

Lesson 5-1: Using Proportions

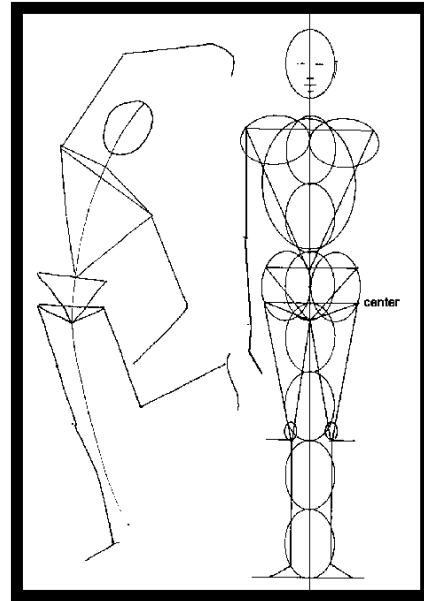
Hands-On Activity: *Modeling*

Objective:

Using playdough and wooden skewers, create a stick figure that is proportional to a given stick figure, doll, or human model.

Materials:

- Playdough or Salt Dough
- Wooden Skewers
- Rulers
- Calculator



Procedure:

1. The teacher decides on the given figure. Either use themselves, another student, toy doll (ie Barbie, G.I. Joe, etc.), or create a large version of a stick doll using the same materials that the students will use. Measure all relevant parts (see chart below).

<u>body part</u>	<u>real measurement</u>	<u>scaled measurement</u>
Head Length		
Neck Length		
Torso Length		
Arm Length		
Leg Length		
Foot Length		
Overall Height		

2. Either assign a scale factor or give each student a predetermined body part scaled measurement.
3. Using proportions, each student is to find the scaled measurement for each body part.
4. Distribute materials to the student.
5. Each student (or groups) create a stick figure model using the materials and found measurements. Wooden skewers are used for body parts while playdough is used to join the parts.
6. Display all models and let the class decide which models are more visually accurate.

Resource Links:

- <http://realcolorwheel.com/human.htm>
- http://www.gigglemoose.com/salt_dough_recipe.htm
- http://drawsketch.about.com/cs/figuredrawing/a/fig_proportion_2.htm