

Human Proportions in Real Life and in Art

Overview: Students compare themselves and multicultural images of the human figure in terms of mathematical proportions.

Goals: This lesson will

Support concepts and skills: observation, proportions,

Fulfill Learning Standards: Mathematics 6.N.4, 6.N.5;

Visual Arts 5

Practice: measuring, calculating percentages and ratios

Familiarize students with: works of art from different cultures



The Hayward Children
Joseph Goodhue Chandler

Objectives for Students: Students will

Be able to: measure, chart, and express different proportions in percentages and ratios.

Understand: in real life the human figure is a standard proportion; in art, the human figure may or may not follow the same proportions.

Key Questions (to be answered by students):

1. What is the standard proportion of the human figure?
2. How do the proportions of the human figure differ in works of art from different cultures?
3. How do the proportions of the human figure differ from real life human bodies?

Materials Needed: Human Proportions in Art record sheet; Tape measures, one for each pair of students

Museum Objects:

- Object shown is *The Hayward Children* by Joseph Goodhue Chandler, oil on canvas, 1843, Gift of Bigelow Crocker (1967.1)
- *Fragmentary jar, Herakles Slaying the Hydra*, Greek, ceramic, 350-325 B. C. (2001.3)
- *Portrait of Ti, Royal Architect, from his tomb, Saqqara, 5th Dynasty* by Joseph Lindon Smith, American, 1863-1950, Canvas, Legacy dimension: H. 0.949 (37 3/8 in.) W. 0.647 (25 1/2 in.), Museum of Fine Arts, Boston, Gift of Mrs. William Amory, 27.554

Any other figurative works of art would also be appropriate for this lesson.

Pre-Museum Visit – Make copies of the Human Proportions in Art record sheet that accompanies this lesson. Pair off students, and ask them to measure each other using tape measures, recording their measurements on the record sheet. First measure the height of their partner, then just their head, then from chin to waist, and finally from waist to floor. Ask each student to calculate the percentage each of their three parts to their entire height. Share percentages as a group, noting similarities in human proportions.

At the Museum – At each of the three works of art ask the students to measure the figure(s) using a measuring tape. (Remind the students to be careful not to touch the artworks during this process.) Measure the work of arts' heights, heads, torsos, and legs (you may need to estimate sometimes), recording these on the record sheet. Note any odd or unique features of each artwork.

Post-Museum Visit – Divide the class into three groups, and ask each group to calculate the percentages and ratios of one of the works of art’s proportions. Share results on the board. Ask, “What did you notice about the differences between the works of art and real human proportions? Why do you think an artist chose to draw, paint, or sculpt the human figure in those ways?” Record their hypotheses to reexamine after doing the follow-up lesson, Expressing Humanity in Art.

Supportive Material: Human Proportions in Art record sheet

Documentation and Assessment Options: Keep the Human Proportions in Art record sheets and compare them with other work on percentages and ratios.

Links to Other Curriculum: This lesson pairs with Expressing Humanity in Art

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Human Proportions in Art

	Me		Artwork 1		Artwork 2		Artwork 3	
	Inches	% /Ratio	Inches	% /Ratio	Inches	% /Ratio	Inches	% /Ratio
Total Height								
Head								
Chin to Waist								
Waist to Floor								

Conclusions: