Guidelines to PDMS-2

Peabody Developmental Motor Scales-2

August 2011

Carol Dansberger PT
Birth through Five CCPS
Standardized Motor Testing

- To determine eligibility for motor services through CCPS, Birth through Five program

- Evaluates children with disabilities/and or atypical motor development

- Evaluates Fine and Gross Motor Developmental Skills by Occupational and Physical Therapists
PDMS-2 Test Parts

- Purchase test kit materials by mail or online.
- Includes examiner’s manual, guide to item administration, examiner record booklet, profile/summary form, motor activities program, manipulatives, Peabody Motor Developmental Chart.
- Costly and copyright protected.

Open link for kit example

Evaluations

Subtests are the evaluation and named:

1. **Reflexes** (up to 11 months)
2. **Stationary**
3. **Locomotion**
4. **Object Manipulation** (starts at 12 months)
5. **Grasping**
6. **Visual-Motor Integration**

See PDMS-2 extrad Examiner’s Manual on pg 3-4 for subtest descriptions.

Blue Examiner Record Booklet- subtests are written on the bottom of each page
# Examiner Record Booklet

## Peabody Developmental Motor Scales

### Section I. Identifying Information

<table>
<thead>
<tr>
<th>First Administration</th>
<th>Second Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Tested</td>
<td>Date Tested</td>
</tr>
<tr>
<td>Date of Birth</td>
<td>Date of Birth</td>
</tr>
<tr>
<td>Chronological Age</td>
<td>Chronological Age</td>
</tr>
<tr>
<td>Prematurity Adjustment</td>
<td>Prematurity Adjustment</td>
</tr>
<tr>
<td>Corrected Age</td>
<td>Corrected Age</td>
</tr>
<tr>
<td>Age in Months</td>
<td>Age In Months</td>
</tr>
</tbody>
</table>

| Examiner’s Name               | Examiner’s Name               |
| Examinee’s Title              | Examinee’s Title              |

### Subtest Results

<table>
<thead>
<tr>
<th>Reflexes</th>
<th>Object Manipulation</th>
<th>Raw Score</th>
<th>Raw Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationary</td>
<td>Grasping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locomotion</td>
<td>Visual-Motor Integration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Administration</th>
<th>Fourth Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Tested</td>
<td>Date Tested</td>
</tr>
<tr>
<td>Date of Birth</td>
<td>Date of Birth</td>
</tr>
<tr>
<td>Chronological Age</td>
<td>Chronological Age</td>
</tr>
<tr>
<td>Prematurity Adjustment</td>
<td>Prematurity Adjustment</td>
</tr>
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### Subtest Results

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<tr>
<td>Stationary</td>
<td>Grasping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locomotion</td>
<td>Visual-Motor Integration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Additional copies of this form (#9283) may be purchased from:

PRO-ED, 8700 Shannon Creek Blvd., Austin, TX 78757-6897
800/897-3202, Fax 800/397-7633, http://www.proedinc.com
Subtests/Quotients

- **Fine Motor (FMQ)** - 2-Tests: Grasping and Visual-Motor Integration

- **Gross Motor (GMQ)** - 3-Tests: Reflexes (up to 11 months), Stationary, Locomotion, and Object Manipulation (starts at 12 months)

- **Total Motor (TMQ)** - Is a combination of both fine and gross motor subtests
  - View the link for more explanation.
  
Scoring the PDMS 2

Read the Guide to Item Administration pg 1-52 and Examiner’s Manual pg 15-17.

Teaches how to conduct the subtest and scoring.

- Standardized testing

Scoring Criteria:

Score items: 2, 1, 0.

2 = Mastered, 1 = Not Fully, 0 = cannot or will not attempt

Record the score in the Examiner Record Booklet (Blue). Refer back to slide 5.
Start Where?

- **Entry Point**- child’s age or item child can successfully complete

- **Basal Level**- child receives score of 2 on three items in a row

- **Ceiling Level**- child receives score of 0 on three items in a row

- **Note:**
  Anything below the basal level is given a 2 and added to the subtest raw score.

Read pg 16-17 in the Examiner’s Manual.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Age in Months</th>
<th>Item NAME, Position, and Description</th>
<th>Score Criteria</th>
<th>Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>37–38</td>
<td>CUTTING PAPER <em>(Sit at a table)</em> Cut piece of 8.5 x 11 in. paper in half. Give 1 piece of paper and scissors to child. Say, “Cut the paper like I did.”</td>
<td>2: Cuts paper into 2 pieces, 1: Cuts paper ½ or less across, 0: Snips with scissors</td>
<td>2: 6th item given</td>
</tr>
<tr>
<td>58</td>
<td>39–40</td>
<td>LACING STRING <em>(Sit at a table)</em> Lacing strip and lace Say, “Watch me lace.” Lace down through 1st hole, up through 2nd hole. Lace string through 3 holes. Show strip to child, then remove lace and give to child. Say, “You do it like I did.”</td>
<td>2: Laces 3 holes, 1: Laces 2 holes, 0: Puts lace through 0–1 hole</td>
<td>2: 5th item given</td>
</tr>
<tr>
<td>59</td>
<td>39–40</td>
<td>COPYING CROSS <em>(Sit at a table)</em> Place paper, marker, and card with cross on table. Say, “Draw lines just like these that cross in the middle.”</td>
<td>2: Draws intersecting lines that are within 20 degrees of perpendicular, 1: Draws intersecting lines that are more than 20 degrees from perpendicular, 0: Fails to intersect lines</td>
<td>2: 4th item given</td>
</tr>
<tr>
<td>60</td>
<td>41–42</td>
<td>CUTTING LINE <em>(Sit at a table)</em> Give child paper with 5 x ¼ in. line and scissors. Run your finger along line and say, “Cut on the line.”</td>
<td>2: Cuts within ½ in. of line the entire length of line, 1: Cuts in direction of line but more than ½ in. from line, 0: Snips with scissors</td>
<td>1: 3rd item given</td>
</tr>
<tr>
<td>61</td>
<td>41–42</td>
<td>COPYING CROSS <em>(Sit at a table)</em> Place paper, marker, and card with cross on table. Say, “Draw lines just like these that cross in the middle.”</td>
<td>2: Draws intersecting lines that are within 20 degrees of perpendicular and lengths on each side of middle vary no more than ¼ in., 1: Draws intersecting lines that are more than 20 degrees from perpendicular and/or lengths on each side of middle vary more than ¼ in., 0: Fails to intersect lines</td>
<td>2: 1st item given</td>
</tr>
<tr>
<td>Item #</td>
<td>Age in Months</td>
<td>Item NAME, Position, and Description</td>
<td>Score Criteria</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>---------------</td>
<td>--------------------------------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>51–52</td>
<td>BUILDING STEPS <em>(Sitting at a table)</em> Build steps as pictured in Guide to Item Administration <em>(3 cubes on bottom)</em>. Leave steps standing briefly. Then knock down and give 6 cubes to child. Say, &quot;Build the steps like I did.&quot;</td>
<td>2 Builds steps as illustrated&lt;br&gt;1 Builds steps with space between cubes or without proper alignment&lt;br&gt;0 Builds structure other than steps</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>53–54</td>
<td>CONNECTING DOTS <em>(Sitting at a table)</em> Place paper with 2 dots and marker on table. Point to dots and say, &quot;Draw a straight line from 1 dot to the other dot.&quot;</td>
<td>2 Connects dots; line does not deviate more than (\frac{1}{4}) in. from horizontal&lt;br&gt;1 Connects dots; line deviates between (\frac{1}{4}) and (\frac{1}{2}) in. from horizontal&lt;br&gt;0 Fails to connect dots or line deviates more than (\frac{1}{2}) in. from horizontal</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>53–54</td>
<td>CUTTING SQUARE <em>(Sitting at a table)</em> Give paper with square on it and scissors. Run your finger around square and say, &quot;Cut out the square along the lines.&quot;</td>
<td>2 Cuts out square within (\frac{1}{4}) in. of lines&lt;br&gt;1 Cuts out square within (\frac{1}{2} - \frac{3}{4}) in. of lines&lt;br&gt;0 Cuts out square more than (\frac{1}{2}) in. from lines</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>53–54</td>
<td>BUILDING PYRAMID <em>(Sitting at a table)</em> 12 cubes Build 6-cube pyramid as pictured in Guide to Item Administration and leave standing. Put 6 cubes in front of child and say, &quot;Build one like mine.&quot;</td>
<td>2 Builds pyramid as illustrated&lt;br&gt;1 Builds pyramid but cubes are touching in some places&lt;br&gt;0 Builds structure other than pyramid</td>
<td></td>
</tr>
</tbody>
</table>
5 Test Scores: Raw Scores, Age Equivalents, Standard Scores, Quotients, Percentile

1. Raw Scores are total points on a subtest.

2. Age Equivalents: Raw scores are converted to age equivalents. See Appendix C, pg 118-119, in the back of the examiner’s manual.

3. Standard Scores compare across subtests. See tables A.1 to A.37, pg 74-110. To interpret standard scores use Table 4.2 on page 31.

4. Quotients: GMQ, FMQ, TMQ (gross, fine, total motor) see slide 6 for review.

5. Percentile Score are values that are equal to or below standard sampled. Derived from subtests and quotients. Use tables A and B pg 73-115.
Raw Scores

Raw Scores:

- Add scores from each subtest evaluated.
  - Example: Grasping and Visual-Motor are subtests for fine motor evaluations
  - Record the raw score in the Blue and/or Red forms
    Example: Grasping = 30

Raw Scores are used to calculate Age Equivalents.
# PDMS-2 Profile/Summary Form

## Peabody Developmental Motor Scales

### Section I. Identifying Information
- **Child’s Name:**
- **Year:**
- **Month:**
- **Day:**
- **Examiner’s Name:**
- **Examiner’s Title:**
- **Date of Birth:**
- **Chronological Age:**
- **Prematurity Adjustment:**
- **Corrected Age:**
- **Age in Months:**
- **Sex:** [ ] Female [ ] Male

### Section II. Record of Scores

<table>
<thead>
<tr>
<th>Subtest</th>
<th>Raw Score</th>
<th>Age Equivalent</th>
<th>Tile</th>
<th>Standard Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Sum of Standard Scores:**
- **Quotients:**
  - GMQ
  - FMQ
  - TMQ
- **Percentiles:**

### Section III. Profile of Scores

<table>
<thead>
<tr>
<th>Age</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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• Age Equivalent:
  – Look up the age equivalent, in months, for each raw score. Compare the age equivalent to the child’s age
  – Needs to be 25% delayed to qualify for services

Example: Child is 30 months old.
  • Stationary raw score=38  Age equivalent= 18 months
  • 25% of 30= 22.5 months
  • Child qualifies.  Age equivalent is below 22.5 months
Standard Scores: To convert the raw score to standard scores.

1. Find the child’s age in months on one of the tables listed in appendix A.
2. Look for the subtest (listed across the top of the pg.)
3. Look down the columns until you find the raw score from your evaluation.
4. Shift your eyes to the far right column (Standard Scores column) and record the number.

This new number is your standard score.
Example Standard Score

- Child is 30 months old
  - Stationary Raw Score is 30
  - Standard Score = 8
  - Turn to pg 31 in the Examiner’s Manual and find your standard score (Example=8)
  - What does the description say?
  - Answer = Average

Note: You may want to add the descriptive language (Average) with your age equivalent (number) to help parents, team members, better understand the tests results.
### Table 4.2
Guide to Interpreting PDMS-2 Subtest Standard Scores

<table>
<thead>
<tr>
<th>Standard Scores</th>
<th>Description</th>
<th>Percentage Included in Bell-Shaped Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>17–20</td>
<td>Very Superior</td>
<td>2.34</td>
</tr>
<tr>
<td>15–16</td>
<td>Superior</td>
<td>6.87</td>
</tr>
<tr>
<td>13–14</td>
<td>Above Average</td>
<td>16.12</td>
</tr>
<tr>
<td>8–12</td>
<td>Average</td>
<td>49.51</td>
</tr>
<tr>
<td>6–7</td>
<td>Below Average</td>
<td>16.12</td>
</tr>
<tr>
<td>4–5</td>
<td>Poor</td>
<td>6.87</td>
</tr>
<tr>
<td>1–3</td>
<td>Very Poor</td>
<td>2.34</td>
</tr>
</tbody>
</table>
Quotients and Percentiles are the remaining 2 scores to consider from your evaluation.

**Quotients:** Derived from the sum of the standard scores.

**Step 1:** Add the standard scores from the 3 (gross motor), 2 (fine motor), or both gross and fine motor (total motor).

**Example:** Gross motor standard scores= Stationary (8) Locomotion (5) Object Manipulation (8)=21

Record the sum (21) under Sum of Standard Scores on the red summary form.
Step 2: Look for your subtest column in Table B

- Total Motor (5 Subtests). Gross Motor (3 Subtests). Fine Motor (2 subtests)
- Look down the column to find the standard score (21) see previous slide (we picked Gross Motor)
- Gaze to the far right for the quotient column
- Find your quotient (81) and record it in on the red summary form

Quotient Scores have descriptive language similar to Standard Scores. Turn to pg 32. Find (81)

- Answer= Below Average
### Table 4.3
Guide to Interpreting PDMS-2 Quotient Scores

<table>
<thead>
<tr>
<th>Quotient Scores</th>
<th>Description</th>
<th>Percentage Included in Bell-Shaped Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>131-165</td>
<td>Very Superior</td>
<td>2.34</td>
</tr>
<tr>
<td>121-130</td>
<td>Superior</td>
<td>6.87</td>
</tr>
<tr>
<td>111-120</td>
<td>Above Average</td>
<td>16.12</td>
</tr>
<tr>
<td>90-110</td>
<td>Average</td>
<td>49.51</td>
</tr>
<tr>
<td>80-89</td>
<td>Below Average</td>
<td>16.12</td>
</tr>
<tr>
<td>70-79</td>
<td>Poor</td>
<td>6.87</td>
</tr>
<tr>
<td>35-69</td>
<td>Very Poor</td>
<td>2.34</td>
</tr>
</tbody>
</table>
Percentiles
Table A in the Appendix

**Percentiles:** Are scores that compare your test results to the sampled standard. Subtest raw scores are converted to percentiles.

**Example 1:** Child is 30 months.
Stationary raw score = 38 (Table A.27 pg 100)
Percentile = 25 (far left column)
Record 25 on red summary form.

**Note:** Table A also gives you your standard scores using raw scores.
• To compare all the subtests in one of the three areas i.e. TMQ, FMQ, GMQ.

• Example 2
  – Gross motor (3 subtests) score= 21
  – Use Table B
  – Converts to percentile rank of 10
  – This means 10% of the kids tested in the standard sample scored here or below
PDMS-2 Summary Points

• Reliable but lengthy and costly
• Needs prior review not easy to interpret without advance practice
• Used by occupational and physical therapists only
• Not best fit for every disabled or atypical child
• May be combined with other testing to help convey true motor delay.
• Does cover large age range (birth to 5)
• Uses a variety of Test Scores (5) and Evaluations or Subtests (6)
#1 Review the Guide to Item Administration. Here you will find the standardized test procedure for each subtest. Best to carry the book with you for quick reference until memorized.

#2 For younger children 0-2 years maybe 3, the profile/summary (red) form, item mastery (section IV), may be most helpful to compare subtests skills mastered to age in months.

#3 Older children 3-5 years the Examiner Record Booklet (blue) is recommended along with the Profile/Summary Form (red) front page to record and score your test results.

#4 Much easier to use age equivalents with descriptive language to determine eligibility.

#5 The graph on the red form (profile of scores) is nice for tracking progress and shared with parents/team members.

#6 Consider using other evaluation tools, and clinical judgment in conjunction with the PDMS-2.