1. Make a list of all the numbers, 0 up to *n*. *(We will use the numbers 0 to n, rather than 2 to n, so that the list index is equal to the number, for convenience).*
2. Strike out the multiples of 2 (except 2 itself)
3. Find the next smallest number which is not struck out (i.e. $p = 3$)
4. Strike out the multiples of *p* (except p itself)
5. Repeat from step 3-4 until *p* is larger than the square root of *n*.
6. Build a list of primes from the remaining numbers.