

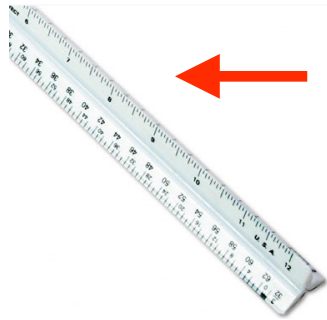
Name: \_\_\_\_\_

## Stagecraft: Using a Scale Ruler

**Measuring "in scale" is a skill you are required to MASTER in this course.** The best way to master this skill is to ask for help if you need it. Please don't be shy...If you don't understand this concept, see Ms. Price right away so she can teach you individually. Don't waste any time being confused when help is available! :)

**In theatre, designers work "in scale".** This means that they create designs on paper that represent "reality" on stage. (For example, if a designer was working in 1" scale, 1 inch on paper would represent 1 foot on stage.) **Most often designers work in 1/4" scale** (1/4" inch on paper is 1 foot on stage) **or 1/2" scale** (1/2" on paper is 1 foot on stage).

Make sense? Good! Let's start...



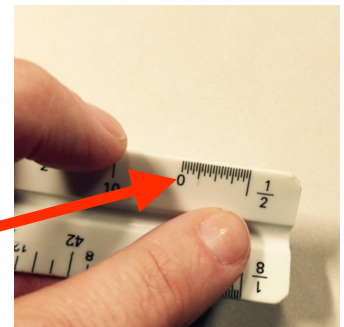
Working in scale is easy if you learn to use this tool: **THE SCALE RULER.** It does all the thinking & work for you! You just need to know how to use it.

First you will learn how to **measure** with a scale ruler (to get used to it). Later you will begin to **design** and **"build"** with scale.

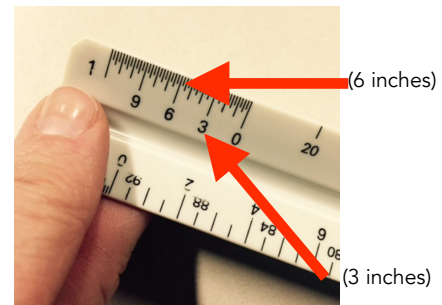
### USING A SCALE RULER TO MEASURE:

1. First **find the scale you are working with**. If you were asked to measure something in 1/2" scale, you would first look at the ends of the ruler (both sides) for the "1/2".
2. Next, **line your ruler up with whatever you are measuring starting at 0!** In the case of 1/2" scale, everything to the *right* of the "0" represents inches in 1/2" scale, not feet. (You won't need to look at inches until you know how many feet you are dealing with first.)
3. Next, **determine how many FEET your object represents** in scale. If you are past the 6, for example, you know your object is *more than* 6 FEET. **(Very Important: Be sure you are looking at the correct numbers on the ruler! There are both TOP and BOTTOM numbers on the ruler because both ends of the ruler have scales on them. Look for the numbers that line up with your scale's "0".)**
4. If your object is longer than 6 feet, but not quite 7 feet, you know that you will need to use the INCHES on your ruler (which is on the other side of your zero). **Simply SLIDE the ruler so that one end of the object ends at your FEET line (6, in this case), and then the other end of your object will be at the inches end of your ruler.** Determine (using the hash marks on the ruler) how many inches (in addition to the number of feet) your object is. (Reminder: One foot = 12 inches)
5. Once you have your number for both FEET and INCHES, you know how long your object is meant to be in "real life". **(Remember you'll need to practice this skill in order to get better at it!)**

(find correct scale)



(inches are on other side of zero)



Measure this line in 1" scale: \_\_\_\_\_ = \_\_\_\_\_ feet \_\_\_\_\_ inches

Measure this line in 1/2" scale: \_\_\_\_\_ = \_\_\_\_\_ feet \_\_\_\_\_ inches

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

## Stagecraft: Using a Scale Ruler

Now, **use a straight edge to draw various lines** below. (Draw at least 3 lines for a partner.)

**Switch papers with your partner and have him/her measure what you drew** in the scale of YOUR choosing. (Be sure to tell partner the scale for each.) (**Partner's Name:** \_\_\_\_\_)

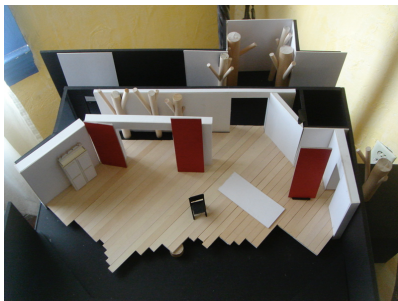
**While holding your partner's paper, list 3 objects in the room for your partner to measure in "real" life size.** List below. (Ex: a chair, a table, a desk, a counter, a couch, a rug, etc.)

- 1.) \_\_\_\_\_ Length: \_\_\_\_\_ (in feet and inches) Width: \_\_\_\_\_ (in feet and inches)
- 2.) \_\_\_\_\_ Length: \_\_\_\_\_ (in feet and inches) Width: \_\_\_\_\_ (in feet and inches)
- 3.) \_\_\_\_\_ Length: \_\_\_\_\_ (in feet and inches) Width: \_\_\_\_\_ (in feet and inches)

**Switch papers back to owner.**

**Owner:** Measure objects above (with tape measure). **Draw objects in 1/4" scale** (using scale ruler)

Set Designers build **model sets** in order to **help the director and actors see** what will eventually be built on stage, and to **assist them in making directorial choices** on how to USE the set when staging a show. Take a look at some sample model sets below: All were created IN SCALE.



**Once finished, turn in this handout.**

**Next:** See Ms. Price for your **Scale MASTERY "Test" OR begin your groundplan.**

**Note:** You must prove mastery with working in scale. It doesn't need to be today - especially if you're still struggling. However, you must be able to pass your mastery test at some point before the end of the unit. See Ms. Price if/when you need one-on-one help.