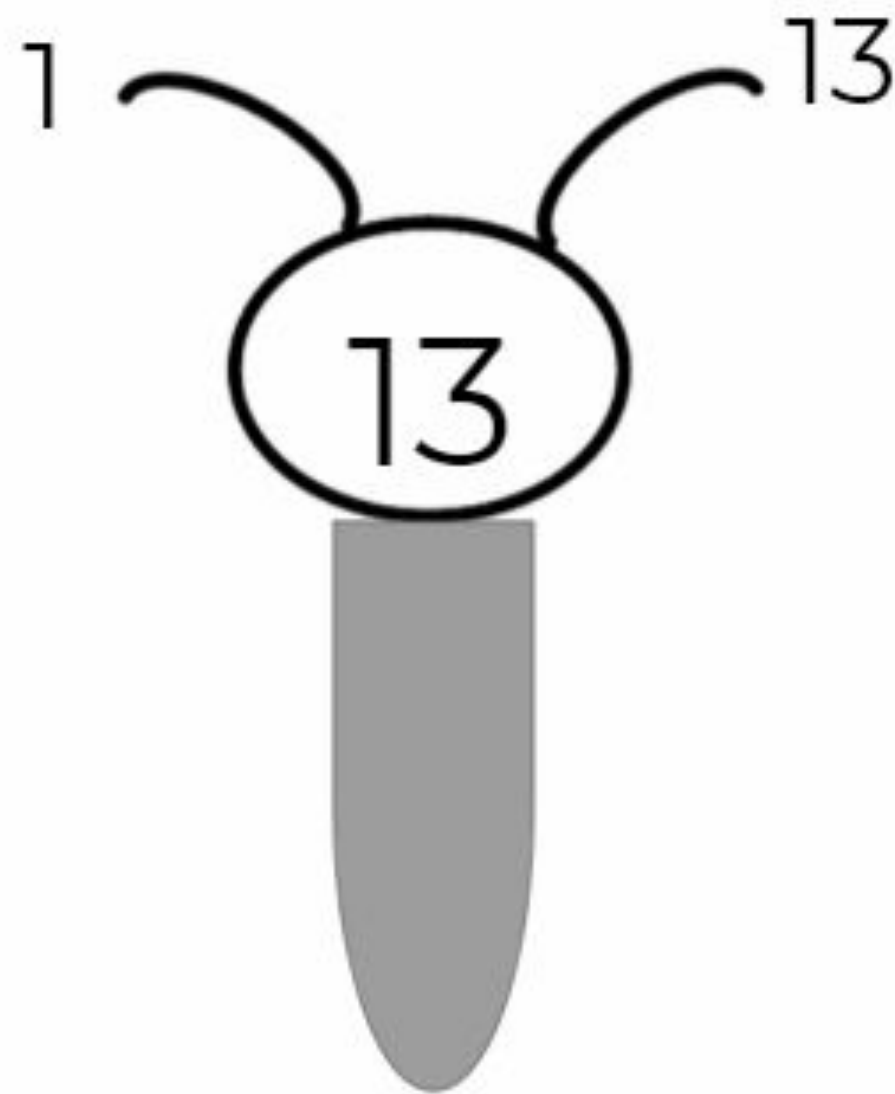## Find all prime numbers less than 100

- **Finish crossing out the multiples of 2.**

- **Circle the next prime number which is 3 and then cross off all multiple of 3.**

- **Circle the next prime number which is 5 and then cross off all the multiples of 5.**

- **Continue this process to find all of the prime numbers up to 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

Challenge Slide
PRIME TIME HUNDRED CLUB!

How many prime numbers can you find between 100 and 150?

You might consider creating a 100 - 150 number square to help!

The same clues will help: crossing off multiples of 2, 3, etc.

Good luck!