



STEM
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science • technology
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VOLLEYBALL

Module 1.1

Intricacies of a Volleyball Court

GRADES 6th – 8th





MODULE
1.1

GRADES
6-8

What Do You Need?

Supplies Provided

[Worksheets](#), Tape Measures and Masking Tape

For Extend: Fishing Line, Toothpicks, Straws and Ribbon

Materials Needed

Pencils, Plain Paper and Copies of Scaffolding Support (if necessary)

For Extend: Cardboard



Test Your Knowledge

Have your students take this lesson's assessment prior to engaging by visiting: <https://stemsports.com/assessments/>. If you have limited digital capability, please email Info@STEMSports.com to access the Assessment & Key.

Engage

Why is it important for the court size to remain the same yet the net height changes?

Explore

Create a scaled model of a volleyball court. Did you use math during the process?

Explain

Learn about proportional relationships and how to solve for the unknown to construct a scale model.

$$\frac{1 \text{ inch}}{1 \text{ yard}} = \frac{x \text{ inches}}{10 \text{ yards}}$$

Elaborate



Based on what you have learned about proportions, construct a scale model of a volleyball court. Use the [worksheet](#).

Evaluate

Based on the size of your volleyball court, what is an accurate diameter of a volleyball for your court?



What Did You Learn?

Have your students retake this lesson's assessment to effectively evaluate their comprehension by visiting:

<https://stemsports.com/assessments/>. If you have limited digital capability, please email Info@STEMSports.com to access the Assessment & Key.



Extend

Challenge Yourself!

Repeat the process using metric measurements and convert using proportions.



What is your Dream Job?

STEM Jobs in Sports

- Director of Facilities
- Systems Engineer
- Stadium/Arena Architect
- Youth Sports Director
- Engineer Technician



To access Worksheet Keys, please visit www.STEMSports.com/digitaltools

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