

TEACHER SUPPORT

SETTING GOALS

CONTENT: Represent data as a bar graph, line plot, or other type of graph, and interpret it. Model real-world problems mathematically. (Grades 2 and up)





UNITS OF TIME: Guide students to think about their goals in different time increments. Goals that are made to span a day or week can be converted into hours, minutes, or seconds, depending on the goal. For example, if a goal is to make 300 basketball shots and it takes 5 seconds to shoot the ball and retrieve it, what is the minimum time needed for 300 shots? If the goal is to practice piano for 2 hours per week, how many minutes will that require on average every day?



SPACED PRACTICE: People often fall into the trap of trying to do all of their studying in one long session, or even worse, "cramming" all of the studying at the last second. Use this activity to explain, then later reflect on, how learning is best when spaced. To maximize retention, people should practice a little bit at a time, spread out over weeks or months, instead of all at once.

FLUENCY PRACTICE

This activity can serve as a powerful tool to help students gain mastery over vocabulary or other skills that benefit from repetition. If a student is struggling with vocabulary, for example, a possible goal can be to commit 3 new flash cards to memory every day for a week. After one week, they'll have 21 terms memorized!

INTERDISCIPLINARY CONNECTIONS

This activity is a powerful way to show the mathematical application of virtually any subject. Students could work to improve their literacy (for example by reading for 30 minutes every day), fitness (for example by doing 25 push-ups every day), or coding skills (for example by programming for 30 minutes every day). Challenge students to apply this activity to their different classes. What can they learn from the resulting graph?

EXTEND THE ACTIVITY

One goal might be an exercise such as "bounce an 8-pound medicine ball against a wall 300 times per week." Now there are two variables to consider: the weight of the ball and the repetitions per week. Have students consider ways to build on each of those variables separately. Should they focus on one more than the other or both at once? Is the progress linear?

To learn more about math in sports, visit hmhco.com/mathatwork.