**SCALE DRAWING PROJECT**

**Goal:** You will select a comic strip and enlarge it to best fit an 8 ½ “ x 11” sheet of paper.

**Include in your project:** 1. The original picture

1. The enlarged picture (colored to match original)
2. Measurements of the original picture
3. The scale selected to enlarge the picture
4. Self-Completed Evaluation

**Illustration:**

**Step 1: Measure the length and width of the comic in cm.** (It does not matter which side you label the length and width; be consistent with your sides on the large paper)

 Length \_\_\_\_\_\_\_\_\_\_ Width \_\_\_\_\_\_\_\_\_\_\_\_

**Step 2: Draw a 1 cm grid on the original comic** (Draw 1 cm tick marks going across the length and the width and then connect your marks to form a grid)

**Step 3: Measure the paper in cm.**

Length \_\_\_\_\_\_\_\_\_\_ Width \_\_\_\_\_\_\_\_\_\_\_\_

**Step 4: Select a scale (1 cm on comic = \_\_\_\_\_\_\_\_\_\_ cm on paper)**

* To do this find the ratio of lengths and widths
i.e.: == \_\_\_\_\_\_\_ == \_\_\_\_\_\_\_\_\_
* Then pick the smallest of the two numbers to the nearest whole number (i.e. if you get 4.29 and 4.76 your scale should be 1 cm comic = 4 cm on paper)

**Step 5: Draw the borders**

* Multiply your length and width of the comic by your scale factor and see how much of the paper you have left over for the border. Take this number and divide by two because the border should be on both sides.
* i.e. **x** Scale Factor = \_\_\_\_\_ Then (**- \_\_\_\_\_\_)**/2 =

 **x** Scale Factor = \_\_\_\_\_ Then (**- \_\_\_\_\_\_)**/2=

**Step 6: Draw a grid on your paper using your scale**. (i.e. If your scale is 1:4, your grid on your large paper will be 4 cm x 4 cm; therefore, you would draw 4 cm tick marks going across the length and width and then connect your marks to form a grid.)

**Step 7: Reconstruct drawing and color accordingly.** Erase your grid marks on your final product before submitting the project! Higher scores will reflect a near-perfect representation of the smaller comic frame. Colors, shading, and drawing should look identical!

SCALE DRAWING PROJECT Rubric:

**NOTE:** When you submit your project, you will first score yourself using this rubric. Be honest and thorough in your evaluation. Remember to include the following parts in your presentation:

**Include in your project:** 1. The original picture

2. The enlarged picture (colored to match original)

3. Measurements of the original picture

4. The scale selected to enlarge the picture

5. Self-Completed Evaluation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **10 – 9** | **8 – 7** | **6 – 5** | **4 - 0** |
| **Scale** | All calculations and proportions are shown  | Most calculations and proportions are shown  | Few calculations and proportions are shown  | No calculations and proportions are shown  |
| **Grids** | All grid lines can be seen on comic strip (grid lines on enlarged picture should be erased, but should appear faintly). All lines are parallel and measured correctly. | Most grid lines can be seen on comic strip (grid lines on enlarged picture should be erased, but should appear faintly. Most lines are parallel and measured correctly. | Few grid lines can be seen on comic strip (grid lines on enlarged picture should be erased, but should appear faintly). Few lines are parallel and measured correctly. | No grid lines can be seen on comic strip (grid lines on enlarged picture should be erased, but should appear faintly). No lines are parallel, nor measured correctly. |
| **Reconstruction** | All proportions are accurate on the enlarged picture | Most proportions are accurate on the enlarged picture | Few proportions are accurate on the enlarged picture | No proportions are accurate on the enlarged picture |
| **Presentation** | The enlarged picture is colored neatly in the lines and colors match original comic | Most of the enlarged picture is colored neatly in the lines and most of the colors match original comic | Some of the enlarged picture is colored neatly in the lines and some of the colors match original comic | The enlarged picture is not colored neatly in the lines and does not match original comic |

**Total Points Possible: 40**

**Self-Assessment:**  **Teacher-Assessment:**

Scale: \_\_\_\_/10 Scale: \_\_\_\_/10

Grids: \_\_\_\_/10 Grids: \_\_\_\_/10

Reconstruction: \_\_\_\_/10 Reconstruction: \_\_\_\_/10

Presentation: \_\_\_\_/10 Presentation: \_\_\_\_/10

**Total Points: \_\_\_\_/40** **Total Points: \_\_\_\_/40**

Comment on your level of effort Teacher Comments:

and accuracy on this project: