

Precision Teaching - Timing of Consonants

The importance of students' proficiency in basic skills — that they can use those skills independently in more complex tasks — is well-documented by Precision Teaching research. Researchers have demonstrated significant correlations between rates of performance and students' abilities to retain and apply skills.

Precision Teaching provides a measurement system that is used to continuously measure specific tasks until they can be performed accurately at an optimal rate. Timings are usually a combination of brief timings (ten, twelve, or fifteen seconds) and longer ones (one minute, give or take). A student's performance is recorded on a semi-logarithmic chart which gives the teacher and student a means to visualize progress, enabling decisions to be made about the student's learning program.

The goal of timed practice is to build fluency; this ensures that a student permanently retains the skills taught, can perform them for extended periods of time, and can easily apply them to new learning situations — retention, endurance, and application.

Two charts — courtesy of Richard McManus, founder of the Fluency Factory — may be used to record student progress in building automaticity. The Introductory Timing chart is used to record timings conducted during each lesson. The Daily Timing chart can be used to record up to fourteen weeks of timings. Data from the Introductory Timing chart can be transferred to the Daily Timing or the Daily Timing chart can be used by itself.

Directions for Timing Consonants

We use brief timings (12 seconds long) to build proficiency. For consistency, this should be turned into a “total time,” in rate in sounds per minute. The rate is calculated using the formula:

$$\frac{\text{Sounds produced}}{\text{elapsed time in seconds}} = \frac{X}{60} = \text{sounds per minute}$$

Example: $\frac{10 \text{ sounds}}{12 \text{ seconds}} = 50 \text{ sounds per minute}$

A shortcut to find sounds per minute for the 12-second timing is to multiply the number of cards identified by 5.

A longer timing (the whole deck) is used to build resilience. Again, the rate is calculated using the formula:

$$\frac{\text{Sounds produced}}{\text{elapsed time in seconds}} = \frac{X}{60} = \text{sounds per minute}$$

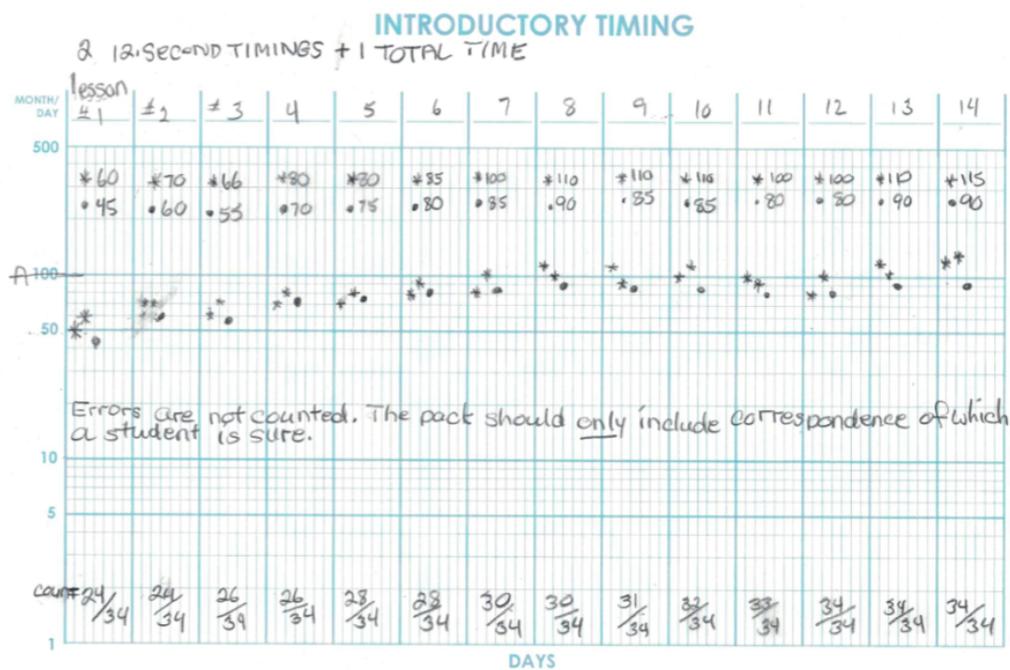
Example: $\frac{34 \text{ sounds}}{30 \text{ seconds}} = 68 \text{ sounds per minute}$

A shortcut to find sounds per minute (for the 34-card deck) is to divide 2040 by the time needed.

Proficiency will be 100+ sounds per minute (completing the 34 sounds in 20 seconds).

Introductory Timing

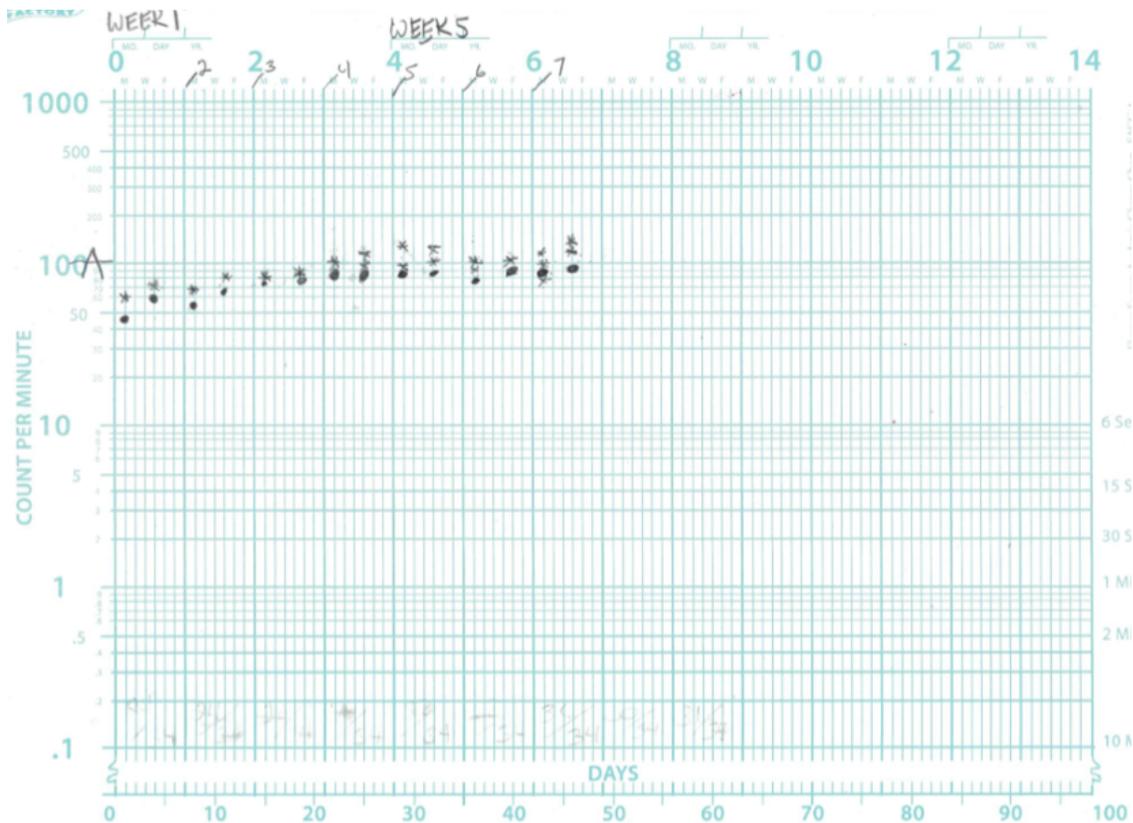
The number of sounds produced per minute are recorded and can be plotted logarithmically to better visualize student progress. A sample timing chart is shown below.



A sample chart for Introductory timing. In this case, the asterisks represent 12-second timings and the dots represent the whole-deck (longer) timing.

Daily Timing

Daily timing enables results to be charted over up to 14 weeks. The results from the introductory timing can be transferred onto the daily timing chart as illustrated below.



The corresponding entries on the Daily Chart: the two asterisks (*) and the dot (•) are “stacked” on the “day” of the lesson.