

Name: \_\_\_\_\_

Date: \_\_\_\_\_

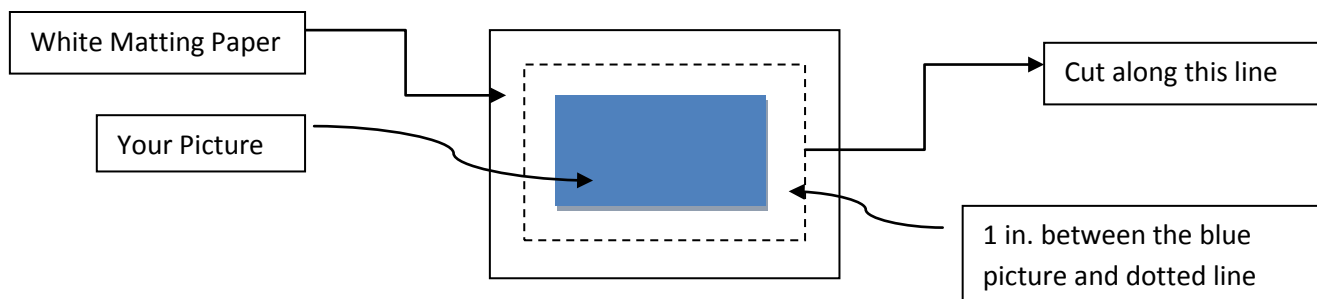
# The Great Frame Up

**Step 1:** Choose your picture. Measure your rectangular picture's base and height. Write down the base and height values below.

Base (b) = \_\_\_\_\_

Height (h) = \_\_\_\_\_

**Step 2:** Attach your picture into the center of your matting (colored sheet of paper). Measure a one inch border around each side of your picture. Then cut out your picture and border.



**Step 3:** Now, it's time to calculate the length of your frame's sides. Each frame consists of 2 copies of 4 parts. Parts A and C are cut from  $1 \frac{1}{4}$  in wide strips. Parts B & D are cut from  $1 \frac{1}{8}$  in wide strips.

Now for the calculations. Please insert your base or height value into the equations below and solve for the length of your parts.

$$\text{Length of Part A} = \text{base} + 2$$

$$\text{Length of Part B} = \text{base} + 2 + 1 \frac{1}{8} + 1 \frac{1}{8}$$

$$\text{Length of Part C} = \text{height} + 2 + 1 \frac{1}{8} + 1 \frac{1}{8}$$

$$\text{Length of Part D} = \text{height} + 2 - \frac{3}{8} - \frac{3}{8}$$

Name:

Date:

**Step 4:** Cut two of each part, for a total of 8 pieces, at the workbench using a pull saw and miterbox. Remember to measure carefully – due to a limited supply of framing material, you get one try at making each part. Get a friend to check your work and ask a teacher to check your measurement.

Remember: MEASURE TWICE. CUT ONCE.

**Step 5:** Find the midpoint of each part using any strategy you can think of. Try using a string the length of each part and folding it in half – such as in the ruler project. Maybe you can use a calculator.

Midpoint of Part A: \_\_\_\_\_

Midpoint of Part B: \_\_\_\_\_

Midpoint of Part C: \_\_\_\_\_

Midpoint of Part D: \_\_\_\_\_

**Step 6:** Glue a pair of Parts A & B together, matching midpoints. Repeat with the second pair of Parts A & B.

**Step 7:** Glue a pair of Parts C & D together, matching midpoints. Repeat with the second pair of Parts C & D.

**Step 8:** Sand your frame with blue sandpaper first. Then use red sandpaper. Wrap the sandpaper around a scrap piece of wood so you don't burn your fingers with friction.

**Step 9:** Fit your four parts together to create a rectangle. Put glue at the corners. Check out this video on YouTube to see how it's done: <http://youtu.be/AyhCDZ-zOHY>