

Scaled Drawings

Scaled Drawings can be a fun way to integrate art with math for children being introduced to multiplication.

Grade Level: Grades 3–5

Materials needed: centimeter paper, markers

Note: Centimeter paper features a grid made up of lines one centimeter apart. You can find centimeter paper at your local office supply store, or you can print it out from an online source.

Play:

1. Have children draw a simple design with straight-ish lines (pine trees, sail boats, and flags work well) on a piece of centimeter paper.
2. Trade papers and “blow up” the picture by making all the lines 2 times longer. For example, if drawing a pine tree, the trunk on the original might be 6 centimeters long and 2 centimeters wide, but on the scale drawing the trunk is drawn 12 centimeters long and 4 centimeters wide. Children might have to tape together several sheets of centimeter paper to have enough space for their double-sized drawing.
3. For fifth-graders or children with experience multiplying by fractions, you might have them make a scale drawing that is $\frac{1}{2}$ as big as the original. This time the pine tree’s trunk is 3 centimeters long and 1 centimeter wide.
4. Display the masterpieces together and show off how multiplication resizes the drawings.

This is an art and math project worthy of hanging on the fridge!

