volume 1



#### science • technology engineering • math • sports

### BASEBALL

Module 1.0 Forces in Baseball

GRADES 6th – 8th



### What Do You Need?

### Supplies Provided Worksheets

## Materials Needed

Pencils and Baseball Gloves







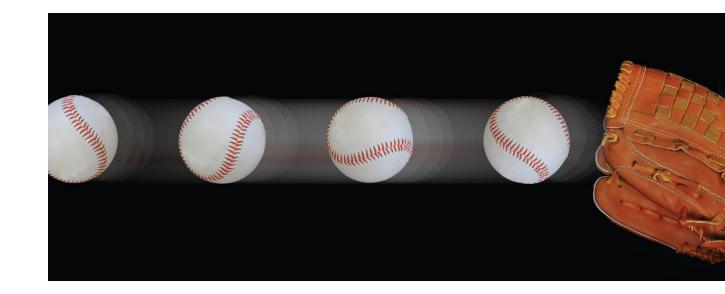
### **Test Your Knowledge**

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





## How fast can you throw a baseball?







## Time to play catch and collect data using the <u>worksheet</u>.





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

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





Use the data table and equation to calculate the kinetic energy of each throw. Use the <u>worksheet</u> as a guide.





Explain the relationship between velocity and kinetic energy using evidence and reasoning. Use the worksheet as a guide.





### What Did You Learn?

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







### **Challenge Yourself!**

Add another variable and compare the relationship between mass and velocity on kinetic energy.





## What is your Dream Job?

## STEM Jobs in Sports

- Baseball Scout
- Track & Field Coach
- Sport Physicist
- Quarterback Coach
- Strength & Conditioning Coach



Want to continue the education? Visit us at <u>https://stemsports.com/</u> ORTag us @stemsportsusa









You Tube



@STEMSportsUSA

STEMSportsUSA

STEMSportsUSA/pins @STEMSportsUSA

STEM Sports

@STEMSportsUSA

