

3-Digit by 2-Digit Multiplication Timed Computation Probes

SECTION 2 · FOUR TIMED FORMS

3X2 MULT FLUENCY PROBES

FORM A Multiplication Computation — Form A

My name: _____ Date (optional): _____

Solve each problem. Write the answer in the box. Go as fast as you can!

1

$$\begin{array}{r} 275 \\ \times 21 \\ \hline \end{array}$$

2

$$\begin{array}{r} 974 \\ \times 98 \\ \hline \end{array}$$

3

$$\begin{array}{r} 237 \\ \times 25 \\ \hline \end{array}$$

4

$$\begin{array}{r} 798 \\ \times 36 \\ \hline \end{array}$$

5

$$\begin{array}{r} 135 \\ \times 97 \\ \hline \end{array}$$

6

$$\begin{array}{r} 226 \\ \times 65 \\ \hline \end{array}$$

7

$$\begin{array}{r} 158 \\ \times 59 \\ \hline \end{array}$$

8

$$\begin{array}{r} 113 \\ \times 73 \\ \hline \end{array}$$

3-Digit by 2-Digit Multiplication Fluency — Goal and

3X2 MULT FLUENCY PROBES

Solve each problem. Show your work. If you are not sure, keep going.

3-Digit by 2-Digit Multiplication Fluency, Timed Progress Monitoring Probes

Page 10 of 23

BRIGHT PATH SPED

CRITERION (DCPM, AND ACCURACY PERCENT, TOGETHER)

ON _____ OF _____ CONSECUTIVE PROBES

AS MEASURED BY (3-DIGIT BY 2-DIGIT MULTIPLICATION COMPUTATION FLUENCY PROBES, FORMS A-D, PAGE 10-13)

BENCHMARKS TOWARD THE GOAL

BENCHMARK	TARGET DATE	TARGET DCPM / ACCURACY	ACTUAL	MET?
1				
2				
3				

WHAT THE ERRORS SAY TO RETEACH (CARRY OVER FROM THE LOG)

Page 8 of 23

BRIGHT PATH SPED

23 PAGES

FOUR TIMED FORMS

SPEED + ACCURACY TOGETHER

FILLABLE PDF

✦ BRIGHT PATH SPED

What Is Inside, and Where

23 pages, one skill, start to finish: no norm-referenced score, no fixed fluency cutoff.

Before you begin

PAGE 4



Start Here —
Three Steps
START HERE

4

01 Set Up

PAGES 6–8



Binder Cover and
Divider Tabs
SETUP

6



How This Pack
Works
REFERENCE

7



3-Digit by 2-Digit
Multiplication
Fluency — Goal
and Directions
GOAL

8

02 Four Timed Forms

PAGES 10–14



Multiplication
Computation —
Form A
FORM A

10



Multiplication
Computation —
Form B
FORM B

11



Multiplication
Computation —
Form C
FORM C

12



Multiplication
Computation —
Form D
FORM D

13



Scoring Keys —
Forms A–D
REFERENCE

14

03 Track, Report and Share

PAGES 16–22



Multiplication
Computation
Fluency — Data
Log and Graph
TRACKER

16



Quick-Response
Observation
Checklist
CHECKLIST

17



Caseload
Summary
ROSTER

18



Quick Reference
for a Second Adult
NOTES

19



Family Update —
This Skill's
Progress
NOTES

20



Progress Note
Phrase Bank
REFERENCE

21



A Filled-In Data
Log (Invented
Student)
EXAMPLE

22

Reading the tags: **Setup** is typed once, before the first probe; **Goal** is the sample and the six-part frame; **Form A–D** are the four student practice pages; **Reference** is the shared scoring keys and the phrase bank; **Tracker** rolls several weeks onto one page; **Checklist** is marked during or right after a probe; **Roster** puts a whole caseload on one grid; **Notes** is ready to send or read back to a family or a second adult; **Example** is the worked, invented sample.

Start Here — Three Steps

Ninety seconds of reading; the weekly routine takes about five.



1

Baseline, then write the goal

Give Forms A, B and C on three different days at the same time limit; the middle DCPM (digits correct per minute) score is the baseline (page 8).

Write the goal from the six-part frame, starting from the sample and changing every bracket to fit the student.



2

Probe once a week, timed

Rotate the forms (A, B, C, D, A...), never the same one two weeks running. Every form is eight problems; the time limit, not the sheet, decides when the probe ends.

Score against the keys page (page 14) digit by digit and log the same day (page 16); the log turns the raw digit count and time into digits correct per minute.



3

Watch, decide, report, share

The quick-response checklist (page 17) notes whether an answer was reached with regrouping and the placeholder zero marked and right, worked but wrong, or guessed/blank, and gives the team a place to write its own call on where practice should go next — never a cutoff this file sets.

The family update (page 20) and the phrase bank (page 21) turn the log into a note without a separate write-up.

WHAT THIS FILE IS

A fillable PDF. The goal page, the log, the checklist, the caseload page, the second-adult reference and the organizer are type-in; the four student practice pages and the scoring-keys page print (a child answers in pencil, by hand).

WHAT THIS FILE IS NOT

Not a Google Sheets file, a Google Doc or an Excel workbook, and not a norm-referenced test. It carries no fixed fluency benchmark score — your team decides what fluent enough means for this student, from the baseline and the IEP.

DIGITS CORRECT, AND WHY IT MATTERS

A multi-digit answer is scored one digit at a time, by place, so a student who gets four of five digits right is counted as four right, not zero.

CONFIDENTIALITY, IN ONE PARAGRAPH

A filled-in log is a student record. It stays in the data folder, never where another family can see it. Use initials on any page that leaves your hands; the family update carries a first name only.

PRINT AND PREP

- ☐ One clean student copy of each form; the child writes the answer directly on it, in pencil.
- ☐ A stopwatch or phone timer; the time limit is written on the goal page.
- ☐ The caseload page prints once a month.

IF SOMETHING DOES NOT WORK

The text disappears when I close it. It was opened in something that fills fields but does not save them. Open it in Acrobat Reader and use Save As.
Anything else — the **Ask a Question** tab on the product page. Every question is read, and a fix to the file is a free update.

GOAL

3-Digit by 2-Digit Multiplication Fluency — Goal and Directions

Goal, baseline and directions for one skill. Timed; score is digits correct per minute (DCPM) and accuracy, together.

The student solves three-digit by two-digit multiplication problems (the full two-partial-product algorithm) in writing, under a fixed, team-set time limit. Four equivalent forms, eight problems each, thirty-six digits possible on every form. The score is speed and accuracy together — digits correct per minute (DCPM) — never accuracy alone.

SAMPLE GOAL — INVENTED; EDIT EVERY BRACKET TO FIT THE STUDENT

By [March 15], when given a [5]-minute timed three-digit by two-digit multiplication computation probe, [Student] will correctly write [7] digits per minute with at least [85] percent accuracy on [3] consecutive weekly probes, as measured by teacher-scored 3-Digit by 2-Digit Multiplication Computation Fluency probes (forms A–D, page 10–13).

BY (DATE)

CRITERION (DCPM, AND ACCURACY PERCENT, TOGETHER)

GIVEN (TIME LIMIT, ANY ALLOWED SUPPORT)

ON ____ OF ____ CONSECUTIVE PROBES

STUDENT WILL (WRITE, IN THE WORDS OF THE PROBE)

AS MEASURED BY (3-DIGIT BY 2-DIGIT MULTIPLICATION COMPUTATION FLUENCY PROBES, FORMS A–D, PAGE 10–13)

BASLINE: GIVE FORMS A, B AND C ON THREE DAYS AT THE SAME TIME LIMIT, TAKE THE MIDDLE DCPM SCORE

BASELINE PROBE 1	BASELINE PROBE 2	BASELINE PROBE 3	MEDIAN DCPM (THE BASELINE)

BENCHMARKS TOWARD THE GOAL

#	BENCHMARK	TARGET DATE	TARGET DCPM / ACCURACY	ACTUAL	MET?
1					
2					
3					

- GIVING AND SCORING THE PROBE
- ☐ Same time limit every session. Say: “Solve each problem. Show your work. If you are not sure, keep going.” Hand the student the form and a pencil. Start the timer.
 - ☐ Let the student write; do not help during the probe. Stop at the time limit, even mid-problem, and circle the last problem the student was working on.
 - ☐ Score against the keys (page 14) one digit at a time, by place value, starting from the ones digit — a digit counts even if another digit in that answer is wrong. DCPM = digits correct ÷ seconds × 60, rounded.
 - ☐ A criterion needs BOTH DCPM and accuracy to clear together — digits written quickly past wrong answers is not computation fluency.

SCORING RULES FOR THIS STUDENT (PLACE-VALUE CONVENTIONS, SUPPORTS ALLOWED)

WHAT THE ERRORS SAY TO RETEACH (CARRY OVER FROM THE LOG)

FORM A

Multiplication Computation — Form A

My name: _____ Date (optional): _____

**Solve each problem. Write the answer in the box. Go as fast as you can!**

1

$$\begin{array}{r} 275 \\ \times 21 \\ \hline \end{array}$$

2

$$\begin{array}{r} 974 \\ \times 98 \\ \hline \end{array}$$

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$$\begin{array}{r} 237 \\ \times 25 \\ \hline \end{array}$$

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8

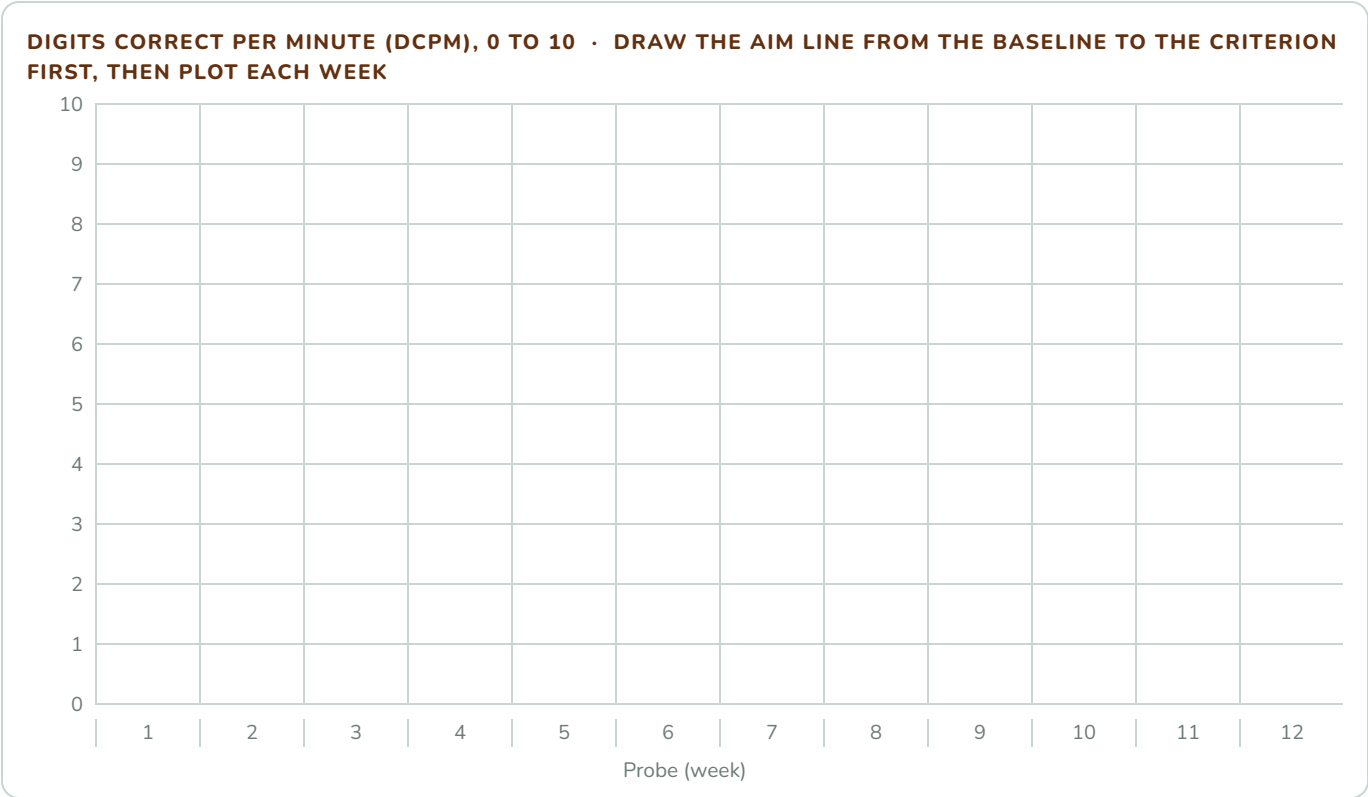
$$\begin{array}{r} 113 \\ \times 73 \\ \hline \end{array}$$

TRACKER

Multiplication Computation Fluency — Data Log and Graph

One row per probe. Three points in a row under the aim line is a decision: change the teaching and write what changed in the notes.

STUDENT	CRITERION / AIM (DCPM)	GOAL DATE
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#	DATE	FORM	TIME (SEC)	PROBLEMS REACHED	DIGITS POSSIBLE	DIGITS CORRECT	DCPM	NOTES
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

CHECKLIST

Quick-Response Observation Checklist

Not a second score. A place to watch HOW the answer was reached — regrouping and the placeholder zero marked and right, worked but wrong, or guessed/blank — and for the team to write its own call on where the breakdown happens.

STUDENT		WEEKS COVERED			FORM ROTATION	
#	DATE	FORM	REGROUPING MARKED, RIGHT (TALLY)	WORKED, BUT WRONG (TALLY)	GUESS / BLANK (TALLY)	NOTES (WHICH PROBLEMS, WHAT PATTERN)
1						
2						
3						
4						
5						
6						
7						
8						

HOW TO MARK IT

☐ Regrouping marked, right: the student writes the carried digit above the column it belongs to and the placeholder zero on the second partial product, and the final answer is correct.

☐ Worked, but wrong: there is written work — both partial products, carried marks — but the final answer has at least one wrong digit.

☐ Guess / blank: an answer with no supporting written work, or the item is left blank.

☐ Tallies are marks, not a score — they describe the SAME probe scored on the graph page (page 16), not a different one.

WHAT THIS PAGE IS FOR

A rising DCPM built on marked, correct regrouping and placeholder zeros, and a rising DCPM built on answers that happen to land close without any shown work, are two different pictures, even when the number on the graph looks the same. This page is where that difference gets written down, so the reteach plan matches what is actually happening, not just the rate.

WHERE THE BREAKDOWN HAPPENS, IN THE TEAM'S OWN WORDS — NOT A CUTOFF THIS FILE SETS

There is no fixed number of tallies or DCPM score anywhere in this file that means “fluent.” Write your team's own call below, and change it whenever the pattern changes.

THE BREAKDOWN IS MOSTLY (PLACEHOLDER ZERO / A CARRY / A SHAKY FACT / OTHER), AND WHY

DATE OF THIS CALL

EXAMPLE

A Filled-In Data Log (Invented Student)

SAMPLE · INVENTED STUDENT

Priya is invented, fifth grade. Twelve weekly timed probes, the aim line, the change three flat points forced, and why accuracy cleared the goal before speed did.

THE GOAL, AS WRITTEN FOR PRIYA, FIFTH GRADE (INVENTED)

By March 15, when given a 5-minute timed three-digit by two-digit multiplication computation probe, Priya will correctly write 7 digits per minute with at least 85 percent accuracy on 3 consecutive weekly probes, as measured by teacher-scored 3-Digit by 2-Digit Multiplication Computation Fluency probes (forms A–D). (7 DCPM sits just under this form's 36-digit, 5-minute ceiling of 7.2.)

#	DATE	FORM	TIME (SEC)	PROBLEMS REACHED	DIGITS POSSIBLE	DIGITS CORRECT	DCPM	NOTES
1	9/9	A	300	4	19	13	3	baseline
2	9/10	B	300	5	23	18	4	baseline
3	9/11	C	300	4	19	18	4	baseline (median of 3, 4, 4 = 4)
4	9/18	D	300	5	22	20	4	flat vs. baseline
5	9/25	A	300	5	21	19	4	flat vs. baseline
6	10/2	B	300	5	23	20	4	3 probes flat: drilled the placeholder zero in the second partial product
7	10/9	C	300	6	27	25	5	–
8	10/16	D	300	6	26	24	5	–
9	10/23	A	300	7	31	28	6	–
10	10/30	B	300	8	36	33	7	accuracy 91.7%, DCPM at criterion (7)
11	11/6	C	300	8	36	33	7	accuracy 91.7%, DCPM at criterion (7)
12	11/13	D	300	8	36	33	7	accuracy 91.7%, three consecutive at criterion: goal met

HOW TO READ THE LOG

- ☐ Baseline was the median of three forms on three days: 3, 4 and 4 DCPM, so 4. Not the average, not the best.
- ☐ The aim line runs from 4 DCPM in week 1 to 7 DCPM at the goal date. Probes 4, 5 and 6 (4, 4, 4) sat flat at baseline: three probes with no rise, so the teaching changed (a daily drill on the placeholder zero in the second partial product) and the change is written on the row.
- ☐ Accuracy and DCPM do not move together: accuracy topped 85 percent by probe 3, while DCPM did not clear the 7-DCPM criterion until probe 10.
- ☐ Criterion met on probes 10, 11 and 12 — three in a row at 7 DCPM, each at 91.7 percent accuracy — so the goal was met by probe 12.

THE PROGRESS REPORT SENTENCE THIS LOG PRODUCES

"Priya wrote 3 correct digits per minute at about 68 percent accuracy in early September, and 7 digits per minute at about 92 percent accuracy by mid-November. Both targets (7 DCPM, 85 percent) were met on three consecutive probes; the goal is met."