Missouri Assessment Program Alternate (MAP-A)

Selecting a Data Collection System

DEVELOPED BY

Missouri Department of Elementary and Secondary Education
Assessment Resource Center
Measured Progress

Selecting a Data Collection System

Collecting student performance data helps the teacher gain information. It is best used when a teacher wants to gain knowledge and desires to apply effective instructional strategies. Selecting the right form of data will make it easier for the teacher to know how to make the necessary instructional changes. There is no reason to collect data unless it will be used to make instructional changes to increase student achievement. It is important to remember that levels of assistance, or prompts, are not a form of data collection. They are a method of instruction and are used as instructional steps toward correct independent responding. They are used when the student does not understand part of the task or makes no response.

Teachers can design their own data collection sheet or use one of the three blank charts provided in this section, as described in the table below. **Do not** submit these data collection charts with the MAP-A.

Descriptions of Data Collection Charts

Chart Type	Possible Uses	Examples of Use
Single Step Task/ Activity	Record worksheet scores	Daily worksheet with 10 or more problems.
	Collect data on a skill that happens daily	Identify the next number on the calendar.
Multi-Trial/Multi-Step Task/Activity	Trials	Each time data is taken the student gets a set number of trials (e.g., five opportunities to identify coins).
	Task Analysis	Five steps for completing a shopping list from a given recipe.
Time Segments	Attending to Task	During reading, attend to the story for five minutes with data taken every minute.

All data collected for use in the MAP-A must be converted into percentages for Level of Accuracy and Level of Independence. A completed sample is included for each of the charts described above.

The following key factors should be considered when selecting a data collection system:

- Each chart should measure only one skill.
- Data should be clear and understandable.
- Chart should be simple to use and allow for the routine collection of data.
- Information on chart should be relevant to the skill you are assessing and individual student needs.

Mathematics Communication Arts/Science Data Collection Chart
Do not submit this chart with the MAP-A.
Single-Step Task/Activity

Student Name: N	Content Area: N	Strand: N
Task/Activity: N	API: N	

ACCURACY KEY	INDEPENDENCE KEY
(+) Correct Response	(+) Independent Response
(-) Incorrect or No Response N	(-) Prompted Response

Date	Week of: N					Week of: N					Week of:				
	M N	T N	W N	TH N	F N	M N	T N	W N	TH N	F N	M N	T N	W N	TH N	F N
Accuracy	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Independence	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Weekly Totals	Accuracy: Independence: N					Accuracy: Independence: N					Accuracy: Independence: N				
Weekly Percentage	Accuracy: Independence: N					Accuracy: Independence: N					Accuracy: Independence:				

This chart works well when recording a student's response on something that happens every day. For exampleo During calendar, Susie identifies the number for the day. The group counts with Susie up to the current date and then Susie gives the next number in the sequence. (See sample on next page.) o

Mathematics Communication Arts/Science Data Collection Chart (ample)

Single-Step Task/Activity

Student Name: Susie Jones N	Content Area: Math N	Strand: Numbers/Operations
Task/Activity: During calendar work, Susie identifies the number for the day. The group counts with Susie up to the correct date. She must then tell what number comes next in the sequence. N	API: NO 1.2b Use counting sequence to show correct sequence up to 100 and beyond. N	

ACCURACY KEY	INDEPENDENCE KEY
(+) Correct Response	(+) Independent Response
(-) Incorrect or No Response N	(-) Prompted Response

Date	Week of: 1/14/08 N					Week of: 1/21/08 N					Week of: 1/28/08				
	M N	T N	W N	TH N	F N	M N	T N	W N	TH N	F N	M N	T N	W N	TH N	F N
Accuracy	+	+	+	+	+	–	–	–	–	+	+	+	+	+	+
Independence	+	+	+	+	–	–	–	–	–	–	–	+	+	–	–
Weekly Totals	Accuracy: **5/5** Independence: **4/5**					Accuracy: **1/5** Independence: N**5**					Accuracy: **5/5** Independence: **2/5**				
Weekly Percentage	Accuracy: **100%** Independence: **80%**					Accuracy: **20%** Independence: **0%**					Accuracy: **100%** Independence: **40%**				

Please note:oThis chart only gives scores for the first collection period. The charting would need to continue through the second collection period as well. o

Mathematics/Communication Arts/Science Data Collection Chart

Do not submit this chart with the MAP-A.

Multi-Trial/Multi-Step Task/Activity

Student Name: N	Content Area: N	Strand: N
Task/Activity: N	API: N	
ACCURACY KEY (A) (+) Correct Response (-) Incorrect or No Response N	**INDEPENDENCE KEY (I)** (+) Independent Response (-) Prompted Response	

Trial/Step Description	Date N		Date N		Date N		Date N		Date N		Date N		Date N		Date N		Date N	
	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Total +'s	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Total Trials/Steps	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Percent (%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	

This chart works well for tasks or activities that have multiple trials or steps. Information is recorded for each trial or step and then totaled for the accuracy of the task as a whole. For example, John writes a grocery list for each recipe prepared during cooking o class. The totals would be transferred to the Entry/Data Summary Sheet. (See example on next page.) o

Mathematics Communication Arts/Science Data Collection Chart (ample)

Multi-Trial/Multi-Step Task/Activity

Student Name: John Smith N	Content Area: CA N	Strand: Writing (WP)
Task/Activity: John will write the grocery list for the recipe of the week in cooking class using pictures. N	API: WP 5.4 Write simple friendly letters, messages, and directions for making or doing something, considering a given audience.	

ACCURACY KEY (A) (+) Correct Response (-) Incorrect or No Response N	**INDEPENDENCE KEY (I)** (+) Independent Response (-) Prompted Response

Trial/Step Description	Date /N4/N8 N		Date 1/25/N8 N		Date 2/2/N8 N		Date 2/8/N8 N		Date 2/N2/N8 N		Date 2/N8/N8 N		Date 2/26/N8 N		Date 3/N/N8 N		Date 3/7/N8 N	
	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N
Get teri ls	+	-	+	-	+	-	+	+	+	+	+	+	+	+	+	+	+	+
Identify ingredients	+-+-	+--- N	+++ --- N	++-- -- N	+++ +-- N	+++ --- N	+++ - N	++-- N	-++- ++ N	--+- -+ N	+++ ++- N	+++ --- N	+++- N	++-- N	+++ ++- N	+++ --- N	++ +- N	++- - N
Choose picture	++--	++-- N	+++ +++ N	+++ --- N	+++ +++ N	+++ +-- N	+++ + N	+++ + N	-++- ++ N	--+- ++ N	+++ +++ N	+++ --+ N	+++ + N	+++ + N	+++ +++ N	+++ --+ N	++ ++ N	++ ++ N
Add to list	+++-	---- N	+++ +++ N	--- ++- N	+++ +++ N	+--- +++ N	+++ + N	++- + N	+++ +++ N	-+ +++ N	+++ +++ N	+++ +++ N	+++ + N	++-+ N	+++ +++ N	+++ +++ N	++ ++ N	++- + N
Give completed list to adult	+	- N	- N	- N	+ N	- N	+ N	- N	+ N	+ N	+ N	+ N	+ N	- N	+ N	+ N	+ N	- N
Total +'s	9	3 N	6 N	7 N	8 N	N	3 N	N	6 N	N	9 N	5 N	3 N	N	9 N	5 N	3 N	N
Total Trials/Steps	4 N	4 N	2N N	20 N	2N N	21 N	4 N	4 N	2N N	20 N	2N N	20 N	4 N	4 N	2N N	20 N	4 N	4 N
Percent (%)	64 N	21 N	8N N	35 N	86 N	54 N	93 N	71 N	8N N	55 N	95 N	75 N	93 N	71 N	95 N	75 N	93 N	71 N

+/- is given for each ingredient that John has to add to the list. The number of ingredients varies with each recipe.Ao

Mathematics/Communication Arts/Science Data Collection Chart

Do not submit this chart with the MAP-A.

Task/Activity by Time Segments

Student Name: N	Content Area: N	Strand: N
Task/Activity: N	API: N	
ACCURACY KEY (A) (+) Correct Response (-) Incorrect or No Response N	**INDEPENDENCE KEY (I)** (+) Independent Response (-) Prompted Response	

Length of Time Segment	Date N		Date N		Date N		Date N		Date N		Date N		Date N		Date N		Date N	
	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N
1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Total +'s	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Total Segments	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Percent (%)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	

This chart works well when working with a student to attend to a task. For example, Joe will attend to a story for five minutes. Data is taken on each minute of the five minute time length. (See example on next page.) o

Mathematics Communication Arts/Science Data Collection Chart (ample)

Task/Activity by Time Segments

Student Name: Joe Johnson N	Content Area: CA N	Strand: Reading (RD and/or RP)
Task/Activity: Joe will attend to the reading of a story for five minutes. N	API: RP2.N Attend to the reading of the story and to the pictures. N	

ACCURACY KEY (A) (+) Correct Response (-) Incorrect or No Response N	**INDEPENDENCE KEY (I)** (+) Independent Response (-) Prompted Response

Length of Time Segment	Date **1/14/08**		Date **1/17/08**		Date **1/26/08**		Date **2/2/08**		Date **2/11/08**		Date **2/16/08**		Date **2/21/08**		Date **3/1/08**		Date **3/7/08**	
	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N	A +/- N	I +/- N
1	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N
2	+ N	_ N	+ N	_ N	+ N	_ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N	+ N
3	_ N	_ N	_ N	_ N	_ N	_ N	+ N	_ N	+ N	_ N	+ N	_ N	+ N	+ N	+ N	+ N	_ N	+ N
4	_ N	_ N	_ N	_ N	+ N	_ N	_ N	_ N	+ N	_ N	+ N	_ N	+ N	_ N	+ N	_ N	+ N	+ N
5	_ N	_ N	_ N	_ N	_ N	_ N	_ N	_ N	_ N	_ N	+ N	_ N	+ N	_ N	_ N	+ N	+ N	+ N
Total +'s	2 N	N	2 N	N	3 N	N	3 N	2 N	4 N	2 N	5 N	2 N	5 N	3 N	4 N	4 N	4 N	5 N
Total Segments	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N	5 N
Percent (%)	40 N	2N N	40 N	20 N	60 N	20 N	60 N	40 N	80 N	40 N		N40 N		N 6N N	80 N	80 N	80 N	N