## **Multiplication Running Record Recording Sheet**

Student:	Date:	

## Part 1: Automaticity

Teacher: We are now going to administer Part 1 of the Running Record. I am going to give you a sheet of paper with some problems. I want you to go from the top to the bottom and tell me just the answer. If you get stuck, you can stop and ask for what you need to help you. If you want to pass, you can. We might not do all of the problems. I am going to take notes so I can remember what happened. Let's start.

Part 1 (Recall))		Initial Observations of Strategies	Any additional notes
0 x 4	a 5s pth	01234	
1 x 2	a 5s pth	0 1 2 3 4	
10 x 7	a 5s pth	01234	
5 x 3	a 5s pth	01234	
2 x 6	a 5s pth	01234	
4 x 8	a 5s pth	0 1 2 3 4	
8 x 6	a 5s pth	01234	
3 x 9	a 5s pth	01234	
6 x 7	a 5s pth	01234	
9 x 6	a 5s pth	0 1 2 3 4	
7 x 8	a 5s pth	0 1 2 3 4	
4 x 4	a 5s pth	01234	
Codes a - automatic 5s - 5 seconds pth - prolonged thinking time		Strategy Levels 0 – didn't know 1 – finger counted 2 - mental math/solving in head (thinking time noted) 3 - uses known facts and strategies 4 - automatic recall	

## Part 2: Flexibility/Efficiency

Teacher: We are now going to administer Part 2 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.

Multiply by 0 0 x 4	Multiply by 1 1 x 2	Multiply by 10 10 x 7	Multiply by 5 5 x 3
What happens when you multiply by zero?	What happens when you multiply by 1?	What strategy do you use when you multiply by 10?	What strategy do you use when you multiply by 5?
product is 0 other can't articulate	product is the number being multiplied other can't articulate	understands place value other can't articulate	count by 5's other can't articulate
For example: 0 x 1 5 x 0 0 x 7	For example: 1 x 3 10 x 1 1 x 5	For example: 10 x 8 5 x 10 10 x 3	For example: 5 x 7 4 x 5 5 x 9
Do they know this strategy? No/Emerging/Yes	Do they know this strategy? No/Emerging/Yes	Do they know this strategy? No/Emerging/Yes	Do they know this strategy? No/Emerging/Yes

Multiply by 2 2 x 6	Multiply by 4 4 x 8	Multiply by 8 8 x 6	Multiply by 3 3 x 9
What do you do when you multiply by two?	What strategy do you use when you multiply by four?	What strategy do you use when you multiply by eight?	What strategy do you use when you multiply by 3?
other can't articulate	use doubles (i.e. 2 x 8 doubles) other can't articulate	use doubles (i.e. 4 x 6 doubled) other can't articulate	x2 plus the number other can't articulate
For example: 2 x 4 2 x 8 2 x 7	For example: 4 x 2 4 x 6 4 x 7	If I didn't know 8 x 3 what is a way that I could solve this problem? How about 8 x 5? How about 8 x 9?	For example: 3 x 3 3 x 6 3 x 4
Do they know this strategy? No/Emerging/Yes	Do they know this strategy? No/Emerging/Yes	Do they know this strategy? No/Emerging/Yes	Do they know this strategy? No/Emerging/Yes

Multiply by 6 6 x 7	Multiply by 9 9 x 6	Part 3: Mathematical Disposition
What strategy do you use	What strategy do you	Do you like math?
when you multiply by 6?	use when you multiply by 9?	What do you find easy?
use doubles (i.e. 3 x 7 doubled)	x10 minus the number being multiplied other	What do you find tricky?
other can't articulate	can't articulate	What do you do when you get stuck?
For example: 6 x 3 6 x 6 6 x 8	If I didn't know 9 x 4, what is a way I could think about and solve this problem? How would you solve 9 x 7? How about 9 x 5?	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?
Do they know this strategy? No/Emerging/Yes	Do they know this strategy? No/Emerging/Yes	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.)

General Observations (to be filled out after the interview)	
Automaticity	
What multiplication strategy should instruction focus on ?	

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