

STEM Sports

science • technology engineering • math • sports

SOFTBALL Module 4.0 Is it Fast or Slow?

GRADES 6th - 8th



## What Do You

# **Supplies Provided Need?**

Worksheets, Softballs, Tape Measures, and Radar Gun

### **Materials Needed**

Pencils and Calculators Internet Access (*Extend* only)







### **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.





Rate pitches fastest to slowest: Fastball, Curveball, Change-up







Record the speed of each pitch type and convert to meters per second. Use the worksheet a guide



**Explain** 

$$KE = \frac{1}{2}mv^2$$

Learn about Kinetic Energy, Velocity, and Speed and how each plays a role in softball.





Calculate the kinetic energy of each type. Use the worksheet as a guide.





Using the worksheet, make a bar graph of the kinetic energy of each pitch?

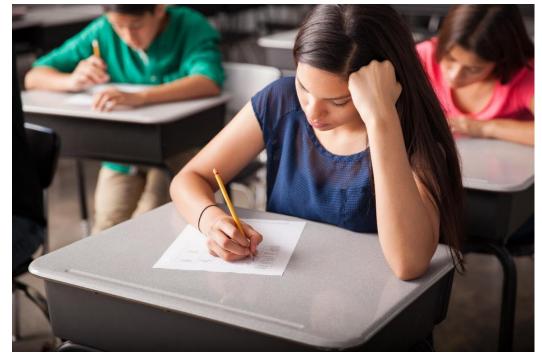






#### What Did You Learn?

Have your students retake this lesson's assessment to effectively evaluate their comprehension by visiting: <a href="https://stemsports.com/assessments/">https://stemsports.com/assessments/</a>. If you have limited digital capability, please email Info@STEMSports.com to access the Assessment & Key.







## **Challenge Yourself!**

Research and add to your data collection by collecting data from other pitch types.





### What is your Dream Job?

## STEM Jobs in Sports

- Coach: Fastpitch Softball
- Performance Coach
- Radar Engineer
- Team Physician
- Pitching Coach



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