



STEM
sports[®]

science • technology
engineering • math • sports

STEM Tennis

Module 6.0

Stroke of Energy

GRADES 6th – 8th

Module 6.0

GRADES
6-8

What Do You Need?

Supplies Provided

[Worksheets](#), Tennis Balls, Tennis Rackets, Sweet Spot Ball-Striking System and Manual, Tape Measures, and Digital Stopwatches
Extend Only: Radar Gun

Materials Needed

Pencils, Calculator
(recommended)



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.



Fun Fact

The fastest serve recorded was 163.4 miles per hour or 73 meters per second.

Engage

How fast can you
hit a tennis ball?



Explore

Set-up the *Sweet Spot
Ball-Striking System*
and work on your game.
Use the [worksheet](#) as a guide.

Explain



Define key terms of Kinetic Energy and Velocity. Explain how to calculate each.

Elaborate

Using the [worksheet](#) as a guide, calculate velocity and kinetic energy.

Evaluate

Use the [worksheet](#) as a guide to construct a graph.



What Did You Learn?

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

<https://stemsports.com/assessments/>.

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Extend

Challenge Yourself!

Use the radar gun to measure the speed of your hit. Compare to your previous calculations.



What is your Dream Job?

STEM Jobs in Sports

- General Manager: Tennis Club
- Tennis Pro: Youth Trainer & Coach
- Baseball Scout
- Tennis Racket Engineer
- High School Physics Teacher and Track & Field Coach

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