

Multi-Digit Addition & Subtraction Fluency

SECTION 2 · FOUR TIMED FORMS

MULTI-DIGIT ADD & SUB FLUENCY PROBES

FORM A Mixed Problems — Form A

My name: _____ Date (optional): _____

✎ Write the answer to each problem. Go as fast as you can!

1 $\begin{array}{r} 34 \\ + 17 \\ \hline \end{array}$	2 $\begin{array}{r} 607 \\ - 198 \\ \hline \end{array}$	3 $\begin{array}{r} 27 \\ + 28 \\ \hline \end{array}$	4 $\begin{array}{r} 80 \\ - 66 \\ \hline \end{array}$	5 $\begin{array}{r} 77 \\ + 16 \\ \hline \end{array}$
6 $\begin{array}{r} 85 \\ - 37 \\ \hline \end{array}$	7 $\begin{array}{r} 74 \\ - 39 \\ \hline \end{array}$	8 $\begin{array}{r} 556 \\ - 248 \\ \hline \end{array}$	9 $\begin{array}{r} 980 \\ - 746 \\ \hline \end{array}$	10 $\begin{array}{r} 980 \\ - 763 \\ \hline \end{array}$
11 $\begin{array}{r} 277 \\ + 193 \\ \hline \end{array}$	12 $\begin{array}{r} 283 \\ + 427 \\ \hline \end{array}$	13 $\begin{array}{r} 374 \\ + 247 \\ \hline \end{array}$	14 $\begin{array}{r} 81 \\ - 37 \\ \hline \end{array}$	15 $\begin{array}{r} 564 \\ - 129 \\ \hline \end{array}$
16 $\begin{array}{r} 556 \\ + 278 \\ \hline \end{array}$	17 $\begin{array}{r} 48 \\ + 46 \\ \hline \end{array}$	18 $\begin{array}{r} 32 \\ - 13 \\ \hline \end{array}$	19 $\begin{array}{r} 447 \\ + 225 \\ \hline \end{array}$	20 $\begin{array}{r} 38 \\ + 12 \\ \hline \end{array}$

Multi-Digit Addition & Subtraction Computation Fluency, Timed Probes

Page 10 of 23

✦ BRIGHT PATH SPED

MULTI-DIGIT ADD & SUB FLUENCY PROBES

Multi-Digit Addition & Subtraction Fluency — Goal and

For one skill. Timed; score is problems correct per minute (PCPM) and accuracy, together.

Three-digit addition and subtraction problems that require regrouping, interleaved, in set time limit. Twenty problems a form, so the sheet rarely runs out before the time accuracy together — problems correct per minute (PCPM) — never accuracy alone.

EDIT EVERY BRACKET TO FIT THE STUDENT

2]-minute timed multi-digit addition and subtraction probe (two- and three-digit ng, interleaved), [Student] will correctly answer [6] problems per minute with at n [3] consecutive weekly probes, as measured by teacher-administered Multi- Fluency probes (forms A-D, page 10–13).

CRITERION (PCPM, AND ACCURACY PERCENT, TOGETHER)

SUPPORT) ON ____ OF ____ CONSECUTIVE PROBES

THE WORDS OF THE AS MEASURED BY (MULTI-DIGIT FLUENCY PROBES, FORMS A-D, PAGE 10–13)

C ON THREE MAKE THE

MEDIAN PCPM (THE BASELINE)

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

ten on the goal box and used every time. Say: "Solve each problem. Start der the line." Hand the student the form and a pencil. Start the timer. r confirm an answer during the probe. Stop exactly at the time limit, even blem the student was working on.

PCPM = problems correct + seconds elapsed × 60, rounded to the nearest problems reached.

lear together — a PCPM reached by skipping the regrouping step, or by not fluency.

CEPTED OWED)

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

imed Probes

Page 8 of 23

✦ BRIGHT PATH SPED

✦ 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



**Multi-Digit
Addition &
Subtraction
Fluency — Goal
and Directions**
GOAL

8

02 Four Timed Forms

PAGES 10–14



**Mixed Problems —
Form A**
FORM A

10



**Mixed Problems —
Form B**
FORM B

11



**Mixed Problems —
Form C**
FORM C

12



**Mixed Problems —
Form D**
FORM D

13



**Scoring Keys —
Forms A–D**
REFERENCE

14

03 Track, Report and Share

PAGES 16–22



**Multi-Digit
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 PCPM (problems 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 twenty problems, mixed two- and three-digit; the time limit, not the sheet, decides when the probe ends.

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



3

Watch, decide, report, share

The quick-response checklist (page 17) notes WHERE a regrouping step breaks down — automatic, a pause at the regroup, a skipped regroup, or a guess — and gives the team a place to write its own call on automaticity — 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.

MIXED DIGIT LENGTH, AND WHY IT MATTERS

Every form mixes ten two-digit and ten three-digit problems, addition and subtraction both, into one shuffled grid — never in their own blocks — so the score shows whether the student can regroup across digit lengths and operations, not just the easiest version of either.

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

Multi-Digit Addition & Subtraction Fluency — Goal and Directions

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

The student solves two- and three-digit addition and subtraction problems that require regrouping, interleaved, in writing, under a fixed, team-set time limit. Twenty problems a form, so the sheet rarely runs out before the time does. The score is speed and accuracy together — problems correct per minute (PCPM) — never accuracy alone.

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

By [May 20], when given a [2]-minute timed multi-digit addition and subtraction probe (two- and three-digit problems requiring regrouping, interleaved), [Student] will correctly answer [6] problems per minute with at least [80] percent accuracy on [3] consecutive weekly probes, as measured by teacher-administered Multi-Digit Addition & Subtraction Fluency probes (forms A–D, page 10–13).

BY (DATE)

CRITERION (PCPM, AND ACCURACY PERCENT, TOGETHER)

GIVEN (TIME LIMIT, ANY ALLOWED SUPPORT)

ON ____ OF ____ CONSECUTIVE PROBES

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

AS MEASURED BY (MULTI-DIGIT FLUENCY PROBES, FORMS A–D, PAGE 10–13)

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

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

BENCHMARKS TOWARD THE GOAL

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

GIVING AND SCORING THE PROBE

- ☐ Same time limit every session, written on the goal box and used every time. Say: "Solve each problem. Start with the ones. Write the answer under the line." Hand the student the form and a pencil. Start the timer.
- ☐ Let the student write; do not help or confirm an answer during the probe. Stop exactly at the time limit, even mid-problem, and circle the last problem the student was working on.
- ☐ Score against the keys (page 14): PCPM = problems correct ÷ seconds elapsed × 60, rounded to the nearest whole number. Accuracy = correct ÷ problems reached.
- ☐ A criterion needs BOTH numbers to clear together — a PCPM reached by skipping the regrouping step, or by writing quickly past wrong answers, is not fluency.

SCORING RULES FOR THIS STUDENT (ACCEPTED ALTERNATE ALGORITHMS, SUPPORTS ALLOWED)

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

FORM A

Mixed Problems — Form A

My name: _____ Date (optional): _____

 Write the answer to each problem. Go as fast as you can!

1

$$\begin{array}{r} 34 \\ + 17 \\ \hline \end{array}$$

2

$$\begin{array}{r} 607 \\ - 198 \\ \hline \end{array}$$

3

$$\begin{array}{r} 27 \\ + 28 \\ \hline \end{array}$$

4

$$\begin{array}{r} 80 \\ - 66 \\ \hline \end{array}$$

5

$$\begin{array}{r} 77 \\ + 16 \\ \hline \end{array}$$

6

$$\begin{array}{r} 85 \\ - 37 \\ \hline \end{array}$$

7

$$\begin{array}{r} 74 \\ - 39 \\ \hline \end{array}$$

8

$$\begin{array}{r} 556 \\ - 248 \\ \hline \end{array}$$

9

$$\begin{array}{r} 980 \\ - 746 \\ \hline \end{array}$$

10

$$\begin{array}{r} 980 \\ - 763 \\ \hline \end{array}$$

11

$$\begin{array}{r} 277 \\ + 193 \\ \hline \end{array}$$

12

$$\begin{array}{r} 283 \\ + 427 \\ \hline \end{array}$$

13

$$\begin{array}{r} 374 \\ + 247 \\ \hline \end{array}$$

14

$$\begin{array}{r} 81 \\ - 37 \\ \hline \end{array}$$

15

$$\begin{array}{r} 564 \\ - 129 \\ \hline \end{array}$$

16

$$\begin{array}{r} 556 \\ + 278 \\ \hline \end{array}$$

17

$$\begin{array}{r} 48 \\ + 46 \\ \hline \end{array}$$

18

$$\begin{array}{r} 32 \\ - 13 \\ \hline \end{array}$$

19

$$\begin{array}{r} 447 \\ + 225 \\ \hline \end{array}$$

20

$$\begin{array}{r} 38 \\ + 12 \\ \hline \end{array}$$

TRACKER

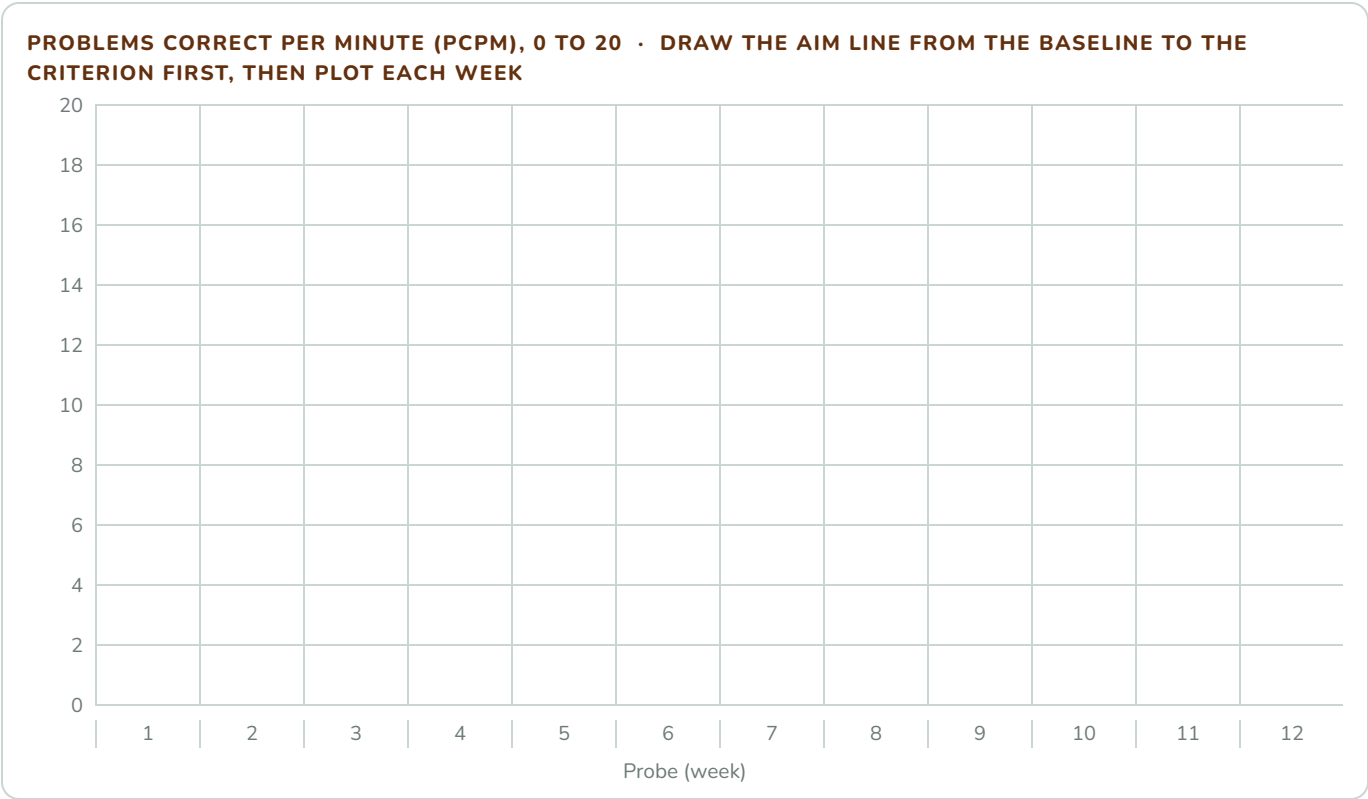
Multi-Digit Fluency — Data Log and Graph

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 (PCPM)

GOAL DATE



#	DATE	FORM	TIME (SEC)	REACHED	CORRECT	ERRORS	PCPM	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 WHERE the regrouping step breaks down, and for the team to write its own call on automaticity.

STUDENT

WEEKS COVERED

FORM ROTATION

#	DATE	FORM	AUTOMATIC (TALLY)	PAUSES AT THE REGROUP (TALLY)	SKIPS THE REGROUP (TALLY)	GUESS / BLANK (TALLY)
1						
2						
3						
4						
5						
6						
7						
8						

HOW TO MARK IT

- ☐ Automatic: carries or borrows and keeps writing, no visible hesitation.
- ☐ Pauses at the regroup: stops or self-corrects right at the carry or borrow, but reaches a correct answer.
- ☐ Skips the regroup: the classic non-regrouping error — the whole ones total under the line, or the smaller digit from the larger regardless of position.
- ☐ Guess / blank: a quick wrong answer with no column work shown, or left blank.
- ☐ Tallies describe the SAME probe scored on the graph (page 16).

WHAT THIS PAGE IS FOR

A rising PCPM built on automatic regrouping and a rising PCPM built on skipping the regroup step entirely look the same on the graph but are different skills. This page writes down which one is happening, so the reteach plan matches it.

AUTOMATICITY, IN THE TEAM'S OWN WORDS — NOT A CUTOFF THIS FILE SETS

No fixed tally or PCPM number here means “fluent.” Write your team’s own call below.

THIS RANGE IS (FLUENT / STILL BUILDING / MIXED), AND WHY

DATE OF THIS CALL

EXAMPLE

A Filled-In Data Log (Invented Student)

SAMPLE · INVENTED STUDENT

Theo is invented, third grade. Twelve weekly timed probes, the aim line, the change three flat points forced, and why accuracy alone did not clear the goal.

THE GOAL, AS WRITTEN FOR THEO, THIRD GRADE (INVENTED)

By January 15, when given a 2-minute timed multi-digit addition and subtraction probe (two- and three-digit problems requiring regrouping, interleaved), Theo will correctly answer 6 problems per minute with at least 80 percent accuracy on 3 consecutive weekly probes, as measured by teacher-administered Multi-Digit Addition & Subtraction Fluency probes (forms A–D).

#	DATE	FORM	TIME (SEC)	REACHED	CORRECT	ERRORS	PCPM	NOTES
1	9/9	A	120	6	2	4	1	baseline
2	9/10	B	120	7	4	3	2	baseline
3	9/11	C	120	6	2	4	1	baseline (median of 1, 2, 1 = 1)
4	9/18	D	120	6	2	4	1	flat vs. baseline
5	9/25	A	120	7	2	5	1	flat vs. baseline
6	10/2	B	120	7	2	5	1	3 probes flat: added a daily two-minute warm-up isolating the regrouping step alone, before mixing operations and digit lengths back in
7	10/9	C	120	9	4	5	2	–
8	10/16	D	120	10	6	4	3	–
9	10/23	A	120	12	8	4	4	errors now mostly on the three-digit cross-zero borrows
10	10/30	B	120	11	8	3	4	accuracy rising, PCPM steady at 4
11	11/6	C	120	13	10	3	5	accuracy climbing, PCPM still under 6
12	11/13	D	120	12	10	2	5	accuracy cleared the 80 percent target; PCPM one point under the 6 target

HOW TO READ THE LOG

- ☐ Baseline is the median of probes 1–3 (1, 2, 1 PCPM) = 1, not the average or the best.
- ☐ Probes 4–6 (1, 1, 1) sat flat at baseline, so the teaching changed — a daily warm-up isolating the regroup step alone — written on row 6.
- ☐ Errors moved to mostly three-digit cross-zero borrows (500 – 268) by the later probes, telling the teacher what to reteach.
- ☐ Accuracy cleared 80% on the latest probe (83.3%) but not yet three in a row; PCPM (5) is one point under the 6 target. Both halves of the criterion must clear together.

THE PROGRESS REPORT SENTENCE THIS LOG PRODUCES

“On weekly timed multi-digit probes (20 two- and three-digit problems, interleaved, a 2-minute limit), Theo answered 1 problem per minute at about 33 percent accuracy in early September, and 5 per minute at about 83 percent accuracy in November. Accuracy has cleared 80 percent once, not yet three in a row; speed has not reached the 6-PCPM target. Progress is steady; the goal is not yet met.”