1. A student used the sieve of Eratosthenes to find all prime numbers less than 100. Create a step-by-step set of directions to show how it was completed. Use the word bank to help guide your thinking as you write the directions. Some words may be used just once, more than once, or not at all.

Word Bank

- composite
- number
- circle
- multiple
- cross out
- shade
- X
- prime

Directions for completing the sieve of Eratosthenes activity:

Answers vary.
2. What do all of the numbers that are crossed out have in common?

Composite numbers

3. What do all of the circled numbers have in common?

Prime Numbers

4. There is one number that is neither crossed out nor circled. Why is it treated differently?

The number one (1) is neither prime nor composite.