

Shaquille O'Neal Hand/Foot Span: Teacher Notes

Sunshine State Standards

MA.A.3.3.3

MA.B.1.3.4

MA.E.1.3.1

MA.E.3.3.1

Math Abilities

Conceptual Understanding

Data Collection

Interpret Data

Line of Best Fit

Procedural Knowledge

Organize Data

Graph Data

Make Predictions

Ratios

Process Standards

Problem Solving

Reasoning

Communication

Connections

Representation

Hook

Shaquille O'Neal, a basketball player in the NBA, is a very large person. He wears a size 20 shoe. Using ratios, you can find Shaq's hand span and make comparisons to your own hand span.



Group Arrangement

Students work in groups and individually.



Tools

- 1 metric ruler
- Graph paper
- Pictures of Shaq's shoe size and hand span



Procedure

1. Measure the foot length and hand span of 10 students. Record your data in the table below.

Student Name	Foot Length	Hand Span	Ratio (F/H)
Average			
Shaquille O'Neal	41 cm		

2. Using the average ratios of foot length to hand span, calculate the hand span of Shaquille O'Neal.
3. Using graph paper, graph the foot length and hand span information from your table.

4. Extend the axis for foot length to include Shaquille O'Neal's 41 cm foot.
5. Draw a line of best fit for the graphed data.
6. Locate the foot length and corresponding hand span for Shaquille O'Neal on the line.



Math Connection

As a result of this activity, students will learn how to collect, graph, and extrapolate data.



Extension

Students can extend this activity by using a graphing calculator or a computer spreadsheet program. The student can use both ways to graph and then make predictions about the size of Shaq's hand span.