

Physical Science

Data Sheet - Speed/Velocity/Acceleration

Materials Needed

Stopwatch, Data Sheet, Writing Utensil

Procedure

1. In your group of FOUR, TWO will throw/record and the other TWO will run/record.
2. When finished, meet back with your groups and exchange data. Everyone fills out a data chart
3. Calculate average speed for all group throws and runs.
4. Calculate acceleration for 1st-3rd runs.

Note: Bases are 90 ft apart. Mound is 60.5 ft from home plate.

<u>Activity</u>	<u>Speed/Velocity</u>	<u>Tester</u>	<u>Recorder</u>	<u>Average</u>
Baseball				
<i>example</i>	<i>84 mph</i>	<i>Shaul</i>	<i>Gray</i>	<i>$84 + 82 + 79 = 245$. $245/3 = 81.7$ mph</i>
1				
2				
3				
Softball				
1				
2				
3				
Football				
1				
2				
3				
1st to 2nd				
<i>example</i>	<i>10.2 seconds</i>	<i>Shaul</i>	<i>Gray</i>	<i>$10.2 + 11.4 + 9.9 = 31.5$. $31.5/3 = 10.5$ sec.</i>
1				
2				
3				
1st to 3rd				
<i>example</i>	<i>10.2 sec. to 2nd, 8.4 sec. to 3rd</i>	<i>Shaul</i>	<i>Gray</i>	<i>10.7 ft/s - 8.8 ft/s = 1.9 ft/s. $/8.4 = .23$ft/s/s</i>
1				
2				
3				