

Chloe

Part 1:
Multiplication Running Record Recording Sheet
Strategy Levels and Accuracy

0 x 4 ✓	a) ca sc asc fco/skf coh pth dk	M0	0 1 2 3 4
1 x 2 ✓	a) ca sc asc fco/skf coh pth dk	M1	0 1 2 3 4
5 x 3 ✓	a) ca sc asc fco/skf coh pth dk	M5	0 1 2 3 4
10 x 7 ✓	a) ca sc asc fco/skf coh pth dk	M10	0 1 2 3 4
2 x 6 ✓	a) ca sc asc fco/skf coh pth dk	M2	0 1 2 3 4
3 x 9 ✓ asked to skip but then did!	a) ca sc asc fco/skf coh (pth) dk	M3	0 1 2 3 4
4 x 8 x 34	a) ca sc asc fco/skf coh (pth) dk	M4	0 1 2 3 4
6 x 7 pass 5x7=35 + 1x7=7	a) ca sc asc fco/skf coh (pth) dk	M6	0 1 2 3 4
4 x 4 ✓	a) ca sc asc fco/skf coh pth dk	MD	0 1 2 3 4
7 x 8 ✓	a) ca sc asc fco/skf coh (pth) dk	MHN/M7	0 1 2 3 4
8 x 5 ✓	a) ca sc asc fco/skf coh pth dk	MHN/M8	0 1 2 3 4
9 x 6 6x10=60 + 3x6=18	a) ca sc asc fco/skf coh (pth) dk	MHN/M9	0 1 2 3 4

Codes:
a- automatic
sc- self corrected
asc- attempted self-correction
ca - counted all on fingers
skf - skip counted on fingers
coh- counted on in head
pth - prolonged thinking time
dk - didn't know

Codes:
M0 - multiplying by 0
M1 - multiplying by 1
M10 - multiplying by 10
M5 - multiplying by 5
M2 - multiplying by 2
M3 - multiplying by 3
M4 - multiplying by 4
M6 - multiplying by 6
M7 - multiplying by 6
M8 - multiplying by 6
M9 - multiplying by 6
MD - multiplying doubles
MHN- multiplying higher numbers

Codes:
0 - doesn't know
1 - counting strategies by ones or skip counting using fingers or drawings
2 - mental math/solving in head (usually skip counting)
3- using known facts and strategies
4- automatic recall

Comments:

Part 2:

Multiplication Flexibility Assessment

Teacher: We are now going to administer Part II of the Running Record. In this part of the Running Record we are going to talk about what strategies you use when you are solving basic multiplication facts. I am going to tell you a problem and then ask you to tell me how you think about it. I am also going to ask you about some different types of facts. Take your time as you answer and tell me what you are thinking as you see and do the math. I am going to take notes so I can remember everything that happened during this Running Record.

<p>Multiplying by 0 What do you do when you are multiplying by zero? For example: 1×0 5×0</p> <p>M0 NE (Y)</p>	<p>Multiplying by 1 What do you do when you are multiplying by 1? For example: 3×1 12×1</p> <p>M1 NE (Y)</p>	<p>Multiplying by 10 What do you do when you are multiplying by 10? For example: 8×10 ✓ 10×10 ✓</p> <p>M10 NE (Y)</p>	<p>Multiplying by 5 What do you do when you are multiplying by 5? For example: 7×5 ✓ 5s 8×5 a 4×5 ✓ a 9×5 5s skf 6×5</p> <p>M5 NE (Y)</p>
<p>Multiplying by 2 What do you do when you are multiplying by 2? double For example: 2×4 ✓ a 2×9 ✓ a 2×7 ✓ a</p> <p>M2 NE (Y)</p>	<p>Multiplying by 4 What do you think and do when you are multiplying by 4? doubles doubles For example: 4×2 ✓ 4×9 ✓ pth $9+9=18$ 18 36</p> <p>M4 NE (Y)</p>	<p>Multiplying by 8 If I didn't know 8×3 what is a way that I could solve this problem? $8 \times 2 = 16 + 8 = 24$ How about 8×9? ✓ pth $10 \times 8 = 80 - 8 = 72$</p> <p>M8/MHN NE (Y)</p>	<p>Multiplying by 3 What strategies do you use when you are multiplying by 3? $x2 + set$ For example: 3×3 3×6 ✓ a $(2 \times 6) + 6$</p> <p>M3 NE (Y)</p>
<p>Multiplying by 6 What do you think and do when you are multiplying a number by 6? $\times 3$ then dbl For example: 6×5 6×9 $\times 3$ pth $3 \times 9 = 26 \times$</p> <p>M6/MHN</p>	<p>Multiplying by 9 If I didn't know 9×4, what is a way I could think about and solve this problem? dbl $9 \times 2 = 18$ $+ 18$ 36</p> <p>M9/MHN</p>	<p>Multiplying by 7 If I were stuck on 7×9, what would you tell me to do? $10 \times 7 = 70 - 7 = 63$ How about: 7×2 or 7×3?</p> <p>M7/MHN</p>	<p>Multiplying by doubles What do you do think and do when you are multiplying a number by itself? $3 \times 3 = 9$ a For example: 5×5 ✓ a 8×8 ✓ a 7×7 ✓ a</p> <p>MD NE (Y)</p>

Comments/Notes about gestures, behaviors, remarks:
Math is OK
like geometry
lattice strategy

Question Prompts:
That's interesting/fascinating: tell me what you did.
That's interesting/fascinating: tell me how you solved it.
That's interesting/fascinating: tell me what you were thinking.
How did you solve this problem?
Can you tell me more about how you solve these types of problems?
What do you mean when you say _____? (i.e. ten friends/neighbor numbers etc.)