## The "sieve" of Eratosthenes A method for finding prime numbers.

Over two thousand years ago a Greek mathematician named Eratoshenes invented a technique that helps us find all the prime numbers between one and hundred.
This method is called


> "The Sieve of Eratosthenes".

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Follow the instructions below to find all the prime numbers between 1 and 100 using the method developed by Eratosthenes.

| I | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| II | 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. Cross out number 1. Number 1 is not classified as a prime number since it only has one divisor.
2. Draw a circle around 2, the smallest prime number. Cross out every second number after 2.
3. Draw a circle around 3, the next prime number. Cross out every third number after 3.
(Some numbers will be crossed out more than once.)
4. Circle the next open number, 5. Cross out every fifth number after 5.
5. The next number is 7 . Circle 7 and then cross out every seventh number after 7.
6. Go through the grid and circle every number that has not yet been crossed out.

The circled numbers are all the prime numbers between 1 and 100. You should have found a total of 25 primes between 1-100.

