

Mixed Mult & Division Facts Timed Fluency Probes

SECTION 2 · FOUR TIMED FORMS

MIXED MULT & DIV FACT FLUENCY PROBES

FORM A Mixed Facts — Form A

My name: _____ Date (optional): _____

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

1 $100 \div 10 =$	2 $7 \times 10 =$	3 $16 \div 4 =$	4 $30 \div 10 =$
5 $9 \times 6 =$	6 $5 \times 10 =$	7 $16 \div 8 =$	8 $6 \times 7 =$
9 $72 \div 8 =$	10 $18 \div 3 =$	11 $54 \div 9 =$	12 $2 \times 3 =$
13 $28 \div 4 =$	14 $10 \times 6 =$	15 $8 \times 9 =$	16 $3 \times 3 =$
17 $64 \div 8 =$	18 $8 \times 6 =$	19 $21 \div 7 =$	20 $20 \div 10 =$
21 $72 \div 9 =$	22 $3 \times 4 =$	23 $4 \times 6 =$	24 $5 \times 6 =$
25 $36 \div 4 =$	26 $36 \div 9 =$	27 $5 \times 9 =$	28 $12 \div 6 =$
29 $7 \times 3 =$	30 $9 \times 7 =$	31 $56 \div 7 =$	32 $45 \div 9 =$
33 $8 \times 7 =$	34 $4 \times 8 =$	35 $2 \times 7 =$	36 $42 \div 7 =$
37 $90 \div 10 =$	38 $80 \div 8 =$	39 $2 \times 2 =$	40 $4 \times 10 =$

Mixed Multiplication & Division Facts Fluency, Timed Progress Monitoring Probes

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✦ BRIGHT PATH SPED

MIXED MULT & DIV FACT FLUENCY PROBES

Multiplication & Division Fluency — Goal and

For one mixed skill. Timed; score is facts correct per minute (FCPM) and accuracy.

Single-digit multiplication and division facts (factors 2 to 10, no remainders). Writing, under a fixed, team-set time limit. Four equivalent forms, forty facts each, so the time does. The score is speed and accuracy together — facts correct per minute alone.

EDIT EVERY BRACKET TO FIT THE STUDENT

7-minute timed mixed multiplication and division fact probe (factors 2 to 10, correctly answer [12] facts per minute with at least [80] percent accuracy on [3] facts measured by teacher-administered Mixed Mult/Div Facts Fluency probes

CRITERION (FCPM, AND ACCURACY PERCENT, TOGETHER)

SUPPORT) ON ____ OF ____ CONSECUTIVE PROBES

THE WORDS OF THE AS MEASURED BY (MIXED MULT/DIV FACTS FLUENCY PROBES, FORMS A-D, PAGE 10-13)

ON THREE MAKE THE

MEDIAN FCPM (THE BASELINE)

BENCHMARKS TOWARD THE GOAL				
BENCHMARK	TARGET DATE	TARGET FCPM / ACCURACY	ACTUAL	MET?
1				
2				
3				

Write the answer to each fact as fast as you can. If you are not sure, keep a pencil and start the timer; do not help during the probe.

Mid-item, and circle the last item worked on.

FCPM = facts correct ÷ seconds elapsed × 60. Accuracy = correct ÷ facts together.

ACCEPTED

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

Progress Monitoring Probes

Page 8 of 23

✦ BRIGHT PATH SPED

✦ BRIGHT PATH SPED

What Is Inside, and Where

23 pages, one mixed 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



**Mixed
Multiplication &
Division Fluency
— Goal and
Directions**
GOAL

8

02 Four Timed Forms

PAGES 10–14



**Mixed Facts —
Form A**
FORM A

10



**Mixed Facts —
Form B**
FORM B

11



**Mixed Facts —
Form C**
FORM C

12



**Mixed Facts —
Form D**
FORM D

13



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

14

03 Track, Report and Share

PAGES 16–22



**Mixed
Multiplication &
Division 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 pages; **Reference** is the shared keys and 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; **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 FCPM (facts 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 mixes multiplication and division facts; 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 facts correct per minute.



3

Watch, decide, report, share

The quick-response checklist (page 17) notes whether answers come instantly or are worked out with a strategy, 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, AND WHY IT MATTERS

Every form has 40 facts — 20 multiplication and 20 division, 20 from an easier fact family and 20 from a harder one, all shuffled together. The student cannot tell which operation or difficulty is coming next, which is the whole point: a goal built on one operation at a time does not show whether the student can switch between them.

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

Mixed Multiplication & Division Fluency — Goal and Directions

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

The student answers a mix of single-digit multiplication and division facts (factors 2 to 10, no remainders), interleaved into one grid, in writing, under a fixed, team-set time limit. Four equivalent forms, forty facts each, so the sheet rarely runs out before the time does. The score is speed and accuracy together — facts correct per minute (FCPM) — never accuracy alone.

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

By [May 20], when given a [2]-minute timed mixed multiplication and division fact probe (factors 2 to 10, mixed order), [Student] will correctly answer [12] facts per minute with at least [80] percent accuracy on [3] consecutive weekly probes, as measured by teacher-administered Mixed Mult/Div Facts Fluency probes (forms A–D, page 10–13).

BY (DATE)

CRITERION (FCPM, 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 (MIXED MULT/DIV FACTS 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 FCPM SCORE

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

BENCHMARKS TOWARD THE GOAL

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

GIVING AND SCORING THE PROBE

- ☐ Same time limit every session. Say: “Write the answer to each fact as fast as you can. If you are not sure, keep going.” Hand the student the form and a pencil and start the timer; do not help during the probe.
- ☐ Stop exactly at the time limit, even mid-item, and circle the last item worked on.
- ☐ Score against the keys (page 14): FCPM = facts correct ÷ seconds elapsed × 60. Accuracy = correct ÷ facts reached — BOTH numbers must clear together.

SCORING RULES FOR THIS STUDENT (ACCEPTED REVERSALS, SUPPORTS ALLOWED)

.....

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

.....

FORM A

Mixed Facts — Form A

My name: _____ Date (optional): _____

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

$$\begin{array}{l} 1 \quad 100 \div \\ 10 = \end{array} \quad \square$$

$$\begin{array}{l} 2 \quad 7 \times \\ 10 = \end{array} \quad \square$$

$$\begin{array}{l} 3 \quad 16 \div \\ 4 = \end{array} \quad \square$$

$$\begin{array}{l} 4 \quad 30 \div \\ 10 = \end{array} \quad \square$$

$$\begin{array}{l} 5 \quad 9 \times 6 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 6 \quad 5 \times \\ 10 = \end{array} \quad \square$$

$$\begin{array}{l} 7 \quad 16 \div \\ 8 = \end{array} \quad \square$$

$$\begin{array}{l} 8 \quad 6 \times 7 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 9 \quad 72 \div \\ 8 = \end{array} \quad \square$$

$$\begin{array}{l} 10 \quad 18 \div \\ 3 = \end{array} \quad \square$$

$$\begin{array}{l} 11 \quad 54 \div \\ 9 = \end{array} \quad \square$$

$$\begin{array}{l} 12 \quad 2 \times 3 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 13 \quad 28 \div \\ 4 = \end{array} \quad \square$$

$$\begin{array}{l} 14 \quad 10 \times \\ 6 = \end{array} \quad \square$$

$$\begin{array}{l} 15 \quad 8 \times 9 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 16 \quad 3 \times 3 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 17 \quad 64 \div \\ 8 = \end{array} \quad \square$$

$$\begin{array}{l} 18 \quad 8 \times 6 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 19 \quad 21 \div \\ 7 = \end{array} \quad \square$$

$$\begin{array}{l} 20 \quad 20 \div \\ 10 = \end{array} \quad \square$$

$$\begin{array}{l} 21 \quad 72 \div \\ 9 = \end{array} \quad \square$$

$$\begin{array}{l} 22 \quad 3 \times 4 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 23 \quad 4 \times 6 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 24 \quad 5 \times 6 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 25 \quad 36 \div \\ 4 = \end{array} \quad \square$$

$$\begin{array}{l} 26 \quad 36 \div \\ 9 = \end{array} \quad \square$$

$$\begin{array}{l} 27 \quad 5 \times 9 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 28 \quad 12 \div \\ 6 = \end{array} \quad \square$$

$$\begin{array}{l} 29 \quad 7 \times 3 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 30 \quad 9 \times 7 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 31 \quad 56 \div \\ 7 = \end{array} \quad \square$$

$$\begin{array}{l} 32 \quad 45 \div \\ 9 = \end{array} \quad \square$$

$$\begin{array}{l} 33 \quad 8 \times 7 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 34 \quad 4 \times 8 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 35 \quad 2 \times 7 \\ = \end{array} \quad \square$$

$$\begin{array}{l} 36 \quad 42 \div \\ 7 = \end{array} \quad \square$$

$$\begin{array}{l} 37 \quad 90 \div \\ 10 = \end{array} \quad \square$$

$$\begin{array}{l} 38 \quad 80 \div \\ 8 = \end{array} \quad \square$$

$$\begin{array}{l} 39 \quad 2 \times 2 \\ = \end{array} \quad \square$$

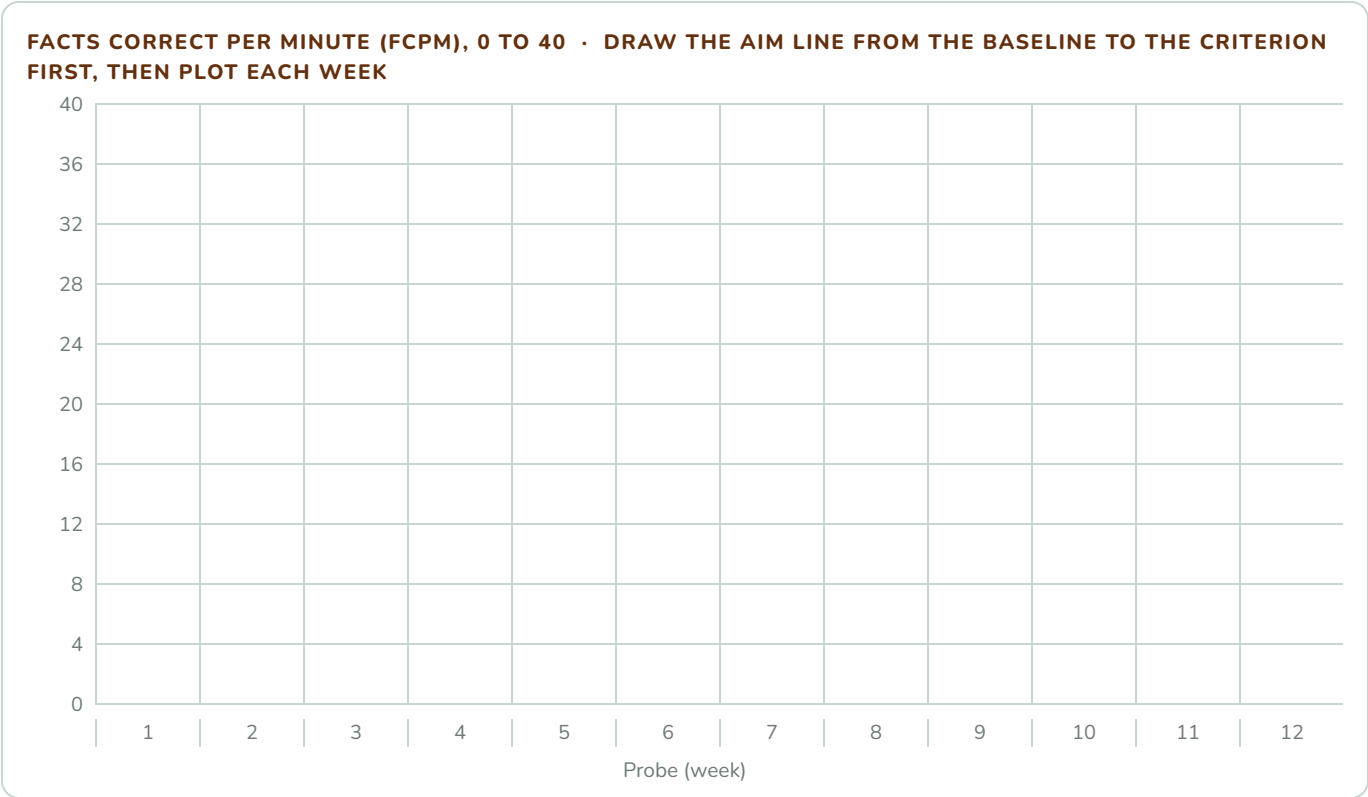
$$\begin{array}{l} 40 \quad 4 \times \\ 10 = \end{array} \quad \square$$

TRACKER

Mixed Multiplication & Division 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 (FCPM)	GOAL DATE
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#	DATE	FORM	TIME (SEC)	REACHED	CORRECT	ERRORS	FCPM	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 came out — recalled instantly, or worked out with a strategy — and for the team to write its own call on automaticity.

STUDENT

WEEKS COVERED

FORM ROTATION

#	DATE	FORM	INSTANT RECALL (TALLY)	USES A STRATEGY (TALLY)	GUESS / BLANK (TALLY)	NOTES (WHICH FACTS, WHICH OPERATION, WHAT PATTERN)
1						
2						
3						
4						
5						
6						
7						
8						

HOW TO MARK IT

☐ Instant recall: the answer is written within about a second, no visible counting, finger use or subvocalizing.

☐ Uses a strategy: the student counts on fingers, makes tally marks, counts up out loud, visibly converts the division fact back to multiplication, or visibly pauses before writing a correct answer.

☐ Guess / blank: a wrong answer written quickly, 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 FCPM built on instant recall and a rising FCPM built on counting strategies are two different skills, even when the number on the graph looks the same. On a mixed probe this also catches whether one operation is slower than the other — write which operation the strategy marks cluster on.

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

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

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

DATE OF THIS CALL

EXAMPLE

A Filled-In Data Log (Invented Student)

SAMPLE · INVENTED STUDENT

Dakota is invented, fourth grade. Twelve weekly timed probes, the aim line, the change three flat points forced, and why speed trailed accuracy to the goal date.

THE GOAL, AS WRITTEN FOR DAKOTA, FOURTH GRADE (INVENTED)

By May 20, when given a 2-minute timed mixed multiplication and division fact probe (factors 2 to 10, mixed operation, mixed order), Dakota will correctly answer 12 facts per minute with at least 80 percent accuracy on 3 consecutive weekly probes, as measured by teacher-administered Mixed Multiplication & Division Facts Fluency probes (forms A–D).

#	DATE	FORM	TIME (SEC)	REACHED	CORRECT	ERRORS	FCPM	NOTES
1	9/9	A	120	18	10	8	5	baseline
2	9/10	B	120	20	12	8	6	baseline
3	9/11	C	120	18	10	8	5	baseline (median of 5, 6, 5 = 5)
4	9/18	D	120	19	10	9	5	flat vs. baseline
5	9/25	A	120	18	10	8	5	flat vs. baseline
6	10/2	B	120	19	10	9	5	3 probes flat: added a daily switching drill, alternating multiplication and division flash cards for facts 6–10
7	10/9	C	120	19	14	5	7	–
8	10/16	D	120	20	16	4	8	–
9	10/23	A	120	21	18	3	9	errors now mostly division facts with a divisor of 8, 9 or 10
10	10/30	B	120	23	20	3	10	accuracy 87.0%, FCPM still under 12
11	11/6	C	120	25	22	3	11	accuracy 88.0%, FCPM one point under 12
12	11/13	D	120	27	24	3	12	accuracy 88.9%, FCPM reaches 12 for the first time

HOW TO READ THE LOG

- ☐ Baseline was the median of three forms on three days: 5, 6 and 5 FCPM, so 5.
- ☐ The aim line runs from 5 FCPM to 12 FCPM. Probes 4–6 sat flat at baseline, so the teaching changed (a daily switching drill) and the change is written on the row.
- ☐ Accuracy cleared 80 percent at probe 8 and held after; FCPM rose more slowly, reaching 12 for the first time on probe 12, so two more probes at 12+ are still needed.

THE PROGRESS REPORT SENTENCE THIS LOG PRODUCES

“On weekly timed mixed multiplication and division fact probes, Dakota answered 5 facts correctly per minute at about 56 percent accuracy in early September, and 12 facts correctly per minute at 88.9 percent accuracy on the most recent probe. Accuracy has met the 80 percent target for five probes running; speed reached the 12-FCPM target once but not yet for three in a row. The goal is not yet met.”