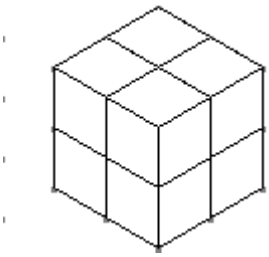
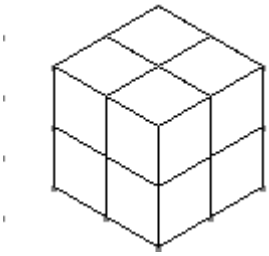
Measuring Volume Informally

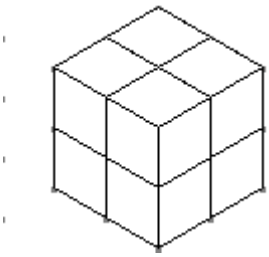
1. **Construct this building with cubes. Share the building equally between two people. Then show the equal shares on the drawing by coloring the shares with different colors.**



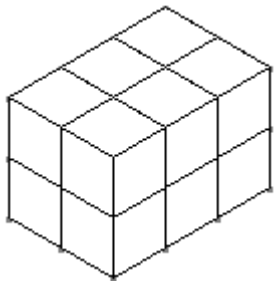
2. **Share the building between two people in a different way. Express the shares numerically.**



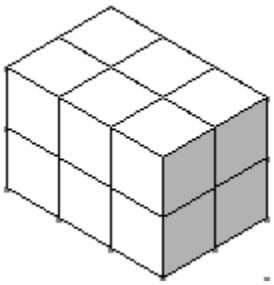
3. **Share this building equally among four people. Show the equal shares on the drawing. Express the shares numerically.**



4. **Share this building equally among three people. Show the equal shares on the drawing. Express the shares numerically.**



5. **Share this building equally among four people. Show the equal shares on the drawing. Express the shares numerically.**



6. **Is it possible to make a rectangular building that has exactly 11 cubes? Is so, what does it look like? If not, why not?**

7. **What could be the possible dimensions for a rectangular building that has 24 cubes?**

8. **How are the numbers of cubes on each dimension related to the total number of cubes used to make a rectangular building?**