

Introduce scale drawings:

- What is a scale drawing?
- What are scale drawings used for? What people/professions use them?

GOAL: Produce a scale drawing of your cartoon 64 times larger than the original one.

PROCEDURE:

1. Select cartoon. The “cell” should be no longer than 3.5 inches to properly fit on the poster board. Sunday comics work best since they are color. There are many Calvin & Hobbes (or Peanuts or Garfield) books available at bookstores that work very well.
2. Photocopy the original comic so everyone can remember the order the cells go in once finished.
3. Each student gets one (or two if they are small) cells from the original comic. If a group is working to complete one entire comic, it may be a good idea upfront to determine which cells are not as necessary. That way the finished comic still makes sense even if you don’t use all the cells.)
4. Tape the cutout cell on a piece of computer paper.
5. Grid the original cartoon.
 - What size grid should we use? What if it is too big/too small? (Use $\frac{1}{4}$ in. for the cartoons)
 - Using a ruler place equidistant marks across the top and bottom and connect them with lines. Place equidistant marks across the sides and connect them with lines.
6. Grid the construction paper.
 - What size grid should we use? What if it is too big/too small? (Use 2 in. for the poster board)
 - Using a ruler place equidistant marks across the top and bottom and connect them with lines. Place equidistant marks across the sides and connect them with lines.
7. Copy box for box. The students need to place their SCALE somewhere on the new drawing to indicate to others how it compares to the original (i.e. Scale: $\frac{1}{4}$ in.= 2in.) Cut out any extra boxes around the comic.
8. Color with markers, etc. A good idea is to have the first students who color to start listing the colors they use on the board so that the whole group will use a common set of colors for items that are the same.
9. Tape the original cartoon somewhere on the front of the poster board.
10. Grade is based on both neatness and accuracy.

What is a scale drawing? What are scale drawings used for? What people/professions use them?

GOAL: Produce a scale drawing of a cartoon _____ times larger than the original one.

PROCEDURE

1. Grid the original cartoon.

- Starting at the top, left corner, place marks every _____ across the top.
- Starting at the bottom, left corner, place marks every _____ across bottom.
- Connect the top marks and the bottom marks with lines.
- Starting at the top, left corner, place marks every _____ across the left side.
- Starting at the bottom, left corner, place marks every _____ across right side.
- Connect the left and right marks with lines.

2. Grid the poster board.

- Repeat above procedure with marks every _____ .

3. Copy each box on the original to each box on your poster board.

4. Place the SCALE somewhere on the new drawing to indicate to others how it compares to the original (i.e. Scale: $\frac{1}{4}$ in.= 2 in.)

5. Color with markers, etc.

6. Tape the original cartoon on the front side of the poster board.

7. Grade is based on both neatness and accuracy.