## Faces on a Cube

Ingrid built a larger cube out of centimeter cubes. The larger cube had two centimeter cubes along each edge. She painted each of the six faces of the larger cube. Then she took the larger cube
 apart so it was broken up into small centimeter cubes again.

Answer the questions about Ingrid's cubes. Use centimeter cubes and draw pictures to help.
(1) How many cubes did Ingrid use in all? $\qquad$
(2) How many cubes have no paint on them?
(3) How many cubes have paint on only one face? $\qquad$
(4) How many cubes have paint on only two faces?
(5) How many cubes have paint on three faces?

## Try This

Build a cube that has three centimeter cubes on each edge. Pretend that you painted all six faces of the larger cube.
Then you break apart the larger cube into centimeter cubes.
(6) How many cubes did you use in all? $\qquad$
(7) How many cubes have no paint on them?
(8) How many cubes have paint on one face?
(9) How many cubes have paint on two faces?
$\qquad$
(10) How many cubes have paint on three faces?

