

# MAND COLD PROBE DATA COLLECTION PROTOCOL

**LEARNER:** *John Smith*      **Mastery Criteria:** (Example only) 3 consecutive days @100% correct when motivation is present and without prompts.

Reinforcer	Target Mand	Prior c's	M: 3/7	T: 3/8	W: 3/9	TH: 3/10	F: 3/11																																													
<i>BOOK</i> <i>Only the books with trunks are motivating right now.</i>	Vocal "book"	2	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC
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<i>Pretzel</i> <i>Stick pretzels</i>	Vocal "pretzel"		<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC
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<i>Water</i> <i>Use his clear water container with the pop up straw. He can see that its water and not orange juice.</i>	Vocal "water"	1	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC	<table border="1"> <tr><td>C</td><td>MO</td><td>MO</td></tr> <tr><td>Y</td><td>N</td><td>N</td></tr> <tr><td>NR</td><td>SRL</td><td>SFC</td></tr> </table>	C	MO	MO	Y	N	N	NR	SRL	SFC
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*chip*  
*Drink it, cup*

**ALYSON**

**Description:** The Mand Cold Probe Data Collection form aids in gathering daily response data on mand targets selected for intensive mand instruction. The cold probe is a method of intermittent data collection, NOT trial by trial data (Cumming, 2004; Dollins & Carbone, 2003; Sundberg & Hale 2003)\*. It serves to determine response strength and correctness after some time has lapsed, typically a day. The probe is conducted as the first **non-teaching** trial of the day. The instructor then evaluates the response to determine its correctness or error type and records this information on the form.

**Goal:** The goal of collecting this data is to guide the sequencing of mands taught, to show progress toward the pre-established mastery criteria, and to aid in data-based decision making.

**Mastery criteria:** Each learner’s ability with the communication mode selected should be carefully evaluated when setting mastery criteria, as well as the level of mand being taught. A starting guideline for mastery is **three consecutive days at 100% correct requesting when motivation is present without prompts**. A disruption in sequence such as “no MO”, (no motivation) an absence or no school are NOT considered disruptions in the consecutive day sequence since there was no opportunity for a mand to occur. Note: Some symptoms of a disability can significantly impair vocalizations and/or physical movements, therefore other more intensive mand instruction and data collection may be necessary. Please see additional mand data forms for these procedures.

\*Cummings, Anne Rena, "Evaluating Progress in Behavioral Programs for Children with Pervasive Developmental Disorders: Continuous Versus Intermittent Data Collection" (2004); 1088; Dollins, P., & Carbone, V. J. (2003, May). Using probe data recording methods to assess learner acquisition of skills. In V. J. Carbone (Chair), *Research related to Skinner's analysis of verbal behavior with children with autism*; Sundberg, M. L., & Hale, L. (2003, May). Using textual stimuli to teach vocal intraverbal behaviors. In A. I. Petursdottir (Chair), *Methods for teaching intraverbal behavior to children*.

## Mand Cold Probe Data Collection Protocol

Steps	Record	Procedures
<b>1</b>	<b>Name</b>	<ul style="list-style-type: none"> <li>Record the learner’s name at the top left of the document.</li> </ul>
<b>2</b>	<b>Dates for the Week</b>	<ul style="list-style-type: none"> <li>Record the dates for the week data is being collected. If the learner is absent or there is no school on any of the days, record “absent” or “no school” across the day’s column. This day will not be counted in your mastery criteria since there was no opportunity to probe the mand. Tracking this information will allow you to observe patterns related to number of teaching opportunities.</li> </ul>
<b>3</b>	<b>Mastery Criteria</b>	<ul style="list-style-type: none"> <li>Record the mastery criteria for the specific level of mand being taught.</li> </ul>
<b>4</b>	<b>Reinforcer</b>	<ul style="list-style-type: none"> <li>List 2 – 5 reinforcers targeted for instruction.                             <ul style="list-style-type: none"> <li>Select items that are of high value and motivating to the learner.</li> <li>Select across a variety of reinforcers if possible (toys, leisure items, activities, edibles, etc.) vs. all of one type.</li> </ul> </li> <li>If applicable, add any additional information in this column that is relevant to this item to help guide the instructor. (i.e. contriving/capturing/sustaining MO for an item, any special interactions with the item, conditions of use of a specific reinforcer, etc.) (For more detailed reinforcer selection information see specific mand instruction protocols).</li> </ul>
<b>5</b>	<b>Target Mand</b>	<ul style="list-style-type: none"> <li>Record the target mand and response type that is required from the learner and any factors related to the response. Here are some response type examples: <b>Vocal; Vocal approximation; Sign; Sign plus vocal approximation.; PECs (picture exchange); Device.</b></li> <li>Record any additional information about the response, for example if the learner is using a sign approximation that should be noted and reviewed in advance. (Example: Vocal “book”)</li> </ul>
<b>6</b>	<b>Prior Corrects “C”</b>	<ul style="list-style-type: none"> <li>Record the number of corrects (“C”) being carried over from a previous week to track the consecutive day sequence (for “cold probe” data).                             <ul style="list-style-type: none"> <li>If there are NO previous corrects, then leave this area blank.</li> <li><b>DO NOT</b> add numbers to this box as corrects are scored. <b>It is only for carry over data from one week to the next.</b></li> <li>If an “incorrect” is scored in the consecutive sequence, this number is no longer used as it ends your opportunity to complete a consecutive day sequence.</li> </ul> </li> </ul> <p><b>Example:</b> <i>If a “C” was scored on the previous Friday, carry it over to the next week’s Mand Cold Probe form for that item. Record a “1” in the box next to the carried over skill yet to be mastered. Add this number to the next consecutive “correct” that occurs until mastery criteria is met (i.e. Friday, Monday, Tuesday = 3 consecutive days). If the learner scores an “incorrect” on Monday, this number is no longer used as it ends your opportunity for a consecutive day sequence.</i></p>

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<b>7</b>	<b>Motivation Check</b>	<ul style="list-style-type: none"> <li>• <b>Probe for motivation for each reinforcer targeted</b> by capturing or contriving the learner’s motivation to request the reinforcer, if necessary. <b>DO NOT</b> prompt the mand required during the PROBE process.             <ul style="list-style-type: none"> <li>• Circle <b>“N”</b> if motivation is NOT present. The probe is complete for this reinforcer and you will STOP collecting PROBE data on this reinforcer.</li> <li>• Circle <b>“Y”</b> if motivation IS present and proceed to <b>STEP 8</b>.</li> </ul> </li> </ul>
<b>8</b>	<b>Recording Mand Probe Data</b>	<ul style="list-style-type: none"> <li>• Record mand data by <b>(1) circling Correct “C” or Incorrect “IC” or (2) by circling Correct “C” or Incorrect “IC” PLUS recording the mand error type using the error codes provided.</b> For instructors who are new at data collection and mand instruction, recording Correct or Incorrect is an acceptable starting point. Being able to distinguish error types can expedite critical instructional changes, build awareness about instructional and error correction procedures and improve these practices across staff.</li> <li>• The following are error definitions and suggested data collection procedures. It takes a conservative approach to learner responding to increase likelihood of mand mastery and retention.             <ol style="list-style-type: none"> <li>1. <b>Correct Mand: Circle “C”:</b> A correct mand matches exactly the pre-established mand response type when motivation is present.</li> <li>2. <b>Incorrect Mand: Circle “IC”:</b> An incorrect mand does NOT match the pre-established mand response type when motivation is present. After circling <b>“IC”</b>, the instructor can include additional information about the error type as follows:                 <ol style="list-style-type: none"> <li>a. <b>Incorrect Mand: Circle “IC” and record the mand error in the blank box provided. (Example:</b> Teacher presents a book, the learner reaches for it and says “movie”. Teacher records “movie” in the blank box).</li> <li>b. <b>Scrolled Mand: Circle “IC” and “SRL” code.</b> A scrolled response is when the learner mands by chaining several mands together indiscriminately (randomly) with OR without one of the mands being correct. <b>(Example:</b> A <u>book</u> is presented, the learner shows motivation and mands "paper, book, truck" or “paper, blue” (saying, signing, PECS, or device). It is not necessary to record what was scrolled. (But do note if all scrolled mands are identical and habitually repeated regardless of the items presented.)</li> <li>c. <b>Motivation present but NO mand occurs: Circle “IC” and “NR”.</b> This occurs when the learner demonstrates motivation but does not produce a mand to obtain the item within a reasonable time frame, (approximately 5 – 10 secs). <b>(Example:</b> the learner reaches for the book but does not say, sign or select “book” and no other response occurs, even when efforts to strengthen motivation through capturing/contriving are made).</li> <li>d. <b>Self-corrected mand: Circle “IC” and “SFC”.</b> A <b>self-correction</b> is an intentional attempt by the learner to produce a correct mand immediately after an incorrect mand is given and <u>no prompting</u> from others has occurred to help produce the correction. <b>(Example:</b> No prompting such facial gestures, comments, questioning, delays in delivery or otherwise that causes the learner to change his/her request. <b>Self-correction example:</b> Learner reaches for the item and says “can I have the marker, ...wait... crayon?”).</li> </ol> </li> </ol> </li> </ul>

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		<p><b>When errors or non-responding occur during the cold probe...</b></p> <ul style="list-style-type: none"> <li>• If motivation is present, but the request does not occur within a reasonable time frame, (approximately 5 – 10 secs) prompt the mand and deliver the reinforcer.</li> <li>• If motivation is present but an incorrect response occurs, run the appropriate error correction procedure and deliver the reinforcer. (See specific mand error correction protocols for more information)</li> </ul>
<p><b>9</b></p>	<p><b>Daily Progress Monitoring Recording</b></p>	<p><b>(1) When the pre-established mastery criterion is met for a mand, do the following:</b></p> <ol style="list-style-type: none"> <li>a. Highlight the reinforcer and its consecutive dates as shown in the example above.</li> <li>b. Record the date mastered on the corresponding Skills Progress Monitoring form for mands.</li> <li>c. Record the number of mands mastered on the corresponding cumulative graph.</li> <li>d. Select a new reinforcer(s) to teach from the Skills Progress Monitoring form for mands and add the start date(s).</li> <li>e. Add the new reinforcer(s) selected to the Mand Cold Probe Data Collection form in the next available row and begin teaching and collecting data.</li> <li>f. Ensure that the newly mastered mand(s) is demonstrating generalization to the natural environment (across people, environments and other similar reinforcers).</li> </ol> <p><b>(2) If NO skills were mastered for any specific mand being taught, do the following:</b></p> <ol style="list-style-type: none"> <li>a. Find the corresponding graph for the mand(s) not mastered.</li> <li>b. Record the same number previously recorded to show no change in the data for that day.</li> <li>c. Continue teaching the mand and reviewing data daily.</li> <li>d. If the mand target is two days past the mastery criteria established and showing great variability across data, an instructional review is warranted.</li> </ol>