



ability profiler™

Administration Manual



U.S. Department of Labor
Employment and Training Administration

Getting Started . . .

The complete **O*NET® Ability Profiler™** consists of four packets:

Instrument Packet

(includes: O*NET Ability Profiler Form; Using Your Results; Part 7 Answer Sheet; Answer Sheet)

Administration Packet

(includes: O*NET Ability Profiler Administration Manual; User's Guide; Record of Apparatus Scores; Three-Dimensional Space Cutouts)

Scoring Packet

(includes: Pre-marked Response Sheets for Scoring Calibration; CD-Rom containing the O*NET Ability Profiler Scoring Program (APSP) software and a PDF version of the APSP User's Guide)

Training Packet

(includes: O*NET Ability Profiler Administrator Training Manual; Overhead Masters; Participant's Guide)

To administer the **O*NET Ability Profiler**, you will need both the *O*NET Ability Profiler Instrument Packet* and the *O*NET Ability Profiler Administration Packet*.

To score the **O*NET Ability Profiler**, you will need *the O*NET Ability Profiler Scoring Packet*.

To conduct training on how to administer the **O*NET Ability Profiler**, you will need the *O*NET Ability Profiler Training Packet*.

To order additional instrument, administration, scoring, and training materials, contact the **U.S. Government Printing Office (GPO)**, telephone: 202/512-1800 (DC area) or 1-866/512-1800 (toll free); or fax: 202/512-2250; or visit their online bookstore at: <http://bookstore.gpo.gov>.

To download various components, visit the **National O*NET Consortium**, "Developer's Corner" web page, under the heading, "O*NET Career Exploration Tools," at: http://www.onetcenter.org/dev_tools.html.

Special Notice: User's Agreement

The O*NET™ Career Exploration Tools are composed of the O*NET WORK IMPORTANCE LOCATOR, O*NET INTEREST PROFILER, O*NET WORK IMPORTANCE PROFILER, O*NET COMPUTERIZED INTEREST PROFILER and O*NET ABILITY PROFILER products and are owned by the U.S. Department of Labor, Employment and Training Administration (DOL/ETA). All O*NET Assessment/Counseling Tools are copyrighted. O*NET is a trademark of DOL/ETA.

The DOL/ETA developed the O*NET Career Exploration Tools as career counseling, career planning, and career exploration tools. In order for each tool to provide an objective assessment, extensive research and development was conducted to ensure that the directions, format, items, and score reports lead to valid assessment. The DOL/ETA adhered to the high standards of the American Psychological Association, the American Education Research Association, and the National Council on Measurement in Education in developing the O*NET Career Exploration Tools. In developing the tools, fairness analyses were conducted to ensure that score results were equally valid both from a statistical and a usability perspective.

Results provided from the O*NET Career Exploration Tools are part of a whole-person approach to the assessment process. They provide useful information that individuals can use to identify their strengths, the parts of work they like to do, and the parts of work that they may find important. Individuals can use results to identify training needs and occupations that they may wish to explore further. Individuals are strongly encouraged to use additional information about themselves with O*NET Career Exploration results when making career decisions.

As such, the use of the O*NET Career Exploration Tools is authorized for career exploration, career planning, and career counseling purposes only. Each O*NET Career Exploration Tool must be used consistent with its own "User's Guide." No other use of these tools or any part of the tools is valid or authorized.

All users are bound by the terms of "Special Notice: User's Agreement." If you use any of the O*NET Career Exploration Tools, you have agreed to be bound by the terms of "Special Notice: User's Agreement."

If any of the O*NET Career Exploration Tools are used for a purpose or purposes other than career exploration, career planning, and career counseling purposes, it is a violation of this Agreement and neither the U.S. Department of Labor nor the Employment and Training Administration is liable for any misuse of the tools. The DOL/ETA reserves the right to pursue all legal remedies for violations of this "Special Notice: User's Agreement."

Recipients of federal assistance from the U.S. Department of Labor must ensure that individuals with disabilities are afforded an equal opportunity to use services based on the O*NET Career Exploration Tools. For further discussion of these obligations, see the U.S. Department of Labor's Equal Opportunity Guidance Letter No. 4. This document can be found at the Department of Labor's Compliance Assistance web page at: <http://www.dol.gov/oasam/regs/compliance/main.htm> or by contacting the Department of Labor, Office of Compliance Assistance and Planning, Civil Rights Center.

No additional license is required to obtain, copy in whole, use or distribute the O*NET Career Exploration Tools. A user must not remove any copyright or trademark notice or proprietary legend contained within the O*NET Career Exploration Products. Further, all copies and related documentation must include the copyright and trademark notices. Users must abide by the following instructions on proper trademark usage when using the O*NET Career Exploration Products:

1. Since O*NET is trademarked, users must acknowledge the use of the O*NET Career Exploration Tools in and on their products. The trademark symbol must be properly displayed when referring to O*NET products. When using the

Special Notice: User's Agreement (continued)

O*NET™ name, users must use "O*NET" as an adjective, not as a noun or verb, followed by the proper generic product name. For example: "...with O*NET Career Exploration Tools," "...formulated from O*NET Career Exploration Tools," or "...includes information from the O*NET Career Exploration Tools," not "...includes O*NET." In addition, the O*NET name must not appear in the possessive form.

Proper trademark citation:

O*NET™ is a trademark of the U.S. Department of Labor, Employment and Training Administration.

2. The version number of O*NET Career Exploration Tools must be clearly stated in and on user products.
3. "O*NET In It" bug with ™ symbol must appear in and on user products:



This graphic can be obtained from the National O*NET Consortium web site (<http://www.onetcenter.org>) under the listing, "Developer's Corner."

O*NET Career Exploration Tools are provided "AS IS" without expressed or implied warranties. Certain components and/or files of the software have been licensed by third parties to the U.S. Department of Labor. Such third parties own and/or have copyrights or other rights in those components and these components of the software may not be distributed separately. You may contact the U.S. Department of Labor or the National Center for O*NET Development for a list of such components and third parties. Your use of this software and these components is subject to this "Special Notice: User's Agreement."

SPECIAL NOTICE: O*NET DEVELOPER'S AGREEMENT

Users intending to develop other products, software, or systems applications using O*NET Career Exploration Tools products must follow the "O*NET Developer's Agreement," which can be found on the "Developer's Corner" at <http://www.onetcenter.org>, or contact the National O*NET Consortium, North Carolina Employment Security Commission, P.O. Box 27625, Raleigh, NC 27611.

Foreword

The **O*NET Ability Profiler™** is one of the **O*NET Career Exploration Tools**, developed for use with the Occupational Information Network (O*NET™) database. The **O*NET Career Exploration Tools** include:

- The **O*NET Computerized Interest Profiler**—helps you find out what your work-related interests are. It is similar to the paper and pencil *O*NET Interest Profiler*, except that you answer and score the questions on a computer.
- The **O*NET Interest Profiler** (paper version)—is similar to the *O*NET Computerized Interest Profiler*, except that you answer and score the questions by hand.
- The **O*NET Work Importance Locator**—helps you decide what is important to you in a job. It can help you identify occupations that you may find satisfying.
- The **O*NET Work Importance Profiler**—a computer-based version of the *O*NET Work Importance Locator*.

These tools may be used separately or together for career exploration, and they provide three important pieces of information:

- 1) what the user can do well,
- 2) what the user likes to do, and
- 3) what is important to the user.

The **O*NET Ability Profiler** is computer-scored, unlike some of the other tools, which are self-scoring. The computer software generates an O*NET Ability Profiler Score Report, which provides percentile scores, guidelines for understanding and using the results, and lists of compatible O*NET occupations for exploration.

The **O*NET Ability Profiler** marks a new era in ability assessment for the U.S. Department of Labor (DOL). The DOL objective was to develop an assessment tool that could easily be incorporated into Workforce Investment Act initiatives and programs aimed at improving the workforce and workplace of the twenty-first century. The **O*NET Ability Profiler** is a new multiple-ability assessment instrument that is technically and operationally improved over earlier DOL ability instruments. The **O*NET Ability Profiler** incorporates the best of earlier DOL ability

Foreword (continued)

instruments, with psychometric, technical, and operational enhancements. These enhancements include, but are not limited to:

- reducing number of test items and subtests;
- including items free from bias;
- providing instructions that communicate the appropriate test-taking strategy for each of the subtests (power or *speeded*);
- grouping subtests so that users will take one type of test first (power) followed by the second type of subtest (*speeded*);
- reducing the *speededness* of certain subtests;
- developing administration options—either with or without dexterity subtests;
- enhancing legibility and comprehension level of all written materials (test booklets and instructions, test items, answer sheets, introduction script, and Administration Manual);
- modernizing the typography and layout format of the test booklets, test items, answer sheet, and Administration Manual
- developing a new self-interpretable O*NET Ability Profiler Score Report that links user results directly to the world of work through O*NET occupations and information;
- reporting results based on a comparison of the relative profile or shape of an examinee's results (when expressed as a bar graph) with the typical ability profile for O*NET occupations.

For a summary of the development of the **O*NET Ability Profiler**, please refer to the *O*NET Ability Profiler User's Guide Chapter 5*.

For more detailed technical information about the development of the **O*NET Ability Profiler**, please see:

McCloy, R., Campbell, J., & Oswald, F. (1999). Generation and use of occupational ability profiles for exploring O*NET occupational units (Vols I & II). Raleigh, NC: National Center for O*NET Development.

Segall, D.O., & Monzon, R.I. (1995). Equating forms E and F of the P&P GATB. San Diego, CA: Navy Personnel Research and Development Center.

Acknowledgments

The **O*NET Ability Profiler** was produced and funded by the O*NET Project of the U.S. Department of Labor, Employment and Training Administration.

The **O*NET Ability Profiler** and its associated administrative materials were developed with the help and support of many groups and individuals. Robert Litman and Donna Dye of the U.S. Department of Labor's Office of Policy and Research and O*NET Project deserve special recognition for their particular contributions. Sincere appreciation is due DOL's Assessment Research and Development Centers' staffs for their thoughtful comments, technical suggestions, and editorial reviews.

The projects associated with the **O*NET Ability Profiler** were completed under the direction of David Rivkin and Phil Lewis of the National O*NET Consortium and the National Center for O*NET Development. Special appreciation is due the staffs of the Pacific Assessment Research and Development Center; the State Test Research Units of Oregon, Colorado, New Mexico, Arizona, and Utah; and the National Center for O*NET Development for their extensive efforts in developing the **O*NET Ability Profiler** and creating supporting administrative materials. In particular, Vince MacManus, Michelle Daggett, Brian Moritsch, Jeannie Stroupe, and Jerry Pickett made significant contributions to the **O*NET Ability Profiler** projects. And, finally, many thanks are due to the American Institutes for Research; Dr. Fritz Drasgow and Alan Mead with HRStrategies; Drs. Laress Wise, Rodney McCloy, and Carolyn Harris with HumRRO; Rey Monzon and Dr. Dan Segall with the Navy Personnel Research and Development Center; Dr. Neal Kingston with Measured Progress; Dan Sharkey with NCS Assessments; Dr. Jay Silva with Saville and Holdsworth, Ltd. USA (SHL); and Dr. René Dawis with the University of Minnesota. Their contributions were countless and greatly appreciated.

Contents

<i>Special Notice: User’s Agreement</i>	i
<i>Foreword</i>	iii
<i>Acknowledgments</i>	v
<i>Special Notice: Proper Use of O*NET Ability Profiler Results</i>	xi
<i>Introduction</i>	xiii
I. Fairness, Organization, and Abilities	I. 1
O*NET Ability Profiler Fairness	I. 1
O*NET Ability Profiler Organization	I. 2
Exercise Descriptions	I. 4
Abilities Measured	I. 5
II. Standardized Administration Conditions: An Overview	II. 1
Order of Administration	II. 2
Examinee Requirements	II. 2
Reasonable Accommodations	II. 2
Assessment Teams.	II. 4
Administrator-Examinee Ratio	II. 5
Assessment Facilities	II. 6
Assessment Materials and Supplies	II. 7
Booklet and Answer Sheet Preparation.	II. 9
Security of the Assessment	II. 12
Arrival Time and Preliminary Duties	II. 12
Monitoring Assessment Sessions	II. 13
Examinee Department.	II. 13
Significant Behavior	II. 14
Disturbances and Distractions.	II. 15
Closing Procedures	II. 16

Contents (continued)

III. General Assessment Administration Procedures	III. 1
Reading Instructions	III. 1
Putting Examinees at Ease	III. 1
Orientation and Introduction	III. 1
Giving Instructions	III. 2
Understanding Instructions	III. 3
Practice Questions	III. 4
Answering Examinee Questions	III. 5
Use of Calculators, Computers, or Similar Devices	III. 5
IV. Administration Checklists	IV. 1
Before the Assessment Session	IV. 1
Day of the Assessment Session	IV. 5
During the Assessment Session	IV. 5
After the Assessment Session	IV. 7
V. Administration Instructions: Standardized Scripts	V. 1
Introductory Script	V. 1
Answer Sheet: Identification Information	V. 5
General Instructions	V. 11
VI. Administration Instructions: Paper-and-Pencil	VI. 1
Part 1: Arithmetic Reasoning	VI. 1
Common Errors	VI. 4
Part 2: Vocabulary	VI. 7
Common Errors	VI. 10
Part 3: Three-Dimensional Space	VI. 13
Common Errors	VI. 16

VI. Administration Instructions: Paper-and-Pencil (continued)	
Part 4: Computation	VI. 19
Common Errors	VI. 23
Part 5: Name Comparison	VI. 27
Common Errors	VI. 29
Part 6: Object Matching	VI. 33
Part 7: Mark Making	VI. 37
Common Errors	VI. 39
 VII. Administration Instructions: Apparatus	 VII. 1
Apparatus Equipment	VII. 1
Handedness of Examinees	VII. 1
Sitting or Standing	VII. 1
Following Administration Directions	VII. 2
Recording Scores of Apparatus Exercises	VII. 3
Part 8: Place	VII. 7
Scoring	VII. 8
Practice Trial	VII. 11
Common Errors	VII. 13
Timed Trial 1	VII. 15
Timed Trial 2	VII. 16
Timed Trial 3	VII. 18
Part 9: Turn	VII. 21
Scoring	VII. 23
Practice Trial	VII. 25
Common Errors	VII. 27
Timed Trial 1	VII. 29
Timed Trial 2	VII. 30
Timed Trial 3	VII. 32

Contents (continued)

VII. Administration Instructions: Apparatus (continued)

Part 10: Assemble	VII. 35
Scoring	VII. 37
Practice Trial	VII. 39
Common Errors	VII. 44
Part 11: Disassemble	VII. 47
Scoring	VII. 49
Practice Trial	VII. 51
Common Errors	VII. 54
Part 10: Assemble	
Timed Trial	VII. 57
Part 11: Disassemble	
Timed Trial	VII. 61

Special Notice: Proper Use of O*NET Ability Profiler™ Results

Please pay particular attention to the proper use of the **O*NET Ability Profiler** results. Part of your responsibility as an administrator/user of the **O*NET Ability Profiler** is to ensure its proper use.

O*NET Ability Profiler results provide useful information that individuals can use to identify their strengths. They can use results to identify training needs and occupations that they may wish to explore further. Individuals are strongly encouraged to use additional information about themselves when making career decisions.

The results of the **O*NET Ability Profiler** are authorized for career exploration, career planning, and career counseling purposes only. No other use of this tool or any part of this tool is valid or authorized.

Please read the **Special Notice: User's Agreement** before administering the **O*NET Ability Profiler**.

For further information on proper use of **O*NET Ability Profiler** results, contact:

National Center for O*NET Development
Attention: Customer Service
P.O. Box 27625
Raleigh, NC 27611

Phone: (919) 733-2790
Fax: (919) 715-0778
E-mail: onet@ncmail.net

Introduction

This “how to” manual is intended for everyone who administers the **O*NET Ability Profiler** (Forms 1 and 2). It presents the basic rules and procedures for administering the **O*NET Ability Profiler**. It includes practical tools, checklists, guidelines, and other information designed to make your job easier.

The following graphical symbols have been added to help you quickly identify key administration issues.

Legend Symbol Guide



Examples of errors that have occurred frequently in the practice exercises and suggested correction methods.



Instructions that are to be read word for word, exactly as written (*verbatim*) by the assessment administrator, directly from the manual, to the examinees.



The time allowed for each part or exercise. No deviations allowed.

Introduction (continued)

Throughout this manual you will notice an emphasis on standardized administration of the **O*NET Ability Profiler**. Understanding the importance of this emphasis has several benefits. It will help you administer the **O*NET Ability Profiler**. Following the recommended procedures will ensure that examinees receive valid scores that are representative of their abilities and skills. Valid scores provide both the examinees and counselors who work with them (or anyone else) with meaningful information to use in career exploration.

Standardized administration is required to ensure the valid results that are needed to give the examinees and counselors meaningful information to use in their career exploration efforts. Standardized administration involves making each administration of the **O*NET Ability Profiler** as identical to the conditions under which it was developed as possible. To help you achieve this goal, a script is provided for you to read as you introduce and give directions for each part. This is why you are instructed to read the directions “verbatim.” It also is why there are guidelines that show how you can respond to certain situations that may arise and to questions from examinees.

So, while the **O*NET Ability Profiler** is intended as an assessment tool to help individuals explore careers, it is important to do your part as an administrator to make sure the examinees take the **O*NET Ability Profiler** under conditions that produce valid results. It also is important to stress to the examinees that to get useful results, they must do their best when taking the **O*NET Ability Profiler**. Working with you, your examinees can get the greatest benefit from the **O*NET Ability Profiler**.

I. Fairness, Organization, and Abilities

O*NET Ability Profiler Fairness

Test fairness can be defined as a test or assessment being equally valid for all segments of the population on those factors it is intended to measure. When developing test items or questions, it is crucial to examine item fairness to ensure that the item does not:

- ▶ measure knowledge or experiences that are not accessible to all groups and are not relevant to the factor being measured;
- ▶ interfere with a specific group of examinees' ability to respond to the item because its contents are distracting or are irrelevant to the factor being measured;
- ▶ contain clues or information that would improve the performance of a specific group of test takers; and
- ▶ contain information that could be offensive to any group of examinees.

Two procedures were used to ensure fairness of the assessment items in the **O*NET Ability Profiler**. First, a sensitivity review was conducted to ensure that items reflected the multicultural nature of American society and that items did not contain language that perpetuated stereotypes, offended members of a particular group, or might otherwise distract examinees from the task at hand. Through the sensitivity review, any potential material that might offend people on the basis of age, sex, disability, ethnic group, or race was eliminated.

The second procedure consisted of extensive statistical analyses that identified those assessment questions on which one group of examinees outperforms other groups in spite of similar levels of ability. Questions that demonstrated different difficulty levels across groups (e.g., women, men) were scrutinized for the existence of possible bias to determine whether they should be eliminated from the **O*NET Ability Profiler**.

Fairness, Organization, and Abilities (continued)

O*NET Ability Profiler Organization

The **O*NET Ability Profiler** is composed of 11 separately timed sections (referred to as *parts* or *exercises*). The parts are combined to measure 9 basic abilities related to the world of work. Of the 11 parts, 7 are paper-and-pencil exercises (6 non-psychomotor and 1 psychomotor) and 4 are apparatus (psychomotor) exercises that require the physical manipulation, movement, and placement of objects.

The **O*NET Ability Profiler** has been designed to allow flexible administration. Although the approximate administration times shown in the three options below do not appear to be dramatically different, other important considerations are the number of assessment administrators needed and set-up time for apparatus, which may add almost one hour to administration time. While all the options have good validity, for the many occupations that do not require manual dexterity, there is ample validity with the paper-and-pencil exercises. If administration will include people who are interested in occupations that require manual dexterity, then the psychomotor exercises should be included. Just remember there is a higher administrator-to-examinee ratio and more time required for apparatus set-up. The need for psychomotor information by the examinees should guide the selection of the appropriate option:

Option 1: **Administer the 11 separately timed exercises (approximately 2½ hours and may require some additional apparatus set-up time)**. This option provides the most information to the examinee about his or her abilities and how they relate to all occupations. This option should be selected if information is needed about all occupations, including those that require psychomotor abilities.

Fairness, Organization, and Abilities (continued)

Option 2: **Administer the 7 paper-and-pencil exercises (Parts 1 through 7; approximately 1½ - 2 hours)**. With this option, information about some occupations that require psychomotor abilities may not be available to the examinee. This option should be selected if information is NOT needed about occupations that require manual dexterity or finger dexterity.

Option 3: **Administer the 6 non-psychomotor exercises (Parts 1 through 6; approximately 1½ - 2 hours)**. With many occupations, scores on the psychomotor exercises are not needed. This option should be selected if information is NOT needed about occupations that require motor coordination, manual dexterity, or finger dexterity.

It is suggested, for ease of administration, that only one of the above options be selected for all of the examinees in one assessment session. However, if necessary, it is possible when administering all 11 exercises to dismiss those examinees who are finished following the first 6 or 7 parts.

The table on the next page describes the 11 parts, the abilities measured, and the actual time required for each exercise.

EXERCISE DESCRIPTIONS

Order	Exercise	Description	Abilities Measured	Number of Items	Actual Test Time *	Booklet or Apparatus Required
1	Arithmetic Reasoning	Consists of mathematical word problems requiring addition, subtraction, multiplication, or division of whole numbers, fractions, and percentages.	Arithmetic Reasoning	18	20 minutes	Booklet
2	Vocabulary	Consists of indicating which two words out of four have either the same or opposite meanings.	Verbal	19	8 minutes	Booklet
3	Three-Dimensional Space	Consists of determining which one of four three-dimensional figures can be made by bending and/or rolling a flat, two-dimensional form.	Spatial	20	8 minutes	Booklet
4	Computation	Consists of mathematical exercises requiring addition, subtraction, multiplication, or division of whole numbers.	Computation	40	6 minutes	Booklet
5	Name Comparison	Consists of determining whether two names are the same or different.	Clerical Perception	90	6 minutes	Booklet
6	Object Matching	Consists of identifying the one drawing out of four that is the exact duplicate of the figure presented in the question stem.	Form Perception	42	5 minutes	Booklet
**7	Mark Making	Consists of using the dominant hand to make three lines within a square.	Motor Coordination	130 squares	60 seconds	Part 7 answer sheet
**8	Place	Consists of using both hands to move pegs, two at a time, from the upper part of the board to the lower part.	Manual Dexterity	48 pegs	45 seconds (3 15-second test trials)	Peg Board
**9	Turn	Consists of using the dominant hand to turn pegs over (top to bottom) and insert them back into the board.	Manual Dexterity	48 pegs	1½ minutes (3 30-second test trials)	Peg Board
**10	Assemble	Consists of using both hands to put a washer on a rivet and move the assembled piece from one part of the board to another.	Finger Dexterity	50 rivets	1½ minutes	Finger Board
**11	Disassemble	Consists of using both hands to remove a washer from a rivet and put the disassembled pieces into different places on the board.	Finger Dexterity	50 rivets	1 minute	Finger Board
<p>* Administration time requires approximately 5-10 minutes per exercise. ** Optional. See page I. 2 for an explanation of when these exercises should be administered.</p>						

Fairness, Organization, and Abilities (continued)

Abilities Measured

The **O*NET Ability Profiler** measures the following abilities:

VA - Verbal Ability

The ability to understand the meaning of words and use them effectively in good communication when you listen, speak, or write. This ability is important in such fields as communications, education, law, literary arts, and sales. Measured by the Vocabulary exercise.

AR - Arithmetic Reasoning

The ability to use several math skills and logical thinking to solve problems in everyday situations. It involves gathering and sorting through all information related to a problem, making educated guesses about how best to solve the problem, picking a likely way to solve it, and then explaining your decisions. This ability is important in such fields as engineering, finance, mathematics, science, and technology. Measured by the Arithmetic Reasoning exercise.

CM - Computation

The ability to use arithmetic operations of addition, subtraction, multiplication, and division to solve everyday problems involving numbers. This ability is important in such fields as engineering, finance, bookkeeping, construction, mathematics, science, and technology. Measured by the Computation exercise.

SA - Spatial Ability

The ability to form pictures of objects in your mind. It involves easily understanding how drawings represent real objects and correctly imagining how parts fit together. This ability is important in such fields as architecture, carpentry, engineering technology, the visual arts, interior design, and clothing design. Measured by the Three-Dimensional Space exercise.

Fairness, Organization, and Abilities (continued)

FP - Form Perception

The ability to quickly and accurately see details in objects, pictures, or drawings. It involves noticing little differences in shapes of figures, shading, and lengths and widths of lines. This ability is important in such fields as craft arts, craft technology, jewelry making, production technology, production work, and quality control. Measured by the Object Matching exercise.

CP - Clerical Perception

The ability to quickly and accurately see differences in detail in printed material. The material may be text or numbers on a page, in lists, or in tables. It involves noticing if there are mistakes in the text and numbers, or if there are careless errors in working math problems. This ability measures “speed of perception,” which is required in many industrial jobs, even when these jobs do not have verbal or numerical content. This ability is important in such fields as administration, claims processing, library services, office machine operation, packaging, and word processing. Measured by the Name Comparison exercise.

MC - Motor Coordination

The ability to quickly and accurately coordinate eyes with hands or fingers when making precise hand movements. This ability is important in such fields as appliance repair, beauty services, office machine operations, packaging, and typing. Measured by the Mark Making exercise.

MD - Manual Dexterity

The ability to quickly and accurately move hands easily and skillfully. Ability to work with the hands in placing and turning motions. This ability is important in such fields as painting, auto body repair, equipment operations, production work, vehicle operations, and woodworking. Measured by the Place and Turn exercises.

Fairness, Organization, and Abilities (continued)

FD - Finger Dexterity

The ability to move the fingers skillfully and easily. It involves using the fingers to handle small objects quickly and accurately. This ability is important in such fields as assembly work, barbering, bindery work, dentistry, and watch making and repair. Measured by the Assemble and Disassemble exercises.

II. Standardized Administration Conditions: An Overview

The value, accuracy, and acceptance of assessment scores are affected by the procedures and conditions under which an assessment is administered. Poor assessment conditions may adversely affect individuals' assessment scores, preventing them from demonstrating their true potential, knowledge, skills, and abilities. The procedures for administering assessments *must* elicit the examinees' best performance. In particular, attention should be given to the physical setting and psychological aspects of administration to ensure that examinees:

- ▶ are free from distracting influences in the surrounding environment (e.g., noise, poor lighting, extreme temperature);
- ▶ are not distressed by physical discomfort (including fatigue);
- ▶ consider the assessment worthwhile; and
- ▶ are willing and able to perform to the best of their abilities.

The administration procedures described below are to be followed when preparing the assessment facilities, giving instructions, and distributing and collecting materials (such as the booklets, answer sheets, and scoring pencils). Assessment facilities will vary from one location to another, and ideal assessment conditions cannot always be achieved. However, sound judgment must be exercised throughout the assessment process to ensure that proper administration and assessment control practices are followed and that all examinees have the same opportunity to do their best.

Close attention to the procedures described on the following pages will result in properly standardized administration conditions.

Standardized Administration Conditions: An Overview (continued)

Order of Administration

The standard order of administration is the same as the order in which instructions are presented in this manual (i.e., Part 1 precedes Part 2, Part 3 precedes Part 4, etc.). The paper-and-pencil exercises are always given first. If you are administering the 7 paper-and-pencil exercises, they should be given in order. If you are administering all 11 parts, the paper-and-pencil exercises always precede the apparatus exercises. *Apparatus Exercises* are scored as part of the administration process. Directions for scoring these exercises are incorporated within the directions for administration appearing in this manual.

Examinee Requirements

Each examinee:

- ▶ must be at least 16 years old;
- ▶ must be proficient in reading English (equivalent to grade six or higher); and
- ▶ should not have taken *any form* of the **O*NET Ability Profiler** or the General Aptitude Test Battery (operational or experimental) within 6 months of the assessment date.

Reasonable Accommodations

Reasonable accommodations can be made for examinees with special needs to enable them to take the **O*NET Ability Profiler**. Interpretive materials developed for the instrument, however, were developed with a set of standardized materials following standardized procedures. Validity evidence associated with the instrument is based on these materials and procedures. Thus, modifications to materials or procedures can affect the accuracy and relevance of information provided to individuals who take the **O*NET Ability Profiler**.

Examples of accommodations to the **O*NET Ability Profiler** are presented below. These examples are not meant to be exhaustive and are provided to give examples of the reasoning that

Standardized Administration Conditions: An Overview (continued)

goes into determining whether accommodations are reasonable. Following these examples, contact information is listed for several organizations that may be able to provide assistance in determining reasonable accommodations.

Time Limits. Reasonable accommodations to the **O*NET Ability Profiler** may include increasing time limits for Parts 1, 2, and 3, since these are considered power tests, and time limits were developed so examinees would have ample time to complete all questions. Thus, you may consider increasing time limits for these parts if the examinee has a learning disability such as dyslexia. It would not be appropriate to increase time limits for Parts 4, 5, or 6 because these are *speeded* tests, where a person's ability to work quickly contributes significantly to his or her results.

Print Size. Another reasonable accommodation may be to increase the print size of the **O*NET Ability Profiler** questions in Parts 1, 2, 3, and 5 for an examinee with visual impairments. However, it would not be reasonable to increase the print size for Parts 4 and 6, since a person's ability to detect differences in shapes and shading may be affected by their vision.

Directions. The **O*NET Ability Profiler** is not intended to measure an examinee's ability to understand directions and follow instructions. Thus, your client is provided with practice exercises as part of the assessment. A reasonable accommodation would be to encourage clients who may have difficulty understanding directions to ask questions or ask for further explanation.

The following organizations may be able to provide assistance in determining whether or not the **O*NET Ability Profiler** is appropriate for your clients, what reasonable accommodations you can make to the instrument, and/or what are some alternative assessments that may be more appropriate to your clients' particular needs:

The Job Accommodation Network: (800) 526-7234

National Business and Disability Council: (516) 747-6323

The American Foundation for the Blind: (202) 408-0200, (800) 232-5463

Office of Disability Employment Policy: (202) 376-6200

Disability and Business Technical Assistance Centers: (800) 949-4232

Standardized Administration Conditions: An Overview (continued)

Reasonable accommodations can appear in many different forms. For example, reasonable physical accommodations that would allow a wheelchair user to reach and move the pegs comfortably in Parts 8 and 9 may include:

- ▶ pillows to prop the examinee up in a steady position;
- ▶ blocking or locking the wheels to steady the wheelchair;
- ▶ moving the pegboard beyond the table edge for examinees who cannot reach the top rows due to small stature, unsteady posture, immovable wheelchair arms, and other physical problems. However, the board must not be moved so far forward that it becomes unstable;
- ▶ moving furniture to allow the examinee to maneuver between the rows of chairs and tables in the room; and
- ▶ providing extra pieces to the examinee so that he or she will not have to move the wheelchair to retrieve dropped pieces.

The primary factor in determining an alternative assessment or the specific type of reasonable accommodation is the requirement to measure the examinee's job-related skills and abilities, not the disabilities or impairments. In addition, when counseling individuals with disabilities, the best practice is to use **O*NET Ability Profiler** scores in combination with other job-related information. This practice should also be used for counseling individuals without disabilities.

Assessment Teams

The actual composition and size of an **O*NET Ability Profiler** assessment team will depend on the size of the group of individuals taking the assessment. The number of assessment administrators and assistants depends on the number of examinees taking the assessment. See the following section entitled "Administrator-Examinee Ratio" for details.

Standardized Administration Conditions: An Overview (continued)

The **assessment administrator** has the following responsibilities:

- ▶ monitoring assessment materials received, used, and returned;
- ▶ controlling the assessment session;
- ▶ giving introductions, orientations, and instructions;
- ▶ administering the assessment; and
- ▶ directing the work of assistants.

The **assistant** is primarily responsible for helping the assessment administrator in the actual administration process. The assistant may be responsible for processing the examinees; this includes signing them in and out of the administration session, ensuring that they have not previously taken any forms of the **O*NET Ability Profiler** or General Aptitude Test Battery during the previous six months, ensuring that all assessment materials have been returned, and answering non-assessment-related questions (e.g., locations of restrooms, water fountains, smoking areas, telephones).

Administrator-Examinee Ratio

The **O*NET Ability Profiler** should be administered to groups of two or more examinees. The group should never be so large that the assessment administrator cannot give adequate attention to all examinees.

For Parts 1 through 6, one administrator can administer the assessment to a maximum of 10 people (*i.e.*, *1:10 administrator/examinee ratio for these paper-and-pencil exercises*). With larger groups, one assistant is needed for every 10 additional people. For example, an administrator and one assistant are needed for a group of 11 to 20 people, while an administrator and two assistants are needed to administer the assessment to a group of 21 to 30 people.

Standardized Administration Conditions: An Overview (continued)

For Parts 7 through 11, one administrator can administer the exercises to a maximum of 5 people (*i.e.*, 1:5 administrator/examinee ratio for the apparatus exercises). With larger groups, one assistant is needed for every 5 additional people. For example, an administrator and one assistant are needed for a group of 6 to 10 people, while an administrator and two assistants are needed to administer the exercises to a group of 11 to 15 people.

A smaller administrator-examinee ratio is recommended when administering the **O*NET Ability Profiler** to individuals requiring additional assistance (e.g., physically disabled, low reading skills, or unfamiliar with standardized assessment procedures).

Assessment Facilities

The facilities must be well-lighted, well-ventilated, quiet, and comfortable.

The administration room and working surfaces should have adequate light for comfortable reading without eye strain. Deep shadows and strong glare on working surfaces caused by poor arrangement of light fixtures should be avoided.

All practical steps must be taken to control ventilation, temperature, and humidity. The assessment should not be conducted when temperature or humidity is so extreme or uncomfortable as to interfere with concentration.

The room must be free from extraneous noise and interruptions. For example, frequent shouting, bells, trucks unloading, and other such noises outside of the administration room can interfere with an examinee's performance. The assessment must not be administered in a location where ordinary business is being conducted. The distractions of conversation, machinery, and other noises can reduce an examinee's level of concentration.

Standardized Administration Conditions: An Overview (continued)

The room must be arranged so that the administrator can be seen by every examinee. Seats should be a minimum of two feet apart on each side to prevent examinees from interfering with each other or obtaining information from each other's answer sheet. There should be enough space between seats to allow for the administrator and assistant(s) to move among the examinees easily and observe their work without causing a disturbance.

Each examinee must have a flat, smooth surface on which to work; it should be large enough that open booklets, answer sheets, and scratch paper can be used easily without overlapping.

Assessment Materials and Supplies

The administrator must ensure that adequate supplies of all required materials are available before conducting a session.

Required materials and supplies are¹:

- ▶ O*NET Ability Profiler Administration Manual;
- ▶ “Using Your O*NET Ability Profiler Results” handout;
- ▶ O*NET Ability Profiler Instrument Booklets;
- ▶ O*NET Ability Profiler Answer Sheets;
- ▶ Part 7 Mark Making Answer Sheets;²
- ▶ manual dexterity pegboards for Parts 8 and 9;^{2, 3}

¹ If you are administering Parts 1 - 11, you need all of the items listed.

² If you are administering Parts 1 - 6 ONLY, you do NOT need these items.

³ If you are administering Parts 1 - 7 ONLY, you do NOT need these items. Mark the score for Part 7 on the Part 7 answer sheet.

Standardized Administration Conditions: An Overview (continued)

- ▶ finger dexterity boards for Parts 10 and 11;^{2,3}
- ▶ O*NET Ability Profiler Record of Apparatus Scores forms (when the Part 7 answer sheet is not used);^{2,3}
- ▶ two timers (one for backup) or another type of accurate timing device that has both minute and second set buttons (e.g., digital clock timer. Do not use wristwatches, track, or lap-type stopwatches.);
- ▶ No. 2 pencils with erasers (two per examinee plus extra supply);
- ▶ Three-Dimensional Space practice cutout models for Part 3;
- ▶ two pieces of scratch paper;
- ▶ blank piece of paper (must be inserted in the answer sheet to prevent pencil marks from imprinting on the opposite page); and
- ▶ “Assessment Session In Progress - Do Not Disturb” signs.

Recommended supplies include:

- ▶ writing pens and large felt-tip marker;
- ▶ paper clips, rubber bands, and stapler;
- ▶ identification/name badges for assessment administrator and assistant(s); and
- ▶ 8½" x 11" card stock (for signs if needed).

Before the administration session begins, instrument booklets should be examined for misprints, pencil marks, missing pages, and other irregularities. If any irregularity exists, the defective booklet(s) must not be used.

Standardized Administration Conditions: An Overview (continued)

Two No. 2 pencils with erasers should be available for each examinee. In addition, an extra supply must be available to immediately replace those that become dull or break during the session. An extra timer must be available and in use in case one timer fails to function properly. The administrator and at least one assistant must use a timer to monitor the timing of each part. Timers must be started immediately after the administrator says “Begin.”

Booklet and Answer Sheet Preparation

The assessment administrator has the option of completing sections of the answer sheet for each examinee before the session begins. By completing certain sections of the answer sheet in advance, the administrator will ensure more accurate information, as well as shorten the time needed by examinees to complete the answer sheet. The following answer sheet sections can be completed by the administrator prior to distribution: (1) Form; (2) State; (3) Source; (4) Test Site; (5) Serial Number; and (6) Identification Number. Source, Test Site and Serial Number are optional fields for your use. For example, testing and assessment locations that use a central scanner for scoring may need to use these numbers to track their score results. The examinees are instructed to verify the information and make corrections as needed.

There are a number of required fields on the **O*NET Ability Profiler** response sheet. These fields must be filled in with valid responses in order for the O*NET Ability Profiler Scoring Program (APSP) to process the response sheet. Please refer to the table on the next page for a summary of the required fields on the first page of the answer sheet.

Standardized Administration Conditions: An Overview (continued)

Response Sheet Field	Required or Not	Response Sheet Field	Required or Not
Name	Required	Source	Not Required
Form	Required	Job Experience	Not Required
English	Not Required	Race/Ethnic Group	Not Required
Education	Not Required	Gender	Not Required
State	Not Required	Serial Number	Not Required
Identification Number *	Required	Raw Score (parts 7-11)	Required **
Age	Not Required	Test Site	Not Required
Testing Date	Required		

* The Identification Number cannot contain any blanks.

** The APSP will use the raw scores if they are present. However, if the fields are incomplete, the Score Report will report the results as missing.

Examinees will need a unique nine-digit Identification Number to assure that the correct O*NET Ability Profiler Score Reports are returned to them. A unique Identification Number is essential in the event that two or more examinees have identical names. It is also important that these unique Identification Numbers are used when answer sheets are sent to a centralized scoring location so that score reports from individuals with the same name can be easily distinguished.

For use in distributing assessment results to examinees, it is recommended that the administrator keep a session log or roster with the following information: 1) session date, 2) session time, 3) administration location, 4) examinee's name, and 5) examinee's identification number. An example of a roster is provided below. The log can be created in advance, or at the beginning of the administration session.

Standardized Administration Conditions: An Overview (continued)

O*NET Ability Profiler Administration Session Roster	
Date:	
Time:	
Location:	
<u>Examinee Name</u>	<u>Examinee Identification Number</u>

If a program already uses a unique customer identification number (for example, a customer number used in agency or office records), that identifier may be used on the roster and answer sheets. If the number used has fewer than nine digits, zero-fill the Identification Number field on the O*NET Ability Profiler Answer Sheet either before the number (prefix) or after the number (suffix).

If examinees do not have a unique nine-digit Identification Number, or it is unknown by either the administrator or examinee, unique identifiers will need to be created and written on the roster by the administrator. The administrator may assign these Identification Numbers to each examinee using the roster. Numbers from the roster may be given to examinees when they are filling out the Name and Identification Number sections on the O*NET Ability Profiler Answer Sheet. At the end of the session, the administrator should check the completed answer sheets to ensure that each examinee's Name and Identification Number is filled in and recorded

Standardized Administration Conditions: An Overview (continued)

correctly on the session roster. If an examinee did not fill in the Identification Number section, the administrator will need to fill in a unique number from the session roster.

A plain piece of 8½" x 11" paper is inserted between the pages of the answer sheet as a guard against transfer of stray marks from previously marked responses. The answer sheet is placed inside the front cover of the instrument booklet. Two additional sheets of plain paper must also be inserted into the booklet to be used as scratch paper for Parts 1 and 4.

Security of the Assessment

The assessment materials must be treated as *sensitive and confidential* and must not be released to unauthorized persons.

- ▶ The assessment materials cannot be reviewed by unauthorized persons.
- ▶ The assessment materials must not be left unattended before, during, or after the session.
- ▶ *A count of all assessment materials must be made immediately after the close of the session to ensure examinees' response sheets remain confidential.*

Arrival Time and Preliminary Duties

The assessment administrator should allow sufficient time to properly prepare the assessment site prior to the scheduled starting time. The administrator:

- ▶ inspects the room to ensure comfortable and adequate accommodations for the number of examinees scheduled to appear;
- ▶ determines where the examinees will be seated;
- ▶ gives the receptionist (if necessary) any needed admission or informational materials;
- ▶ posts directional signs around the examination area; and
- ▶ checks the location of restrooms and water fountains.

Standardized Administration Conditions: An Overview (continued)

Monitoring Assessment Sessions

Successful administration of the **O*NET Ability Profiler** depends largely on the alertness of the assessment administrator. After the assessment has started, the administrator and/or assistant(s) should quietly and unobtrusively walk around the room to observe the work of each examinee and ensure that directions are understood and followed. If a correction is necessary, the examinee is told the proper procedures by the administrator with the least possible interruption.

The administrator is not permitted to make any comments to the examinees about their performance, express encouragement or discouragement, or urge examinees to work harder or faster (unless such statements are specifically included in the administration instructions).

The assessment administrator must ensure that each examinee turns the page of the instrument booklet when instructed and continues working without loss of time. If an examinee stops unusually early in the assessment process, the administrator needs to verify that part of the assessment material was not omitted or that the examinee did not accidentally skip a section or page. Examinees who complete all the questions before time is called are instructed to go back and look over the questions in the section just finished. Examinees are not permitted to turn to another section of the assessment before being instructed to do so.

Examinee Deportment

Examinees must not be left unsupervised at any time. The assessment administrator should always be alert for signs that an examinee is not following instructions (e.g., continuing to work after time has been called, taking information from another's answer sheet, using unauthorized testing or assessment aids, or any other disruptive behavior). Every effort must be made to discourage these activities. However, if the abuse continues, the administrator quickly and quietly asks the examinee in question to leave the session. The administrator must document the dismissal actions for future reference.

Standardized Administration Conditions: An Overview (continued)

Significant Behavior

While observing an assessment session, the assessment administrator should make notes regarding any significant examinee characteristics and behavior indicating that the assessment results may not represent accurate measurements of ability. The following are some examples of situations that would necessitate special handling:

- ▶ An examinee becomes sick or leaves before completing the instrument booklet.
- ▶ An examinee has reading or language difficulties that were not apparent when the assessment was scheduled.
- ▶ An examinee finishes a part well ahead of the prescribed time limit.
- ▶ An examinee has difficulty in following oral or written directions.
- ▶ An examinee has difficulty reading the printed material because s/he forgot to bring glasses.
- ▶ An examinee appears to be answering questions randomly or exhibiting other signs that may indicate that s/he has difficulty reading or lacks motivation.
- ▶ An examinee is caught cheating.
- ▶ An unusual interruption or incident occurred (e.g., a chair fell over, a maintenance person entered the room, the lights went out).

Standardized Administration Conditions: An Overview (continued)

Disturbances and Distractions

During the actual assessment process, the assessment administrator takes actions to avoid distractions, disturbances, and unnecessary interruptions.

Some rules to enforce include the following:

- ▶ Spectators are not allowed to watch examinees taking assessments.
- ▶ Examinees cannot bring children into the room.
- ▶ Foot traffic is not permitted through the assessment room.
- ▶ No one is permitted to enter the assessment room to converse with the administrator, assistant(s), or examinees after the assessment has started.
- ▶ If there is a telephone in the room, it must be unplugged if arrangements to eliminate all incoming and outgoing calls have not been made.
- ▶ Portable telephones, pagers, and alarm wristwatches must be turned off during the assessment process.
- ▶ Examinees are prohibited from eating or drinking in the room.

The assessment administrator and assistant(s) will not engage in behavior that might distract or irritate the examinees. They do *not*:

- ▶ read outside materials (e.g., books, magazines, newspapers) during the assessment session;
- ▶ wear noisy jewelry, squeaky shoes, or clothes that rustle;
- ▶ eat or drink in the room;
- ▶ display the timers to the examinees (Keep the timers out of sight as much as possible.); and
- ▶ stand immediately behind or next to an examinee, but instead observe from a distance, moving quietly around the room.

Standardized Administration Conditions: An Overview (continued)

Closing Procedures

At the close of the assessment session, the assessment administrator must ensure that all instrument booklets, answer sheets, scratch paper, and No. 2 pencils are collected before the examinees are allowed to leave the administration area.

No one other than the administrator and assistant(s) is permitted to handle or inspect any used or unused assessment materials, completed answer sheets, instrument booklets, or other related materials. *Under no circumstances is any examinee permitted to make any changes to item responses after the time allowed for that exercise has elapsed.* Properly dispose of all scratch paper and defective answer sheets.

III. General Assessment Administration Procedures

Reading Instructions

In any assessment session, only one person, the administrator, should read the instructions to the examinees. However, if a different administrator must direct the group, it is important that the new administrator is introduced to the examinees by the person who was conducting the session. Explain that the new administrator will give the remainder of the instructions and administer the rest of the assessment.

Putting Examinees at Ease

All examinees deserve reasonable and courteous treatment. Every effort must be made to secure examinees' cooperation and reduce their level of nervousness and tension, so that they will be willing and able to do their best work.

After the examinees have been seated, the administrator introduces himself or herself and the assistants, and briefly explains the purpose of the assessments and how the examinees should do their best.


Orientation and Introduction

The assessment administrator should give introductory information in a conversational, friendly, and relaxed manner. When discussing the materials, the administrator avoids using the word "test" and, instead, refers to "tasks" or "exercises." The word "test" can cause tension for some examinees.

It is important to generate interest by acquainting the examinees with the purpose and uses of the assessment, emphasizing the benefits for the examinees.

General Assessment Administration Procedures (continued)

Giving Instructions

The instructions to be read to examinees are indicated by a  symbol and are enclosed in bordered boxes. The instructions *must be read exactly as written (verbatim)*. The assessment administrator should be standing (if physically able) while reading the instructions to the examinees. In addition, the administrator must be familiar with the procedure for administering each exercise, as well as the practice items.

Before reading the specific instructions for each part, the assessment administrator and assistant(s) ensure that all examinees have *turned to the proper page* of the instrument booklet. This is done by glancing quickly at each booklet after the examinees have been instructed to turn to a specific page. If an examinee has turned to the wrong page, the administrator or assistant helps him or her locate the correct page. Similarly, it is necessary to ensure that each examinee is working on the proper section of the answer sheet. While reading the instructions, the administrator and assistant(s) do not allow examinees to turn pages or begin working on either the practice or timed questions.

The instructions are never delivered in the assessment administrator's own words. Any deviation from the written directions may change the assessment and invalidate the results. Attempting to memorize the directions greatly increases the chance of altering the standardized instructions. Instead, the administrator must *read the instructions verbatim*, directly from this **O*NET Ability Profiler Administration Manual**, as the examinees read from the instructions appearing in their booklets. The only point at which the administrator may explain specific assessment information in his or her own words is when an examinee needs help in completing the practice questions.

General Assessment Administration Procedures (continued)

The instructions should be delivered in a clear, audible, conversational tone and in a manner that emphasizes all of the important points. Care must be taken to avoid a mechanical delivery. The assessment administrator needs to *enunciate clearly and speak loudly enough* so that all examinees can hear the instructions. Instructions are addressed to those sitting the greatest distance from the administrator. In addition, the instructions are read at a speed that allows the examinees to follow the administrator's voice and, at the same time, read the printed instructions that appear in their booklets.

Instructions that pertain to practice questions *must never be omitted*. To avoid giving the impression that one part or exercise is more important than the others, the administrator refrains from giving more detailed instructions for one exercise than for another. When referring to practice questions, the administrator pauses long enough to permit the examinees to study each item and come up with the solution. The length of the pause may be ascertained by observing the examinees.

Understanding Instructions

The **O*NET Ability Profiler is not** intended to measure a person's ability to understand and follow instructions. Therefore, it is necessary to ensure that scores reflect each of the abilities that the exercises were designed to measure and that they are not affected by any lack of comprehension of the instructions. Practice questions are included to make sure that the instructions are understood. The assessment administrator must inspect each examinee's practice question responses before proceeding with the timed questions.

If the completed practice questions indicate that the examinee had difficulty understanding the instructions, then the instructions should be repeated. (On an individual basis, the administrator calls attention to any errors the examinee made in answering the practice questions and encourages the examinee to rework incorrect questions. The administrator will not resume the assessment process until all examinees understand the instructions for that particular exercise and answer all questions pertaining to the instructions.)

General Assessment Administration Procedures (continued)

Assessment administrators must be extremely careful to administer the **O*NET Ability Profiler** properly and fairly to all examinees. However, if, after a reasonable amount of time explaining directions, some applicants are still unable to understand the procedure, the administrator instructs examinees to do their best and begins the assessment. If this occurs, the administrator documents the situation for future reference.

Practice Questions

Examinees should be encouraged to ask for an explanation of any practice question(s) they do not understand.

When an examinee makes an error or asks for further explanation of a practice question, the assessment administrator may provide a brief explanation. This will usually be sufficient to eliminate any misunderstanding on the part of the examinee. In some cases, however, the administrator may need to demonstrate how the answer was obtained and show the examinee why his or her answer is incorrect. The administrator does not try to “teach” the examinee a new skill or concept. For example, it is not appropriate to teach the examinee how to multiply numbers.

The administrator instructs the examinee to erase any incorrect answers completely before reworking the question correctly.

To assist the administrator, examples of the most frequently occurring practice problem errors are included in Section VI of this manual.

General Assessment Administration Procedures (continued)

Answering Examinee Questions

The assessment administrator is as objective as possible in all statements or answers to questions, avoiding any remark, tone, or mannerism that might be construed as sarcastic or antagonistic. The administrator always exhibits tact, courtesy, and firmness, making it obvious to the examinees that they are all being treated equally.

The administrator does not give any information that aids in solving any actual assessment problem. Also, the administrator does not act annoyed or surprised during the assessment session.

Use of Calculators, Computers, or Similar Devices

The use of calculators, computers, or similar devices by examinees is not allowed. Use of these devices would undermine the standardization of administration; such devices were not allowed during the development of the assessment. The assessment is designed to measure the abilities of examinees, not their skill in using assistive devices.

IV. Administration Checklists

A properly conducted assessment administration session produces valuable results for both the examinee and those individuals using the results (e.g., educators and vocational counselors). It gives the examinee a more positive perspective toward taking a career exploration assessment. In addition, it gives the examinee and the assessment user greater confidence in the validity of the assessment results.

The checklists that follow are designed to help ensure proper administration of the **O*NET Ability Profiler** and to eliminate confusion, uncertainty, and frustration that may arise during the administration. The lists also serve as reminders of decisions to be made before, during, and after assessment sessions.

Before the Assessment Session

1. Understand the nature and purpose of administering the **O*NET Ability Profiler**.
2. Decide on the number of examinees to be included in a session:
 - a. **If administering Parts 1 - 6 ONLY**, 1:10 administrator/examinee ratio.
 - b. **If administering Parts 1 - 7 ONLY**, 1:10 administrator/examinee ratio for Parts 1 - 6; 1:5 ratio when administering Part 7.
 - c. **If administering Parts 1 - 11**, 1:10 administrator/examinee ratio for Parts 1 - 6; 1:5 administrator/examinee ratio when administering Parts 7 through 11.
 - d. Additional assistants needed when disabled or disadvantaged persons are in a session.
3. Inspect the assessment facilities:
 - a. lighting;
 - b. ventilation, temperature, and humidity;
 - c. noise;

Administration Checklists (continued)

- d. work space (table size, room layout); and
 - e. seating arrangement.
4. Decide on the exact time of the assessment session:
- a. avoid the day before or after a holiday;
 - b. avoid conflicts with the recess of other training groups or meetings; and
 - c. ensure ample time.
5. Assemble the required materials and supplies:⁴
- a. *O*NET Ability Profiler Administration Manual*:
 - (1) one for the assessment administrator and
 - (2) one for each assistant.
 - b. “Using Your O*NET Ability Profiler Results” handout:
 - (1) one for each examinee.
 - c. O*NET Ability Profiler instrument booklets (Parts 1 through 6):
 - (1) one for each examinee;
 - (2) one for the administrator; and
 - (3) one for each assistant.
 - d. answer sheets (Parts 1 through 6):
 - (1) one for each examinee;
 - (2) one for the administrator; and
 - (3) one for each assistant.

⁴ If you are administering Parts 1 - 11, you need all of the items listed.

Administration Checklists (continued)

- e. mark-making answer sheet (Part 7):⁵
 - (1) one for each examinee.
- f. manual dexterity pegboards (Parts 8 and 9):^{5, 6}
 - (1) one for each examinee and
 - (2) one for the administrator and, if needed, for each assistant for demonstration purposes.
- g. finger dexterity boards (Parts 10 and 11):^{5, 6}
 - (1) one for each examinee and
 - (2) one for the administrator and, if needed, for each assistant for demonstration purposes.
- h. O*NET Ability Profiler Record of Apparatus Scores Form (record sheet for Parts 8 through 11) or the Part 7 answer sheet to record apparatus scores.^{5, 6}
- i. No. 2 pencils with erasers:
 - (1) two for each examinee.
- j. stopwatches or other approved timers (do not use wristwatches):
 - (1) one for the administrator and
 - (2) one for an assistant.
- k. “Assessment Session In Progress - Do Not Disturb” signs
- l. Three-Dimensional Space practice cutout models for Part 3
- m. other supplies (e.g., extra sharpened pencils, scratch paper)

⁵ If you are administering Parts 1 - 6 ONLY, you do NOT need these items.

⁶ If you are administering Parts 1 - 7 ONLY, you do NOT need these items. Mark the score for Part 7 on the Part 7 answer sheet.

Administration Checklists (continued)

6. Prepare booklets and answer sheets:
 - a. Check the instrument booklets for any misprints, pencil marks, missing pages, bends/folds, and other irregularities or defects.
 - b. Complete the following answer sheet sections:
 - (1) Form (required section),
 - (2) State (optional section),
 - (3) Source (optional section),
 - (4) Test Site (optional section), and
 - (5) Identification Number (required section).

NOTE: These sections may be completed in advance, or examinees may fill them out at the beginning of the session.

 - c. Insert a plain sheet of paper inside the answer sheet.
 - d. Insert the answer sheet and two (2) sheets of scratch paper inside the front cover of each instrument booklet before distribution.
7. Study assessment and directions carefully. Become familiar with:
 - a. administration directions for each part,
 - b. time limits for each part,
 - c. scoring directions for each part,
 - d. common errors for each part,
 - e. method of indicating answers, and
 - f. Three-Dimensional Space practice cutout models.
8. Decide the order in which the materials and supplies are to be distributed and collected.

Administration Checklists (continued)

Day of the Assessment Session

1. Check all materials to see that you have enough for the assessment session.
2. Put up directional signs and “Assessment Session In Progress - Do Not Disturb” signs.
3. Inspect the room to ensure comfortable and adequate accommodations for the number of examinees scheduled (space, lighting, temperature, ventilation, and condition and arrangement of tables and chairs).
4. Give receptionist any necessary materials.
5. Check location of restrooms, drinking fountains, telephones, smoking areas, and the nearest exit in case of fire or an emergency in order to exit the building quickly.

During the Assessment Session

1. Greet examinees as they enter the assessment site.
2. Direct them to sit in designated places.
3. Proceed with the assessment administration:
 - a. stand in a central location,
 - b. speak in a loud, clear voice,
 - c. introduce yourself and assistant(s),
 - d. give the introductory script/orientation, and
 - e. answer any questions.
4. Distribute materials according to predetermined order.
5. Caution examinees not to begin until told to do so.

Administration Checklists (continued)

6. Ensure that all demographic and assessment administration information is marked on the answer sheet.
7. Read the instructions *exactly* as written.
8. Administer practice questions for each part:
 - a. review the common error descriptions for the practice questions,
 - b. explain to examinees their errors,
 - c. demonstrate the three-dimensional problems using the practice cutout models, and
 - d. wait until all examinees have correctly completed the practice questions before beginning the timed questions.
9. Administer timed questions for each part.
10. Start all stopwatches immediately after saying “Begin.”
11. Move quietly about the room to:
 - a. ensure that examinees mark their answers in the correct part of the answer sheet,
 - b. ensure that examinees continue working until they reach the end of a section,
 - c. ensure that examinees stop at the end of a section,
 - d. replace broken electronic scorers/pencils,
 - e. encourage examinees to keep working until time is called,
 - f. ensure that examinees are not copying other examinees’ answers, and
 - g. attend to those examinees who finish early.
12. Permit no outside interruptions.
13. Stop at the proper time.

Administration Checklists (continued)

After the Assessment Session

1. Collect the booklet, answer sheet(s), protective sheet of paper, scratch paper, and pencils from each examinee individually according to predetermined order.
2. Record, for future reference, any problems or deviations in administering the assessment and any examinee whose behavior during the assessment indicated an irregularity that could invalidate his or her scores.
3. Count the booklets and answer sheets to ensure that all materials have been collected.
4. Transfer the apparatus/psychomotor scores from the Part 7 answer sheet (and from the *O*NET Ability Profiler Record of Apparatus Scores*, if used for Parts 8 through 11) to the appropriate boxes on the front of the answer sheet and fill-in the matching ovals.
5. Arrange for the answer sheets to be scored. This can be done in one of several ways.
 - 1) If your site has appropriate scanning equipment and has installed the O*NET Ability Profiler Scoring Program (APSP) software, the answer sheets can be scanned to create a computer file that contains examinee information. The O*NET APSP software then uses this file to generate Score Reports for each individual examinee who took the **O*NET Ability Profiler** assessment.
 - 2) If you do not have scanning equipment on site, there are two other options:
 - a. You may be able to send the answer sheets to a central location in your region or state for scanning. This central location can either select to send the examinee information file back to your site for scoring by the O*NET Ability Profiler Scoring Program, or the central location can score the results and send the individual O*NET Ability Profiler Score Reports to your office.

Administration Checklists (continued)

OR

- b. You can create an examinee information file by manually entering data from the examinee answer sheets into a file that has the same layout as the one created by the scanning equipment. (See Appendix A of the *O*NET Ability Profiler Scoring Program User's Guide* for the file layout.) This file can then be used by the O*NET APSP software to generate the individual Score Reports.

V. Administration Instructions: Standardized Scripts

Introductory Script

When the examinees have been admitted and seated, the assessment administrator greets them and introduces himself or herself and any assistants in an informal, friendly, and relaxed manner. The administrator then distributes the handout, “**Using Your O*NET Ability Profiler Results,**” and reads the following script *verbatim*:



“Before we begin taking the **O*NET Ability Profiler**, I want to read to you from the handout, ‘**Using Your O*NET Ability Profiler Results.**’

(HOLD UP THE HANDOUT, ‘USING YOUR O*NET ABILITY PROFILER RESULTS,’ AND MAKE SURE THAT ALL EXAMINEES HAVE A COPY.)

“You should all have this sheet in the front of you. Please read it silently to yourself while I read it aloud.”

Using Your O*NET Ability Profiler™ Results

The **O*NET Ability Profiler** helps you learn more about your strengths and how they relate to the world of work. You can use your results to explore the world of work by comparing your abilities to the abilities necessary to perform different occupations. Knowing your relative strengths can help you decide what kinds of jobs and careers you want to explore and identify areas where you might want to pursue more education and training.

(Continue on next page)

Administration Instructions: Introduction (continued)



It is strongly encouraged that you use additional information about yourself when making career decisions, rather than the results of a single assessment instrument. Talk to your employment counselor, teacher, or **O*NET Ability Profiler** assessment administrator for more help on how to use your **O*NET Ability Profiler** results.

Your **O*NET Ability Profiler** results **must not be used** for employment or hiring decisions. Employers, education programs, or other job-related programs must not use your results as part of a screening process.

If you think that your **O*NET Ability Profiler** results are not being used properly, talk to your employment counselor, teacher, or **O*NET Ability Profiler** administrator. You also can contact the National Center for O*NET Development for assistance.

National Center for O*NET Development
Attention: Customer Service
P.O. Box 27625
Raleigh, NC 27611

Phone: (919) 733-2790
Fax: (919) 715-0778
E-mail: onet@ncmail.net

“Does anyone have questions about the proper use of **Ability Profiler** results?”

(PAUSE TO ANSWER ANY QUESTIONS. IF NEEDED, DIRECT EXAMINEES TO THE NATIONAL CENTER FOR O*NET DEVELOPMENT FOR FURTHER ASSISTANCE.)

(Continue on next page)

Administration Instructions: Introduction (continued)



“Now, please remove this sheet from the table and put it under your chair so that it will be out of the way during the rest of this session.

(PAUSE)

If you are administering Parts 1 - 6 or Parts 1 - 7, say:

“The **O*NET Ability Profiler** is made up of exercises in a booklet.

If you are administering Parts 1 - 11, say:

“The **O*NET Ability Profiler** is made up of several separate parts. Some parts are paper-and-pencil, and some parts require working with your hands.

THEN CONTINUE:

“Your results can help you identify your special abilities and skills. They also can help you explore careers or jobs that might be right for you.

“I will read the instructions word for word. This is required. I (or we) will also be walking around while you are working to answer any questions, to make sure you are starting in the correct place, and to see that you are following along.

“Do your best on each part. Pay careful attention to all instructions and *always* ask questions during the practice exercises if you do not understand something. Complete as much as you can in the time allowed, and work as accurately as you can.

(Continue on next page)

Administration Instructions: Introduction (continued)



“If you think that you will not be able to do your best today because you are not feeling well, have forgotten your glasses, have taken medication, or for some other reason, please let me (us) know now and I (we) will reschedule you.

(PAUSE AND CHECK IF ANYONE WANTS TO RESCHEDULE.)

If you are administering Parts 1 - 6 or Parts 1 - 7, say:

“This session will last for about 2 hours with a 5-minute break half-way through.

If you are administering Parts 1 - 11, say:

“This session will last for about 2½ hours with a 5-minute break half-way through.

THEN CONTINUE:

“Now, put all of your belongings under your chair. If you have an alarm wristwatch, turn it off so that it will not disturb others. The official time will be kept according to my watch. Also, turn off any pagers or portable phones.

“The use of calculators, computers, or other similar devices is not permitted. If you have any such devices with you, please put them away.

“Are there any questions before we begin?”

(ANSWER ALL APPLICABLE QUESTIONS.)

Administration Instructions: Answer Sheet (continued)

Answer Sheet: Identification Information

1. Read the following instructions to the examinees *verbatim*:



“At this time you are going to complete the questions in this booklet.

(HOLD UP THE AP BOOKET.)

“*DO NOT* write on or make *any* marks in the booklet.

“Mark all your answers on this answer sheet.

(HOLD UP THE O*NET ABILITY PROFILER ANSWER SHEET.)

“Be very careful not to make any additional marks, folds, or creases on the answer sheet.

“The answer sheet will be inside your booklet. The booklet and answer sheet will be distributed in a few moments.

“*DO NOT* open your booklet or start writing until you are instructed to do so.

“If you have any pens or pencils of your own, please put them away. You won’t need them. We will supply all the materials you will need.”

(DISTRIBUTE INSTRUMENT BOOKLETS, ANSWER SHEETS WITH PROTECTIVE PAPER, PENCILS [IF NOT ALREADY DONE], AND SCRATCH PAPER.)

Administration Instructions: Answer Sheet (continued)

2. After the materials have been distributed, proceed with the instructions.

THEN SAY:



“Before we begin, you’ll need to complete the information section on the answer sheet. All personal information will be kept confidential.

“Now, remove the answer sheet from the booklet. Set your booklet aside for now. We will come back to it in a few minutes.

(PAUSE)

“When completing your answer sheet, you must be sure that your answer marks completely fill in the ovals. If you make a mistake, erase it completely and fill in your new choice.

“Remember to listen to the instructions *before* you start writing.

“You’ll begin with your name. Please skip this section, if it has already been completed for you. If not, please **PRINT** your **LAST NAME ONLY** in the *empty boxes* at the top. Begin with the first box and put one letter in each box, including the shaded boxes, until you have either finished printing your **LAST NAME** or printed as much of it as will fit. Do not skip boxes.

(CHECK TO SEE THAT ALL EXAMINEES ARE PRINTING THEIR LAST NAMES PROPERLY.)

“Next, go to the section for your first name and print your **FIRST NAME** in the boxes, including the shaded boxes.

(PAUSE)

(Continue on next page)

Administration Instructions: Answer Sheet (continued)



“Then print your middle initial in the last box. If you have no middle initial, leave that box blank.”

3. If an examinee’s name (last, first, or both) is too long to fit in entirely, he or she should print as much of it as possible. Check to see that all examinees have printed their names properly and are not skipping the shaded boxes.

THEN SAY:



“Now fill in the matching ovals below your name. Begin with the letter in the first box. Find the same letter in the column directly below it. Fill in the oval showing this letter completely, but do not go into the other ovals.

“Do each letter of your name in the same way.

(ALLOW SUFFICIENT TIME FOR ALL EXAMINEES TO FINISH.)

“Next, look at the information sections along the right side of the name section.

(PAUSE)

“In the box for FORM, look to see if the oval **IN FRONT** of the number 1 (or number 2) has been filled in. If not, please do so now.

(PAUSE)

(Continue on next page)

Administration Instructions: Answer Sheet (continued)



“Look at the box marked ENGLISH. If English is your primary or most-used language, fill in the ‘Yes’ oval. If English is not your most-used language, fill in the ‘No’ oval.

(PAUSE)

“Move down to the box marked EDUCATION. In the boxes, print the total *number of years* of formal *schooling* you have completed and then fill in the matching ovals. For example:

“If you have completed your GED or high school diploma, print 12.

“If you have completed an associate degree, print 14.

“If you have completed a bachelor’s degree, print 16.

“If you have a master’s degree or higher, print 18.

(PAUSE)

“In the section for STATE, look to see that the two letter state abbreviation and the matching ovals have been filled in (identify the state’s abbreviation; e.g., California is CA; New York is NY). If not, please do so now.

(PAUSE)

(Continue on next page)

Administration Instructions: Answer Sheet (continued)



(DIRECT EXAMINEES TO USE ASSIGNED IDENTIFICATION NUMBERS.)

“In the section for IDENTIFICATION NUMBER, print your identification number and then fill in the matching ovals.

(OR)

“If the IDENTIFICATION NUMBER has already been completed, look to see that the matching ovals have been filled in. If not, please do so now.

(PAUSE)

“Age, race, and gender are optional items.

“In the section for AGE, print how old you are today in years and fill in the matching ovals.

(PAUSE)

“In the section for TESTING DATE, put in (*give today’s date by month, day, and year; e.g., 12-28-98*) and fill in the matching ovals. You need to fill in any leading zeros, too.

(PAUSE)

(SKIP SECTION MARKED “SOURCE”.)

“In the section for JOB EXPERIENCE, put in the total number of years and months of full-time job experience you have had and then fill in the matching ovals. If you don’t know exactly, just estimate.

(PAUSE)

(Continue on next page)

Administration Instructions: Answer Sheet (continued)



“In the section for RACE/ETHNIC GROUP, fill in the one oval that best describes the group with which you most closely identify.

(PAUSE)

“In the box marked GENDER, fill in the oval that indicates whether you are male or female.”

(PAUSE)

4. Allow sufficient time for completing identifying information. Walk around the room and make sure that each answer sheet has been filled out correctly.

THEN SAY:



“You will be given a brief rest period in about 45 minutes.

“Handle the booklet and answer sheet carefully. Remember, do not write in the booklet at any time. Scratch paper is provided for your use. Do not bend the answer sheets.

“Please work quietly out of consideration for others.

“Now open your booklet, remove the 2 sheets of scratch paper and set them aside for now. Read the **GENERAL INSTRUCTIONS** on page 1 silently to yourself while I read them aloud.”

(PAUSE)

5. Allow sufficient time for everyone to turn to the General Instructions page.

Administration Instructions: General Instructions (continued)

THEN SAY:



GENERAL INSTRUCTIONS

“This booklet contains several separate parts. **Each part has its own instructions, separate section on the answer sheet, and time limit.** Read and listen carefully to all of the instructions to make sure that you’re working on the correct part and filling out the correct section of your answer sheet. The instructions will also help you decide how fast you should work and when it is best to guess.

“Before you begin each part, you’ll have a chance to work a few practice questions. Please ask questions if you do not understand the instructions or are having trouble with the practice questions.

“When it is time to do the actual timed questions, you’ll be told when to start and when to stop. Be sure to begin immediately when you’re told to begin and stop immediately when you’re told to stop.

“Mark only one answer for each question. If you want to change an answer, erase the first answer completely and fill in your new choice. You won’t be allowed to clean up your answer sheet after you’ve been told to stop.

“When you finish a page, the instructions at the bottom will tell you whether to go to the next page or to stop and wait for further instructions.

(Continue on next page)

Administration Instructions: General Instructions (continued)



“If you finish before time is called, you may turn back to previous pages of the same part and check the work you’ve just completed. But do not turn back to a previous part at any time.

“Do not turn to the next page until told to do so.

“Are there any questions before we begin?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“Turn to page 3 and read the General Instructions for Parts 1, 2, and 3 while I read them aloud.”

(PAUSE)

GENERAL INSTRUCTIONS Parts 1, 2, and 3

“On the next three parts work **CAREFULLY**. You should have enough time to answer each question. It is to your advantage to **ANSWER EVERY QUESTION**. Even if you’re not sure of an answer, make your **BEST GUESS**, fill in your answer, then go to the next question. Your score for each part will be the number of questions you answer correctly. There is no penalty for answering incorrectly.”

(PROCEED WITH THE ADMINISTRATION OF PART 1: ARITHMETIC REASONING.)

(Continue on next page)

VI. Administration Instructions: Paper-and- Pencil

PART 1: ARITHMETIC REASONING

1. Read the following instructions to the examinees *verbatim*:



“Now read the instructions for Part 1 on the next page silently to yourself while I read them aloud.

“On this page are some arithmetic questions. Read Practice Question 1.

(PAUSE)

“It takes one-half hour to fill 1 tank. How many tanks can be filled in 6 hours?”

(PAUSE)

DO NOT READ ANSWER OPTIONS ALOUD!

(3, 9, 12, 15, or none of these.)

THEN SAY:



“In Practice Question 1, the correct answer is 12. In the answer column, the letter next to 12 is C. Fold your answer sheet to Page 2 so that **PART 1, ARITHMETIC REASONING** is showing and reinsert the plain sheet of paper.

(PAUSE. ALLOW TIME TO FOLD ANSWER SHEETS AND INSERT PAPER.)

(Continue on next page)

Part 1: Arithmetic Reasoning (continued)



“Find the shaded box labeled **PART 1 PRACTICE**. Notice that for Practice Question 1, the oval under letter C has been filled in.

(PAUSE)

“Now read Practice Question 2.

(PAUSE)

“Harry spends one-third of his monthly income on rent. He earns \$1,560 per month. How much does he pay for rent?”

(PAUSE)

DO NOT READ THE FOLLOWING ANSWER OPTIONS ALOUD!

(\$460, \$490, \$530, \$560 or none of these.)

THEN SAY:



“In Practice Question 2, the correct answer is \$520. However, \$520 does not appear in the answer column. Therefore, E or ‘none of these’ is the correct answer. For Practice Question 2, the oval under letter E has been filled in because none of the other answers given was correct.

“Now do Practice Questions 3 and 4 on the next page in the same way. Follow the directions and then in the practice box fill in the ovals under the letters of your answers.

(Continue on next page)

Part 1: Arithmetic Reasoning (continued)



“Do not write in this booklet. Do your work on the scratch paper provided.

“When you finish these practice questions, stop and wait for further instructions.

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“**START** the practice questions.”

DO NOT READ PRACTICE QUESTIONS 3 AND 4 ALOUD!

- 3. Candy bars cost \$0.65 each. How much will 6 candy bars cost?
(\$2.50, \$2.80, \$3.60, \$3.90 or none of these?)**
- 4. Jim has used $2\frac{1}{2}$ feet of fencing from a piece that was $9\frac{1}{2}$ feet long. How many feet are left?
(6, $6\frac{1}{2}$, 7, $7\frac{1}{2}$ or none of these?)**

Part 1: Arithmetic Reasoning (continued)

**CORRECT ANSWERS
(DO NOT READ ALOUD!)**

- Inspect each examinee's answer sheet to see that the practice questions have been answered correctly and that the answer marks completely fill in the ovals. Point out incorrect answers to the examinee. Have the examinee erase the answer completely, rework that question correctly, and mark the appropriate oval on the answer sheet.

		PART 1 PRACTICE				
		A	B	C	D	E
1		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
		A	B	C	D	E
2		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
		A	B	C	D	E
3		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
		A	B	C	D	E
4		<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

✓ Common Errors

All Practice Questions:

Error: It is obvious that the examinee is experiencing difficulty because s/he lacks an understanding of the basic arithmetic operations involved.

Remedy: The assessment administrator does not attempt to explain or teach the arithmetic operations involved, but instead encourages the examinee to do his/her best and then proceeds with administering the assessment.

- Allow sufficient time for all examinees to finish the practice questions.

Part 1: Arithmetic Reasoning (continued)

THEN SAY:



“The correct answer for Practice Question 3 is D and the correct answer for Practice Question 4 is C.”

“Now read the instructions on page 5.

(PAUSE)

“On the next pages are more questions like the ones you’ve just answered. For each question, fill in the oval under the letter of your answer.

“Work **CAREFULLY**. You should have enough time to answer each question. It is to your advantage to **ANSWER EVERY QUESTION**. Even if you’re not sure of an answer, make your **BEST GUESS**, then mark your choice on the answer sheet.

“You’ll receive one point for each correct answer. Points will not be subtracted for questions you answer incorrectly. Do not write in this booklet. Do your work on the scratch paper provided.

“When answering the questions in this part, be sure to work down the page and not across.

“If you finish before time is called, go back and check your work in **THIS PART** only. If you want to change an answer, erase the first answer completely, then fill in your new choice.

(Continue on next page)

Part 1: Arithmetic Reasoning (continued)



“You will have 20 minutes to complete this part.

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“Ready?”

(PAUSE)

“Please turn the page and **BEGIN.**” **(START THE STOPWATCH.)**



Allow exactly **20 MINUTES.**

THEN SAY:



“PLEASE STOP and put your pencil down.”

PART 2: VOCABULARY

1. Read the following instructions to the examinees *verbatim*:



“Turn your answer sheet over so that **PART 2 VOCABULARY** is showing. Now turn to page 10 in your booklet.

(PAUSE)

“Please read the instructions silently to yourself while I read them aloud.

“On this page are some questions in which you are asked to pick the two words that are either *most nearly the same* in meaning or *most nearly the opposite* in meaning.

“Read Practice Question 1.

(PAUSE)

“*Big, large, dry, slow.*

(PAUSE)

“**BIG** and **LARGE** have the *same* meaning. The letter for **BIG** is **A** and the letter for **LARGE** is **B**.

(Continue on next page)

Part 2: Vocabulary (continued)



“On your answer sheet find the shaded box labeled **PART 2 PRACTICE**.
“Notice that for Practice Question 1, the oval under letters A dash B (**A-B**) has been filled in.

(PAUSE)

“Now read Practice Question 2.

(PAUSE)

“*Witty, sad, tired, happy.*

(PAUSE)

“**SAD** and **HAPPY** have opposite meanings. The letter for **SAD** is **B** and the letter for **HAPPY** is **D**. Therefore, on your answer sheet for Practice Question 2, the oval under letters B dash D (**B-D**) has been filled in.

“Now do the next three practice questions on the next page in the same way. For each question, choose the two words that are either *most nearly the same* in meaning or *most nearly the opposite* in meaning.

“Consider all of the choices before selecting an answer to be sure you haven’t overlooked a choice that is better. Then, in the practice box, fill in the oval under the *letter combination* of your answer.

“When you finish these practice questions, stop and wait for further instructions.

(Continue on next page)

Part 2: Vocabulary (continued)



“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“**START** the practice questions.”

DO NOT READ THE PRACTICE QUESTIONS ALOUD!

3. Smart, false, true, good.
4. Help, strike, begin, end.
5. Frighten, accept, bother, scare.

2. Inspect each examinee’s answer sheet to see that the questions have been answered correctly and that the answer marks completely fill in the ovals. If any examinee has made an error, explain and demonstrate how the answers to Practice Questions 1 and 2 were obtained, and point out why the examinee’s answer is incorrect. Then have the examinee erase the answer completely and mark the appropriate oval on the answer sheet.

CORRECT ANSWERS (DO NOT READ ALOUD!)

PART 2 PRACTICE						
	A-B	A-C	A-D	B-C	B-D	C-D
1	●	○	○	○	○	○
2	○	○	○	○	●	○
3	○	○	○	●	○	○
4	○	○	○	○	○	●
5	○	○	●	○	○	○

Part 2: Vocabulary (continued)

Common Errors

All Practice Questions:

Error: Examinees are sometimes under the impression that they should match the first word with one of the subsequent words.

Remedy: Remind examinees that in Practice Question 2, the first word (*witty*) is not matched with another word, and in the other questions the first word is not necessarily the one being matched.

3. Allow sufficient time for all examinees to complete the practice questions.

THEN SAY:



“The correct answer for Practice Question 3 is B dash C; for Practice Question 4, C dash D; and for Practice Question 5, A dash D.

“Now read the instructions on page 11.

(PAUSE)

“On the next pages are more questions like the ones you’ve just answered. For each question, fill in the oval under the *letter combination* of your answer.

(Continue on next page)

Part 2: Vocabulary (continued)



“Work **CAREFULLY**. You should have enough time to answer each question. It is to your advantage to **ANSWER EVERY QUESTION**. Even if you’re not sure of an answer, make your **BEST GUESS**, then mark your choice on the answer sheet. You’ll receive one point for each correct answer. Points will not be subtracted for questions you answer incorrectly.

“Do not write in this booklet.

“When answering the questions in this part, be sure to work down the page and not across.

“If you finish before time is called, go back and check your work in **THIS PART** only. If you want to change an answer, erase the first answer completely, then fill in your new choice.

“**You will have 8 minutes to complete this part.**

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“Ready?”

(PAUSE)

“Please turn the page and **BEGIN.**” **(START THE STOPWATCH.)**

Part 2: Vocabulary (continued)



Allow exactly **8 MINUTES.**

THEN SAY:



“PLEASE STOP and put your pencil down.”

PART 3: THREE-DIMENSIONAL SPACE

1. Read the following instructions to the examinees *verbatim*:



“Turn to page 14 in your booklet.

(PAUSE)

“Please read the instructions silently to yourself while I read them aloud.

“On this page are some problems in which **flat** shapes have been folded *or* rolled *or* both to make **three-dimensional** objects.

“Look at Practice Problem 1.

(PAUSE)

“At the left is a drawing of a flat shape. The dotted lines show where the shape must be folded. At the right are four different drawings of three-dimensional objects.

(HOLD UP THE PRACTICE CUTOUT MODEL.)

“This cutout is like the drawing of the flat shape on the left.

(PAUSE)

“Notice that only *Object D* can be made by folding the flat shape shown in *Figure 1*.

(DEMONSTRATE TO THE EXAMINEES BY FOLDING AND REFOLDING THE CUTOUT FOR PRACTICE PROBLEM 1.)

(Continue on next page)

Part 3: Three-Dimensional Space (continued)



“On your answer sheet, find the shaded box labeled **PART 3 PRACTICE**. Notice that for Practice Problem 1, the oval under letter **D** has been filled in.

(PAUSE)

“Now look at Practice Problem 2.

“At the left is another drawing of a flat shape. There are no indications on the flat shape to show where it’s to be rolled. There are dotted lines where the circles meet the rectangle to show where it’s to be folded.

(HOLD UP THE PRACTICE CUTOUT MODEL)

“This cutout is like the drawing of the flat shape on the left.

“Notice that of the four different drawings on the right only *Object C* can be made by both rolling *and* folding the flat shape.

(DEMONSTRATE TO THE EXAMINEES BY ROLLING, FOLDING, AND REFOLDING THE CUTOUT FOR PRACTICE PROBLEM 2.)

“Therefore, on your answer sheet for Practice Problem 2, the oval under letter **C** has been filled in.

(PAUSE)

(Continue on next page)

Part 3: Three-Dimensional Space (continued)



“Now do the next three practice problems on the next page in the same way. In the practice box, fill in the ovals under the letters of your answers. When you finish these practice problems, stop and wait for further instructions.

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“**START** the practice problems.”

**CORRECT ANSWERS
(DO NOT READ ALOUD!)**

- Inspect each examinee’s answer sheet to see that the practice problems have been answered correctly and that the answer marks completely fill in the ovals. If an examinee has made an error, explain and demonstrate how the answers to Practice Problems 1 and 2 were determined. Point out why any object chosen cannot be made from the flat shape. Have the examinee erase the incorrect answer completely and mark the appropriate oval on the answer sheet.

PART 3 PRACTICE				
	A	B	C	D
1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	A	B	C	D
2	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	A	B	C	D
3	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	A	B	C	D
4	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
	A	B	C	D
5	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Part 3: Three-Dimensional Space (continued)

✓ Common Errors

Practice Problem 5:

Error: Examinees sometimes choose answer C instead of answer A.

Remedy: Examinees should be told that the dotted line in Shape 5 indicates a fold.

3. Allow sufficient time for all examinees to finish the practice problems.

THEN SAY:



“The correct answer for Practice Problem 3 is C; for Practice Problem 4, B; and for Practice Problem 5, A.

“Now read the instructions on page 15.

(PAUSE)

“On the next pages are more problems like the ones you’ve just answered. Only *one* object can be made from the flat shape by folding *or* rolling *or* both. For each problem, fill in the oval under the letter of your answer.

“Work **CAREFULLY**. You should have enough time to answer each problem. It is to your advantage to **ANSWER EVERY PROBLEM**. Even if you’re not sure of an answer, make your **BEST GUESS**, then mark your choice on the answer sheet.

(Continue on next page)

Part 3: Three-Dimensional Space (continued)



“You’ll receive one point for each correct answer. Points will not be subtracted for problems you answer incorrectly.

“Do not write in this booklet.

“If you finish before time is called, go back and check your work in **THIS PART** only. If you want to change an answer, erase the first answer completely, then fill in your new choice.

“You will have 8 minutes to complete this part.

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“Ready?”

(PAUSE)

“Please turn the page and **BEGIN.**” **(START THE STOPWATCH.)**



Allow exactly **8 MINUTES.**

Part 3: Three-Dimensional Space (continued)

THEN SAY:



“PLEASE STOP. Put your pencil down and fold your answer sheet so that the Name Section can be seen at the top. Reinsert the plain sheet of paper.

“Place your answer sheet inside the front cover of your booklet, and close your booklet.

(PAUSE)

“At this time there will be a five-minute break. Do not open the instrument booklet during the break period.

“If you wish to get up and stretch or leave the room, you may do so, but be back in your seat within five minutes.”

4. Replace all broken or dull pencils with sharpened ones.
5. After 5 minutes have elapsed, continue administering the assessment.

PART 4: COMPUTATION

1. Read the following instructions to the examinees *verbatim*:



“Please return to your seats.

(PAUSE)

“Remove your answer sheet and fold it so that Part 4 is showing. Reinsert the plain sheet of paper. Open your booklet to page 21.

(PAUSE. ALLOW TIME TO FOLD ANSWER SHEETS, REINSERT PAPER, AND TURN TO THE CORRECT PAGE.)

“Please read the General Instructions for Parts 4, 5, and 6 silently to yourself while I read them aloud.

GENERAL INSTRUCTIONS

Parts 4, 5, and 6

“The next three parts are different from the parts you’ve already taken. On these parts, **SPEED** is **VERY IMPORTANT**. You won’t have time to answer every question. You must work as **FAST** as you can, but don’t be careless.

(Continue on next page)

Part 4: Computation (continued)



“If you have even the slightest idea of the answer, it is to your advantage to make your **BEST GUESS**. If you can eliminate one or more wrong choices to the question, then make your **BEST GUESS** from the remaining choices. However, if you have no idea of the correct answer, don’t spend time guessing; go to the next question.

“You’ll receive one point for each correct answer. You’ll be penalized for wrong answers. Points will not be subtracted for questions you don’t answer.

“Now please turn to page 22.

(PAUSE)

“On this page are some computation questions. Read Practice Question 1.”

(PAUSE)

DO NOT READ PRACTICE QUESTION ALOUD!

1. SUBTRACT

$$\begin{array}{r} 8 \\ - 2 \\ \hline \end{array}$$

- A. 4**
- B. 5**
- C. 6**
- D. 7**
- E. none of these**

Part 4: Computation (continued)

THEN SAY:



“In Practice Question 1, the correct answer is 6. In the answer column, the letter next to 6 is C. On your answer sheet find the shaded box labeled **PART 4 PRACTICE**.

(PAUSE)

“Notice that for Practice Question 1, the oval under letter C has been filled in.

(PAUSE)

“Now, read Practice Question 2.”

(PAUSE)

DO NOT READ PRACTICE QUESTION ALOUD!

2. ADD

$$\begin{array}{r} 8 \\ + 1 \\ \hline \end{array}$$

- A. 6
- B. 7
- C. 10
- D. 11
- E. none of these

Part 4: Computation (continued)

THEN SAY:



“In Practice Question 2, the correct answer is 9. However, 9 does not appear in the answer column. Therefore, E or ‘none of these’ is the correct answer. For Practice Question 2, the oval under letter E has been filled in because none of the other answers given was correct.

(PAUSE)

“Now do Practice Questions 3 and 4 on the next page in the same way. Follow the directions and then, in the practice box, fill in the ovals under the letters of your answers.

“Do not write in this booklet. Do your work on the scratch paper provided.

“When you finish these practice questions, stop and wait for further instructions.

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“**START** the practice questions.”

Part 4: Computation (continued)

DO NOT READ PRACTICE QUESTIONS 3 AND 4 ALOUD!

3. MULTIPLY

$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

- A. 8
- B. 9
- C. 12
- D. 14
- E. none of these

4. DIVIDE

$$2 \overline{)6}$$

- A. 3
- B. 4
- C. 5
- D. 6
- E. none of these

**CORRECT ANSWERS
(DO NOT READ ALOUD!)**

2. Inspect each examinee's answer sheet to see that the practice questions have been answered correctly and that the answer marks completely fill in the ovals. Point out any incorrect answer to the examinee. Have the examinee erase the answer completely, rework that question correctly, and mark the appropriate oval on the answer sheet.

PART 4 PRACTICE					
	A	B	C	D	E
1	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
	A	B	C	D	E
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	A	B	C	D	E
3	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
	A	B	C	D	E
4	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Common Errors

Practice Question 3:

Error: Examinees sometimes choose answer E instead of answer C.

Remedy: Examinees should be told to re-read the specific directions for the item. If, after a reasonable explanation, the examinees still have difficulty in solving the problems correctly, the assessment administrator should not attempt to explain

Part 4: Computation (continued)

or teach the arithmetic operations involved, but should encourage the examinees to do their best and then proceed with administering the assessment.

3 Allow sufficient time for all examinees to finish the practice questions.

THEN SAY:



“The correct answer for Practice Question 3 is C and for Practice Question 4, A.

“Now read the instructions on page 23.

(PAUSE)

“On the next pages are more questions like the ones you’ve just answered. For each question, fill in the oval under the letter of your answer.

“Remember, on this part **SPEED** is very important. Work as **FAST** as you can, but don’t be careless. If you have even the slightest idea of the answer, it is to your advantage to make your **BEST GUESS**. If you can eliminate one or more wrong choices to a problem, make your **BEST GUESS** from the remaining choices. However, if you have no idea of the correct answer, don’t spend time guessing; go to the next problem.

“You’ll receive one point for each correct answer. You’ll lose one quarter (1/4) of a point for each wrong answer. Points will not be subtracted for problems you don’t answer.

(Continue on next page)

Part 4: Computation (continued)



“Do not write in this booklet. Do your work on the scratch paper provided.

“When answering the questions in this part, be sure to work down the page and not across.

“If you finish before time is called, go back and check your work in **THIS PART** only. If you want to change an answer, erase the first answer completely, then fill in your new choice.

“**You will have 6 minutes to complete this part.**

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“Ready?”

(PAUSE)

“Please turn the page and **BEGIN.**” **(START THE STOPWATCH.)**



Allow exactly **6 MINUTES.**

Part 4: Computation (continued)

THEN SAY:



“PLEASE STOP and put your pencil down.”

PART 5: NAME COMPARISON

1. Read the following instructions to the examinees *verbatim*:



“Turn to page 30 in your booklet and read the instructions silently to yourself while I read them aloud.

(PAUSE)

“On this page are some questions in comparing names. Read Practice Question 1.”

(PAUSE)

DO NOT READ PRACTICE QUESTION ALOUD!

1. C. K. Duncan — C. K. Duncan

THEN SAY:



“The two names are *exactly* the *same*. Fold your answer sheet so that **PART 5 NAME COMPARISON** is showing and reinsert the plain sheet of paper. Find the shaded box labeled **PART 5 PRACTICE**.

(PAUSE. ALLOW TIME TO FOLD ANSWER SHEETS AND REINSERT PAPER.)

“Notice that for Practice Question 1, the oval under S, for *same*, has been filled in. Now read Practice Question 2.”

(PAUSE)

Part 5: Name Comparison (continued)

DO NOT READ PRACTICE QUESTION ALOUD!

2. Debbie Bailey — Debbie Baily

THEN SAY:



“These two names are *different*. So for Practice Question 2, the oval under **D**, for *different*, has been filled in.

“Now do the next six practice questions in the same way. If the names are *exactly the same*, fill in the oval under **S**. If they are *different in any way*, fill in the oval under **D**.

“When you finish these practice questions, stop and wait for further instructions.

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“**START** the practice questions.”

DO NOT READ PRACTICE QUESTIONS ALOUD!

3. Brimms Co. — Brimms Company
4. Wesson & Wyle — Wesson & Wyle
5. Remington, D.E. — Remington, D.F.
6. Linda Small — Lynda Small
7. Strong Ltd. — Strong Inc.
8. James Reagon — James Reagon

Part 5: Name Comparison (continued)

3. Allow the examinees sufficient time to finish the practice questions.

THEN SAY:



“The correct answer for Practice Question 3 is D for different; for Practice Question 4, S for same; for 5, D; for 6, D; for 7, D; and for 8, S.

“Now read the instructions on page 31.

(PAUSE)

“On the next pages are more questions like the ones you’ve just answered. For each question, fill in the oval under the letter of your answer.

”Remember, on this part **SPEED** is very important. Work as **FAST** as you can, but don’t be careless. If you have even the slightest idea of the answer, but are not sure, then it is to your advantage to make your **BEST GUESS**. However, if you have no idea of the correct answer, don’t spend time guessing; go to the next question.

“You’ll receive one point for each correct answer. You’ll lose one point for each wrong answer. Points will not be subtracted for questions you don’t answer.

“Do not write in this booklet. If you finish before time is called, go back and check your work in **THIS PART** only.

(Continue on next page)

Part 5: Name Comparison (continued)



“If you want to change an answer, erase the first answer completely, then fill in your new choice.

“You will have 6 minutes to complete this part.

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“Ready?”

(PAUSE)

“Please turn the page and **BEGIN.**” **(START THE STOPWATCH.)**



Allow exactly **6 MINUTES.**

THEN SAY:



“PLEASE STOP and put your pencil down.”

PART 6: OBJECT MATCHING

1. Read the following instructions to the examinees *verbatim*:



“Now turn to page 36 in your booklet.

(PAUSE)

“Please read the instructions silently to yourself while I read them aloud.

“On this page are some problems in which you compare objects. Look at Object 1 and the four objects that follow.

(PAUSE)

“Notice that only Object **B** is *exactly the same* as Object 1.

“On your answer sheet, find the shaded box labeled **PART 6 PRACTICE**.

(PAUSE)

“Notice that for Practice Problem 1, the oval under letter **B** has been filled in.

(PAUSE)

“Now do the next two practice problems in the same way. In each one, find the *lettered* object that is *exactly the same* as the *numbered* object. Then, in the practice box, fill in the oval under the letter of your answer.

(Continue on next page)

Part 6: Object Matching (continued)



“When you finish these practice problems, stop and wait for further instructions.

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“**START** the practice problems.”

**CORRECT ANSWERS
(DO NOT READ ALOUD!)**

2. Inspect each examinee’s answer sheet to see that the problems have been answered correctly and that the answer marks completely fill in the ovals. If an examinee has made an error, explain and demonstrate, by pointing out corresponding parts, how the answer for Practice Problem 1 was obtained. Then show why the examinee’s answer is incorrect. When the examinee understands the procedure, have the examinee erase the answer completely and mark the correct oval on the answer sheet.

PART 6 PRACTICE				
	A	B	C	D
1	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
	A	B	C	D
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	A	B	C	D
3	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

3. Allow sufficient time for all examinees to complete the practice problems.

Part 6: Object Matching (continued)

THEN SAY:



“The correct answer for Practice Problem 2 is D and for Practice Problem 3 is C.

“Now read the instructions on page 37.

“On the next pages are more problems like the ones you’ve just answered. For each problem, fill in the oval under the letter of your answer.

“Remember, on this part **SPEED** is very important. Work as **FAST** as you can, but don’t be careless. If you have even the slightest idea of the answer, it is to your advantage to make your **BEST GUESS**. If you can eliminate one or more wrong choices to a problem, then make your **BEST GUESS** from the remaining choices. However, if you have no idea of the correct answer, don’t spend time guessing; go to the next problem.

“You’ll receive one point for each correct answer. You’ll lose one third ($1/3$) of a point for each wrong answer. Points will not be subtracted for problems you don’t answer.

“Do not write in this booklet.

“If you finish before time is called, go back and check your work in **THIS PART** only.

(Continue on next page)

Part 6: Object Matching (continued)



“If you want to change an answer, erase the first answer completely, then fill in your new choice.

“**You will have 5 minutes to complete this part.**

“Are there any questions?”

(ANSWER ALL APPLICABLE QUESTIONS.)

“Ready?”

(PAUSE)

“Please turn the page and **BEGIN.**” **(START THE STOPWATCH.)**



Allow exactly **5 MINUTES.**

THEN SAY:



“**PLEASE STOP.** Put your pencil down and close your booklet.”

4. Do not allow the booklets and answer sheets to be passed to the front, side, or back.
5. Collect the booklets, answer sheets, pencils, plain piece of paper, and all scratch paper.

If you are administering only the first 6 parts of the assessment, end the assessment here.
Thank the examinees for their cooperation, then dismiss them.

PART 7: MARK MAKING

**CONTINUE WITH THIS SECTION ONLY IF YOU'RE ADMINISTERING PARTS 1-7 OR PARTS 1-11
Administrator/Examinee Ratio is 1:5**

1. Distribute the Part 7 answer sheet and two new pencils to each examinee.
2. Read the following instructions to the examinees *verbatim*:



“Turn your Part 7 answer sheet so that the name space is at the top of the page.

(PAUSE)

“In the proper spaces, print your name, last name first, and today’s date.”

(GIVE THE DATE. PAUSE. ALLOW TIME FOR ENTRY OF INFORMATION.)

NOTE: *If an identification number is used on the Part 7 answer sheet, appropriate directions should be given.*

3. Inspect each examinee’s answer sheet to see that the name and date have been completed.

**THEN
SAY:**



“Please read the instructions to yourself while I read them aloud.

“On this page is an exercise in making lines in squares. Do NOT begin until you are told to do so.

(Continue on next page)

Part 7: Mark Making (continued)



“You are to make THREE LINES like these, || , in each of the squares below. The lines should be made as quickly as possible. Finish each box before going on to the next one. Work as fast as you can until told to stop. Work from left to right in each row. If your pencil point breaks, use your other pencil and keep working.

“The first three squares have been done for you.

“You will have 10 seconds to do the other squares. Work as fast as you can. Do not stop to make corrections.

“HOLD YOUR PENCIL READY FOR MARKING. READY?”

“**BEGIN.**” (START THE STOPWATCH.)



Allow exactly **10 SECONDS**.

THEN SAY:



“**STOP!** Do not go on to the next exercise until you are told to do so.”

Part 7: Mark Making (continued)

4. Inspect each examinee's answer sheet to see that the practice exercise has been done correctly. If anyone has not done it correctly, explain and demonstrate how the marks should be made, emphasizing the importance of speed.



Common Errors

All Trials:

Error: Examinees do not proceed from left to right in each row; instead, they circle or wind around from row to row.

Remedy: Remind the examinees that they must work from left to right in each row and finish each row before advancing down to the next line.

Error: Examinees may make all the vertical marks and then go back and make all the horizontal marks.

Remedy: Remind the examinees that they must make three lines like these, II, in each square before advancing to the next square.

THEN SAY:



“Look at the instructions for the next practice exercise while I read them aloud.

“Below is another exercise like the one you have just done. You will have 10 seconds to make the same three lines in as many more squares as you can.

(Continue on next page)

Part 7: Mark Making (continued)



“See if you can go faster this time.

“HOLD YOUR PENCIL READY FOR MARKING. READY?

“**BEGIN.**” (START THE STOPWATCH.)



Allow exactly **10 SECONDS.**

THEN SAY:



“**STOP!** Do not turn this page until you are told to do so.

(PAUSE)

“Now look at the instructions at the bottom of the page while I read them aloud.

(PAUSE)

“On the back of this page is another exercise exactly like this. Work as fast as you can. This time you will have 60 seconds.

“Now turn the page and wait for the signal to begin.

“HOLD YOUR PENCIL READY FOR MARKING.”

Part 7: Mark Making (continued)

5. Allow a two-second pause, or enough time to see that each examinee is holding his or her pencil about one-half inch above the first square. Give appropriate instructions to those who are not doing so.

THEN SAY:



“READY? BEGIN.” (START THE STOPWATCH.)



Allow exactly **60 SECONDS.**

THEN SAY:



“STOP! Put your pencil down.”

6. Collect the pencils and answer sheets if not using Part 7 sheets for scoring Parts 8-11.

If you are administering only Parts 1 through 7, end the assessment here. Thank the examinees for their cooperation, and then dismiss them. Score the Part 7 assessment sheet and transfer the score to the appropriate box on the front of the answer sheet.

VII. Administration Instructions: Apparatus

***CONTINUE WITH THIS SECTION ONLY IF YOU'RE ADMINISTERING PARTS 1 - 11
Administrator/Examinee Ratio is 1:5***

Apparatus Equipment

The Manual Dexterity Pegboard apparatus is to be used for the administration of Parts 8 and 9, and the Finger Dexterity Board apparatus is used for the administration of Parts 10 and 11.

Handedness of Examinees

The performance on some of the apparatus exercises is different for right-handed and left-handed examinees. At the beginning of each apparatus exercise session, the administrator must find out if any of the examinees are left-handed; if so, the apparatus equipment should be set up accordingly.

The apparatus equipment is set up to accommodate both the left- and right-handed examinees. If more than one left-handed examinee is present, it is better to position them together for ease in administering and scoring the exercises.

Sitting or Standing

Research has demonstrated that it makes no appreciable difference whether an examinee stands or sits while taking Parts 8 and 9, Place and Turn. Therefore, examinees should choose the stance they feel will allow them to work the fastest. Examinees, however, are seated while performing on Parts 10 and 11, Assemble and Disassemble.

The assessment administrator or assistant is to ***stand*** while demonstrating the performance for Parts 8 and 9, but be ***seated*** during the demonstration for Parts 10 and 11. Examinees can stand or sit while performing on Parts 8 and 9, but are seated while performing on Parts 10 and 11. It is during the practice trial that the administrator can determine if the examinee understands

Administration Instructions: Apparatus (continued)

how the task is to be performed. The administrator should watch closely for deviations from the standard procedures and make whatever corrections are necessary.

Following Administration Directions

If you are administering the apparatus exercises, the directions must be followed exactly. For each apparatus exercise, the administration procedure involves an explanation and demonstration of the task to be done, and a practice trial.

The assessment administrator must be very familiar with the instructions that are read to the examinees. Under no circumstances should these instructions be recited from memory when exercises are administered. Each time the exercises are administered, the instructions must be read to ensure that they are identical for every group. The only exceptions to varying the instructions involve attention to handedness of the examinees and in cases such as the following:

- ▶ “Set your board even with the edge of the table”; and/or
- ▶ “You will begin with this rivet.”

These sentences may be omitted if they are unnecessary. However, all instructions pertaining to the actual performance of the exercises must be read verbatim.

During the administration of the apparatus exercises, if an examinee has a peg, rivet, or washer in his/her hand when the stop signal is given, s/he should be told to complete the movement and place the pieces in the appropriate part of the board.

Administration Instructions: Apparatus (continued)

Recording Scores of Apparatus Exercises

The examinees' scores on each apparatus trial are entered in the appropriate boxes on the left-hand side of the front of the Part 7 answer sheet (see Diagram 1 on page VII. 4) or on the O*NET Ability Profiler Record of Apparatus Scores form (see Diagram 2 on page VII. 5).

- ▶ The pegboard score for Part 8: *Place* is the sum of the three timed trials.
- ▶ The pegboard score for Part 9: *Turn* is the sum of the three timed trials.
- ▶ The score for Part 10: *Assemble* is equal to the one assembling timed trial of the finger dexterity board.
- ▶ The score for Part 11: *Disassemble* is equal to the one disassembling timed trial of the finger dexterity board.

After finishing these exercises, transfer the scores to the appropriate boxes on the front of the O*NET Ability Profiler answer sheet and fill-in the matching ovals. To ensure that the psychomotor scores (raw scores – Parts 7-11) are hand-entered properly on the scannable answer sheets, enter leading zeros if the score for any one part is not large enough to use all the available columns. The applicable oval in that column under the zero should be filled in. (For example, if an examinee's raw score for Part 7 were 54, the numbers 054 should be entered into the spaces for the Part 7 raw score on the scannable answer sheet, and the applicable ovals in the columns below those numbers should be filled in.)

NOTE: To help prevent invalid scores from being recorded on the answer sheet, the highest possible scores for the psychomotor exercises are listed below. Any score beyond these is in error:

- Part 7 ≤ 130
- Part 8 ≤ 144
- Part 9 ≤ 144
- Part 10 ≤ 50
- Part 11 ≤ 50

Diagram 2

O*NET ABILITY PROFILER™ RECORD OF APPARATUS SCORES

Date: 12/2/2002 Examiner: P. Hurst Assistant (s): S. Mellon, M. Daggett

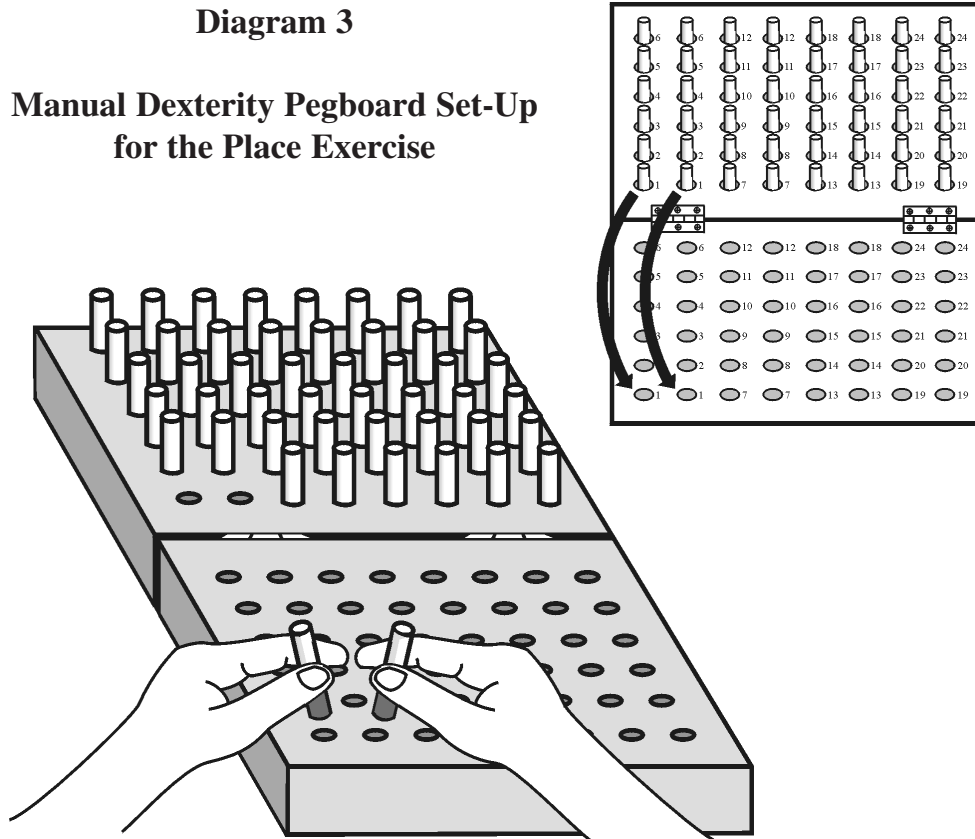
Remarks: _____

		Name of Examinee											
		(Last)	(First)										
		Baker, Mary	* Campbell, Julie	Brintz, Nanette	Bulley, Rose	Higgins, Lloyd	* Garcia, Maria	MacManus, Vince	Moritsch, Brian	Walker, Audrey	Wong, Wendy		
8	T R I A L S	1	34	35	36	31	30	32	28	32	36	26	* Left-Handed Examinees
		2	35	33	40	36	30	32	30	30	38	28	
		3	34	32	41	37	30	34	30	32	37	26	
	TOTAL	103	100	117	104	90	98	88	94	111	80		
9	T R I A L S	1	36	36	38	32	36	36	32	34	36	28	
		2	38	34	43	38	38	34	34	36	39	32	
		3	36	33	42	37	37	33	34	34	37	32	
	TOTAL	110	103	123	107	111	103	100	104	112	92		
10		32	34	30	29	31	36	29	29	34	29		
11		32	34	35	32	31	33	32	27	31	26		

© 2002, U.S. Department of Labor, Employment and Training Administration. All rights reserved.

PART 8: PLACE

Prior to the session, the assessment administrator sets up a pegboard for each examinee and a board that s/he will use for demonstration purposes. Diagram 3 shows the pegboard set up for use. The numbers in the diagram show the order in which examinees must move the pegs from the upper to the lower part of the board.



Directions: Examinee grabs two pegs from the upper section, one with the left hand and one with the right hand, and moves them to the corresponding holes in the lower section.

Part 8: Place (continued)

Each board is set up as follows:

- ▶ The pegboard is placed on a table with the lower edge of the board even with the edge of the table. A peg, white end up, is in each hole in the upper part of the board.
- ▶ The assessment administrator's board is at the center rather than near either end of the table. Boards for the examinees are close enough to the administrator for each person to see the demonstration clearly, and far enough apart to allow adequate working space.

Assign each examinee to a board and print his or her name on the *O*NET Ability Profiler Record of Apparatus Scores* (if this form is being used). If Part 7 answer sheets are used to record apparatus scores, arrange these answer sheets in proper sequence to facilitate scoring. Do not place the answer sheets where the examinees can see their scores being entered after each timed trial. You don't want examinees' performance to be influenced by seeing their scores.

Scoring

When scoring Part 8, record the total number of attempts made by the examinee. The number of attempts is equal to:

- ▶ The number of empty holes in the upper part of the board; or
- ▶ The number of pegs inserted in the lower part of the board plus the number of pegs dropped; or
- ▶ The number of pegs remaining in the holes in the upper part of the board subtracted from the total number of pegs (48).

Part 8: Place (continued)

Any two of these methods should be used in scoring, one used as a check for the other. Verify each examinee's name when recording his or her score. The maximum score is 48.

Caution: *Examinees must not be given any indication whether or not they will be penalized for errors.*

The intent of this caution is to avoid a situation in which examinees could use this knowledge of the scoring procedure to their advantage.

PART 8: Place - Practice Trial

1. Read the following practice instructions to the examinees *verbatim* and demonstrate the operations as indicated in the instructions.

SAY:



“Now we are going to have you work with the manual dexterity boards. Please do not move any pegs until I say ‘BEGIN.’

“You are going to move all of the pegs from the UPPER part of the board to the LOWER part of the board as fast as you can.

(POINT TO THE UPPER, THEN THE LOWER PART OF THE BOARD.)

“Watch me while I show you how. You will start with these two pegs. Pick them up at the same time, one in each hand, and put them in these two holes like this.

(PICK UP PEGS 1 AND PUT THEM IN HOLES 1.)

“Then pick up the next two pegs and put them in the next two holes like this.

(PICK UP PEGS 2 AND PUT THEM IN HOLES 2.)

“Move all of the pegs in these columns before beginning on the next.

(MOVE PEGS 3, 4, 5, AND 6 TO HOLES 3, 4, 5, AND 6.)

(Continue on next page)

Part 8: Place - Practice Trial (continued)



“Always begin each column at the bottom like this, and work toward the top.

(BEGIN TO MOVE THE PEGS IN THE NEXT TWO COLUMNS.)

“If you drop a peg, don’t stop to pick it up; skip that hole and go right on.

(DROP PEG 9 FROM YOUR LEFT HAND AND DON’T PICK IT UP. CONTINUE WORKING WITHOUT HESITATION AND COMPLETE THE COLUMN.)

“Now you will have a practice exercise. You may sit or stand while doing this exercise. Don’t start until I say ‘BEGIN.’

“You are going to move the pegs from the upper to the lower part of the board as fast as you can. You will start with these two pegs.

(POINT TO PEGS 1.)

“Now set your board even with the edge of the table. Put your hands on the first two pegs.

(QUICKLY GLANCE AROUND TO MAKE CERTAIN THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

“Work as fast as you can. READY? **BEGIN** the practice trial.”

2. Observe each examinee as s/he performs. Make corrections whenever an examinee deviates from standard procedures as shown in Diagram 3 on page VII. 7.



Common Errors

Error: An examinee drops a peg while moving it.

Remedy: The assessment administrator tells the examinee to skip that hole.

Error: An examinee takes pegs from the tops of the columns first.

Remedy: The administrator tells the examinee to take the pegs from the bottom and points at the appropriate pegs.

Error: An examinee puts pegs at the tops of the columns first.

Remedy: The administrator tells the examinee to put the pegs into the holes at the bottom of the board and points to the appropriate holes.

Error: An examinee takes pegs from the wrong column.

Remedy: The administrator points to the appropriate pegs and says “take these.”

Error: An examinee puts pegs in the wrong column.

Remedy: The administrator points to where the pegs are to go.

3. During the practice trial each examinee should receive sufficient instructions to have a thorough understanding of the procedure.
4. Allow each examinee sufficient time to move all of the pegs.

Part 8: Place - Practice Trial (continued)

THEN SAY:



“Pick up any pegs that you have dropped and put them in the proper place.

“Now turn your board around and set the edge of the board even with the edge of the table.”

PART 8: Place - Timed Trial 1

1. Inspect each board to make certain that it is set up properly for the first timed trial. There should be a peg, white end up, in each hole in the upper part of the board.

**THEN
SAY:**



“There are three 15-second timed trials in this exercise. Now put your hands on the first two pegs and wait until I say ‘BEGIN.’

(QUICKLY GLANCE AROUND TO MAKE CERTAIN THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

“Work as fast as you can. READY? **BEGIN!**”

(START THE STOPWATCH.)



Allow exactly **15 SECONDS.**

**THEN
SAY:**



“**STOP!** Don’t touch any more pegs.

“If you already have pegs in your hands, place them in the lower part of the board.”

2. Record the scores for all examinees.

Part 8: Place - Timed Trials (continued)

THEN SAY:



“In the same manner, move the rest of the pegs to the lower part of the board.

“Pick up any pegs that you have dropped and put them in the proper place.

“Now turn your board around and set it even with the edge of the table.”

Part 8: Place - Timed Trial 2

1. Inspect each board to make certain that it is set up properly for the second timed trial.

THEN SAY:



“This is your second timed trial. Now put your hands on the first two pegs and wait until I say ‘BEGIN.’

(QUICKLY GLANCE AROUND TO MAKE CERTAIN THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

“See if you can go faster this time. READY? **BEGIN!**”

(START THE STOPWATCH.)

Part 8: Place - Timed Trials (continued)



Allow exactly **15 SECONDS.**

THEN SAY:



“STOP! Don’t touch any more pegs.

“If you already have pegs in your hands, place them in the lower part of the board.”

2. Record the scores for all examinees.

THEN SAY:



“In the same manner, move the rest of the pegs to the lower part of the board.

“Pick up any pegs that you have dropped and put them in the proper place.

“Now turn your board around and set it even with the edge of the table.”

Part 8: Place - Timed Trials (continued)

Part 8: Place - Timed Trial 3

1. Inspect each board to make certain that it is set up properly for the third timed trial.

THEN SAY:



“This will be your last timed trial. Now put your hands on the first two pegs and wait until I say ‘BEGIN.’

(QUICKLY GLANCE AROUND TO MAKE CERTAIN THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

“See if you can go faster this time. READY? **BEGIN!**”

(START THE STOPWATCH.)



Allow exactly **15 SECONDS**.

THEN SAY:



“**STOP!** Don’t touch any more pegs.

“If you already have pegs in your hands, place them in the lower part of the board.”

Part 8: Place - Timed Trials (continued)

2. Record the scores for all examinees.

THEN SAY:



“Move the rest of the pegs to the lower part of the board.

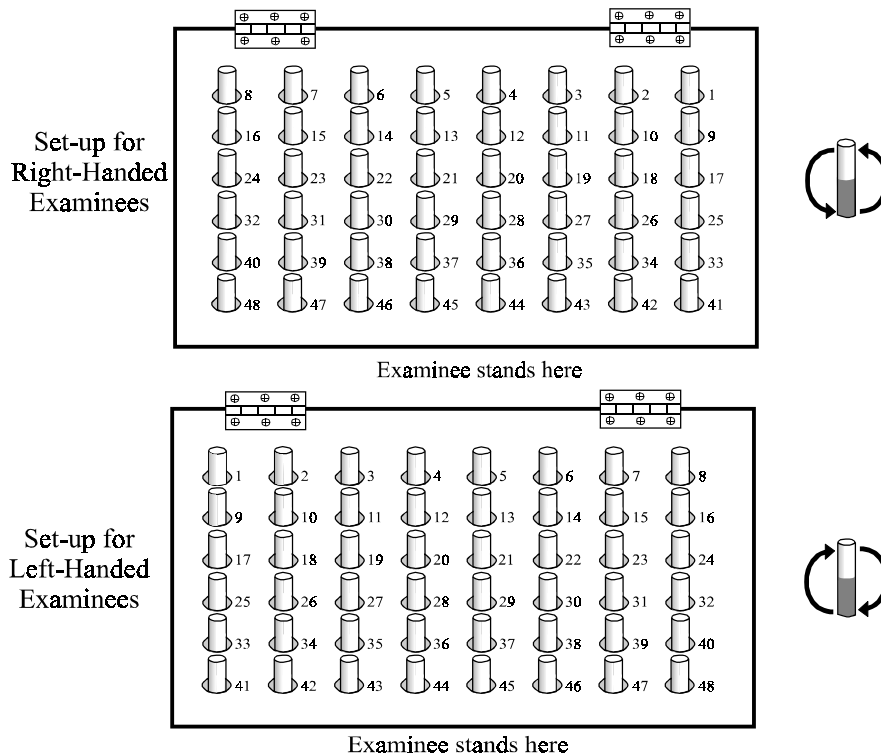
“Pick up any pegs that you have dropped and put them in the proper place.

“Do not turn your board around this time.”

PART 9: TURN

Prior to the session the assessment administrator sets up a pegboard for each examinee, and a board that s/he will use for demonstration purposes. At the end of Part 8, the pegs will be in the proper position for Part 9. Diagram 4 shows the pegboard set up for use. The numbers in the diagram show the order in which right-handed examinees and left-handed examinees are to turn over the pegs.

Diagram 4
Manual Dexterity Board Set-Up for the Turn Exercise



Directions: Examinee grasps a peg with his/her dominant hand, rotates the peg using only their dominant hand, and reinserts the peg into its original hole.

Part 9: Turn (continued)

Each board should be set up as follows:

- ▶ The pegboard is placed on a table with the lower edge of the board even with the edge of the table. A peg, white end up, should be in each hole in the lower part of the board. On alternate trials, the white ends will be down.
- ▶ The assessment administrator's board should be at the center rather than near either end of the table. Boards for the examinees are placed close enough to the administrator for each person to see the demonstration clearly, and far enough apart to allow adequate working space.

The group should consist of either right-handed or left-handed examinees. When this is not practical, however, the administrator needs to make it clear to both right-handed and left-handed examinees that their preferred hand is to be used.

The administrator must explain to the examinees the following method of turning pegs over:

- ▶ Each peg is to be lifted from its hole in the board by being grasped between the thumb and the next two or three fingers.
- ▶ Turning is accomplished by pulling the bottom of the peg in toward the palm of the hand with the middle finger, while the thumb and index finger act as pivots.
- ▶ A half-turn is made on each peg so that if the white part was on top, it is shifted to the bottom, and vice versa.
- ▶ Right-handed examinees will turn the top of each peg toward the left.
- ▶ Left-handed examinees will turn the top of each peg toward the right.
- ▶ The top of the peg does not turn precisely to the right or left, but tends to turn partly forward.

Part 9: Turn (continued)

Do not give a detailed explanation of the method of turning the pegs to the examinees. Most examinees will normally use the method described if a single demonstration is given. If Part 7 answer sheets are used to record apparatus scores, these sheets should already be in the proper sequence to facilitate scoring. Place them where scores can be entered easily, but also try placing them where the examinees are not distracted by seeing their scores being entered for each timed trial.

Scoring

When scoring Part 9, record the total number of *attempts* made by the examinee. The number of attempts is equal to the number of pegs moved, regardless of whether they have been turned in the proper direction or not. The total number of attempts can be determined by counting:

- ▶ The number of pegs turned over plus the number of pegs dropped.
- ▶ The number of pegs not turned subtracted from the total number of pegs (48).

Both methods should be used in scoring, one being used as a check on the other. Verify each examinee's name when recording his or her score. The maximum score is 48.

Caution: *Examinees must not be given any indication whether or not they will be penalized for errors.*

The intent of this caution is to avoid a situation in which examinees could use this knowledge of the scoring procedure to their advantage.

Part 9: Turn - Practice Trial

1. Read the following practice instructions to the examinees *verbatim*. Demonstrate the operations as described. The instructions are written for examinees whose dominant or preferred hand is their right hand. For examinees whose dominant or preferred hand is their left hand, change the underlined references to the opposite hand from the one named in the text below. For example, change references to “RIGHT hand” to read “LEFT hand.”

SAY:



“Is there anyone who is left-handed?”

(IF BOTH RIGHT- AND LEFT-HANDED EXAMINEES ARE IN THE SAME ASSESSMENT GROUP, GIVE SEPARATE DEMONSTRATIONS FOR EACH GROUP.)

“Please do not move any pegs until I say **BEGIN**. This time you are going to turn over each one of these pegs as fast as you can, using only your RIGHT hand.

(POINT TO PEGS.)

“Watch me while I show you how. You will start with this peg.

(POINT TO PEG 1.)

“Pick it up with your RIGHT hand, turn it over, and put it back in the hole.

(PICK UP, TURN OVER, AND INSERT PEG 1.)

“Continue working across the row like this.

(PICK UP, TURN OVER, AND INSERT PEGS 2, 3, 4, 5, 6, 7, AND 8.)

(Continue on next page)

Part 9: Turn - Practice Trial (continued)

SAY:



“Always begin each row at the RIGHT and work toward the LEFT.

(BEGIN TO PICK UP, TURN OVER, AND INSERT THE PEGS IN THE SECOND ROW.)

“If you drop a peg, don’t stop to pick it up; skip that hole and go right on.

(DROP PEG 13 AND DON’T PICK IT UP. CONTINUE WORKING AND COMPLETE THE ROW.)

“Now you will have a practice exercise.

“Don’t start until I say ‘BEGIN.’

“You are going to turn over each peg as fast as you can.

“Set your board even with the edge of the table. Now put your hand on the first peg.

“If you are RIGHT-HANDED, you’ll start with the peg in the upper RIGHT HAND corner.

(POINT TO PEG 1 OF EXAMINEE’S BOARD.)

“Work as fast as you can. READY? **BEGIN.**”

(QUICKLY GLANCE AROUND TO MAKE CERTAIN THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

2. Observe each examinee as s/he performs. Make corrections whenever an examinee deviates from standard procedures.



Common Errors

Error: An examinee turns a peg in the wrong direction.

Remedy: The assessment administrator shows the examinee the correct way to turn the peg.

Error: An examinee drops a peg while turning it.

Remedy: The administrator tells the examinee to skip that peg.

Error: An examinee takes a peg from the wrong end of a row.

Remedy: The administrator shows the examinee where to start by pointing to the appropriate peg.

3. During the practice trial, each examinee should receive sufficient instructions to have a thorough understanding of the procedure.
4. Allow each examinee sufficient time to turn all of the pegs.

**THEN
SAY:**



“Pick up any pegs that you have dropped and put them in the proper place.

“Now set the edge of the board even with the edge of the table.”

PART 9: Turn - Timed Trial 1

1. Inspect each board to make certain that it is set up properly for the first timed trial. There should be a peg, red end up, in each hole in the lower part of the board. The edge of the board should be even with the edge of the table.

THEN SAY:



“There are three 30-second timed trials in this exercise. Now put your PREFERRED hand on the first peg and wait until I say ‘BEGIN.’

(QUICKLY GLANCE AROUND TO MAKE CERTAIN THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

“Work as fast as you can. READY? **BEGIN!**”

(START THE STOPWATCH.)



Allow exactly **30 SECONDS.**

THEN SAY:



“**STOP!** Don’t touch any more pegs.

“If you already have a peg in your hand, complete the turn and place it in the hole.”

Part 9: Turn - Timed Trials (continued)

2. Record the scores for all examinees.

THEN SAY:



“In the same manner, turn over the rest of the pegs so that they are all one color.

“Pick up any pegs that you have dropped and put them in the proper place.

“Now set your board even with the edge of the table.”

Part 9: Turn - Timed Trial 2

1. Inspect each board to make certain that it is set up properly for the second timed trial.

THEN SAY:



“This is your second timed trial. Now put your PREFERRED hand on the first peg and wait until I say ‘BEGIN.’

(QUICKLY GLANCE AROUND TO MAKE CERTAIN THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

“See if you can go faster this time. READY? **BEGIN!**”

(START THE STOPWATCH.)

Part 9: Turn - Timed Trials (continued)



Allow exactly **30 SECONDS**.

THEN SAY:



“**STOP!** Don’t touch any more pegs.

“If you have one in your hand, complete the turn and place it in the hole.”

2. Record the scores for all examinees.

THEN SAY:



“In the same manner, turn over the rest of the pegs so that they are all one color.

“Pick up any pegs that you have dropped and put them in the proper place.

“Now set your board even with the edge of the table.”

Part 9: Turn - Timed Trials (continued)

Part 9: Turn - Timed Trial 3

1. Inspect each board to make certain that it is set up properly for the third timed trial.

THEN SAY:



“This is your last timed trial. Now put your PREFERRED hand on the first peg and wait until I say ‘BEGIN.’

(QUICKLY GLANCE AROUND TO MAKE CERTAIN THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

“See if you can go even faster this time. READY? **BEGIN!**”

(START THE STOPWATCH.)



Allow exactly **30 SECONDS.**

THEN SAY:



“**STOP!** Don’t touch any more pegs.

“If you have a peg in your hand, complete the turn and place it in the hole.”

Part 9: Turn - Timed Trials (continued)

2. Record the scores for all examinees.

THEN SAY:



“Turn over the rest of the pegs so they are all one color.

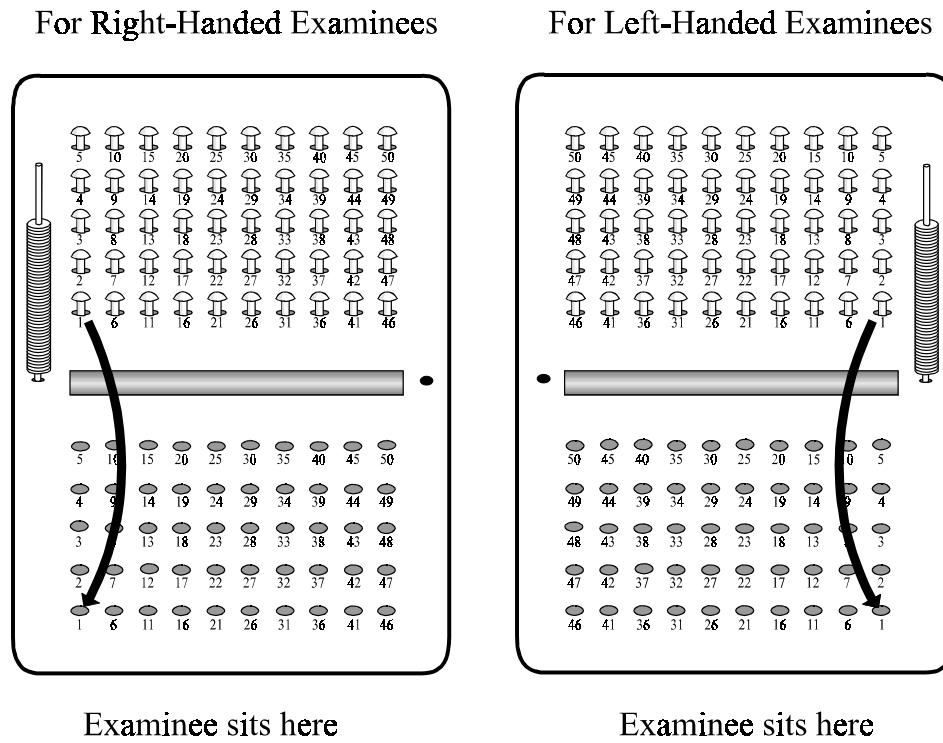
“Pick up any pegs that you have dropped and put them in the proper place.”

3. Direct the examinees to make the appropriate disposition of the pegboards.

PART 10: ASSEMBLE

Prior to the session, the assessment administrator sets up a finger dexterity board for each examinee and two (one right-handed and one left-handed) for demonstration purposes. The administrator checks to ensure that all rods are set firmly and that the rivets and washers move freely. (The rivets and washers must be cleaned periodically to prevent sticking.) Diagram 5 shows two finger dexterity boards set up for use. The numbers in the diagram show the order in which right-handed examinees and left-handed examinees must assemble and move the rivets.

Diagram 5
Finger Dexterity Board Set-Up for the Assemble Exercise



Part 10: Assemble (continued)

Each board should be set up as follows:

- ▶ The finger dexterity board is placed and set up in accordance with one of the diagrams in Diagram 5. The upper part of the board is filled with rivets. Washers are placed on the rod approximately $\frac{1}{2}$ inch from the top.
- ▶ The assessment administrator's board is at the center rather than near either end of the table. Boards for the examinees are placed close enough to the administrator for each person to see the demonstration clearly and far enough apart to allow adequate working space.
- ▶ The lower edge of each board is at a comfortable distance from the examinee.
- ▶ A chair is placed in front of each board, and there should be no extra chairs at the table.

The group should consist of either right-handed or left-handed examinees. When this is not practical, the administrator makes it clear to both right-handed and left-handed examinees that their preferred hand is used to move the rivets.

Seat each examinee in front of a board.

Scoring

When scoring Part 10, record the total number of *attempts* made by the examinee. The number of attempts is equal to the number of rivets moved, regardless of whether or not they were properly assembled or inserted. The Part 10 score can be determined by counting:

- ▶ The number of empty holes in the upper part of the board; or
- ▶ The number of rivets inserted in the lower part of the board plus the number of rivets dropped; or
- ▶ The number of rivets remaining in the holes in the upper part of the board subtracted from the total number of rivets (50).

Two of these methods should be used in scoring, one as a check for the other. Verify each examinee's name when recording his or her score. The maximum score is 50.

Place the Part 7 answer sheets where the scores can be entered easily, but also try placing them where the examinees are not distracted by seeing their scores being entered after this exercise.

Caution: *Examinees must not be given any indication whether or not they will be penalized for errors.*

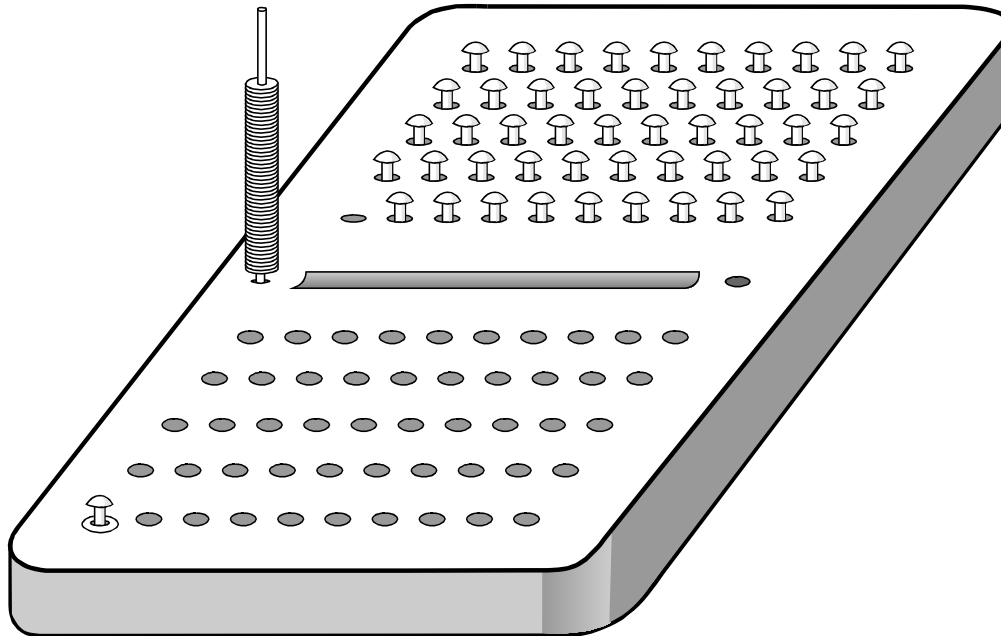
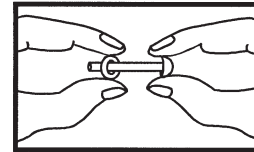
The intent of this caution is to avoid a situation in which examinees could use this knowledge of the scoring procedure to their advantage.

Part 10: Assemble - Practice Trial

1. Review Diagram 6 to make certain you are familiar with how this exercise is to be performed.

Diagram 6

**Rivet Board for the
Ability Profiler Assemble Exercise**



Examinee sits here

Directions: Examinee removes the rivet from the upper section, removes a washer from the washer stand, places the washer on the rivet, and places the rivet and washer in the corresponding hole in the lower section.

Part 10: Assemble - Practice Trial (continued)

2. Read the following practice instructions to the examinees *verbatim*. Demonstrate the operations as described. The instructions are written for right-handed examinees. When assessing left-handed people, change the underlined words to the opposite hand.

THEN SAY:



(IF BOTH RIGHT- AND LEFT-HANDED EXAMINEES ARE IN THE SAME ASSESSMENT GROUP, GIVE SEPARATE DEMONSTRATIONS FOR EACH GROUP.)

“Now you are going to work with the finger dexterity board. Please do not move any washers or rivets until I tell you to do so.

“You are going to put a washer on each rivet and move them from this part of the board to this part of the board as fast as you can.

(POINT TO THE UPPER, THEN THE LOWER PART OF THE BOARD.)

“Watch me while I show you how. You will start with the rivet closest to the ROD.

(POINT TO THE ROD.)

“Pick the rivet up with your RIGHT hand; at the same time, with your OTHER hand, take a washer from the rod.

(PICK UP RIVET 1 BETWEEN THE THUMB AND INDEX FINGER OF YOUR RIGHT HAND AND TAKE A WASHER FROM THE ROD WITH YOUR LEFT HAND.)

(Continue on next page)

Part 10: Assemble - Practice Trial (continued)



“Put the washer on the rivet like this.

(ASSEMBLE THE WASHER AND RIVET.)

“Hold the washer and rivet, so that the washer will not fall off the rivet.

(GRIP THE WASHER AND THE RIVET BETWEEN THE THUMB AND INDEX FINGER AND SHAKE THE RIVET AND WASHER TO SHOW THAT THE TWO REMAIN TOGETHER.)

“Then using only your RIGHT hand, put the assembled washer and rivet in this hole, in the lower LEFT hand corner.”

(PLACE THE ASSEMBLED PIECE IN HOLE 1.)

NOTE: *Examinees will tend to vary slightly from this method when they perform the assembly operation. Some will tend to turn the washers completely over and others will turn them at a slight angle. These minor variations are permissible since they enable each examinee to hold the washers in the position that is most comfortable for him or her. However, the assessment administrator must insist that only the preferred hand is used when the assembled rivets and washers are inserted into the holes of the board.*

Part 10: Assemble - Practice Trial (continued)

THEN SAY:



“Pick up the next rivet and washer. Assemble them and place them in the next hole, like this.

(ASSEMBLE RIVET 2 AND PUT IT IN HOLE 2.)

“Fill all of the holes in each column before going on to the next.

(ASSEMBLE RIVETS 3, 4, AND 5, AND PUT THEM IN HOLES 3, 4, AND 5.)

“Always begin each column at the bottom and work toward the top, like this.

(BEGIN TO ASSEMBLE AND PLACE THE RIVETS IN COLUMN TWO.)

“If you drop a rivet, don’t stop to pick it up; skip that hole and go right on.

(DROP RIVET 8 AND DON’T PICK IT UP. LEAVE HOLE 8 EMPTY AND CONTINUE TO FILL THE OTHER HOLES IN THE COLUMN.)

“If you drop a washer, don’t stop to pick it up; take another one from the rod.

(DROP THE WASHER THAT YOU WERE ABOUT TO USE AND TAKE ANOTHER FROM THE ROD.)

“If you take more than one washer at a time, use one and drop the rest on the table.

(AS YOU TAKE RIVET 11, TAKE A FEW WASHERS FROM THE ROD. DROP ALL BUT ONE AND PUT THE REMAINING WASHER ON THE RIVET. INSERT RIVET 11 IN HOLE 11.)

(Continue on next page)

Part 10: Assemble - Practice Trial (continued)



(COMPLETE THE REST OF THIS COLUMN.)

“Now you will have a practice exercise.

“Don’t start until I say ‘BEGIN.’

“You are going to put one washer on each rivet and move them to the other part of the board, as fast as you can.

“Do only the first five columns for practice.

“Set your board at a comfortable distance from you. Put your RIGHT hand on the first rivet and your LEFT hand on the first washer.

(QUICKLY GLANCE AROUND TO MAKE CERTAIN THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

“Work as fast as you can. READY? **BEGIN!**”

3. Observe each examinee as s/he performs. Make corrections whenever an examinee deviates from standard procedures as shown in Diagram 6 on page VII. 39.

Part 10: Assemble - Practice Trial (continued)



Common Errors

Error: An examinee takes more than one washer from the rod.

Remedy: The assessment administrator tells the examinee to use one washer and drop the rest.

Error: An examinee drops a washer after taking it from the rod.

Remedy: The administrator tells the examinee to take another washer from the rod.

Error: An examinee drops a rivet while moving it.

Remedy: The administrator tells the examinee to skip that hole.

Error: An examinee takes a rivet from the top of a column first.

Remedy: The administrator tells the examinee to start at the bottom of the column and points to the correct rivet.

Error: An examinee puts an assembled rivet at the top of a column first.

Remedy: The administrator tells the examinee to put the assembled rivet at the bottom and points to the correct place.

Error: An examinee takes a rivet from the wrong column.

Remedy: The administrator shows the examinee which rivet to take.

Error: An examinee puts an assembled rivet in the wrong column.

Remedy: The administrator shows the examinee where the assembled rivet is to go.

Part 10: Assemble - Practice Trial (continued)

Error: An examinee starts to work on the sixth column.

Remedy: The assessment administrator tells the examinee to stop.

4. During the practice trial, each examinee receives sufficient instructions to have a thorough understanding of the procedure.
5. Allow each examinee sufficient time to complete the first five columns.

THEN SAY:



“Please check your boards to see that you have only ONE washer on each rivet.

“If you have more than one, take off the extra washers and put them on the rod.

“Pick up any washers or rivets that you have dropped and put them in the proper place.”

6. Inspect each examinee’s board to see that it is set up properly for Part 11 as shown in Diagram 7 on page VII. 47.

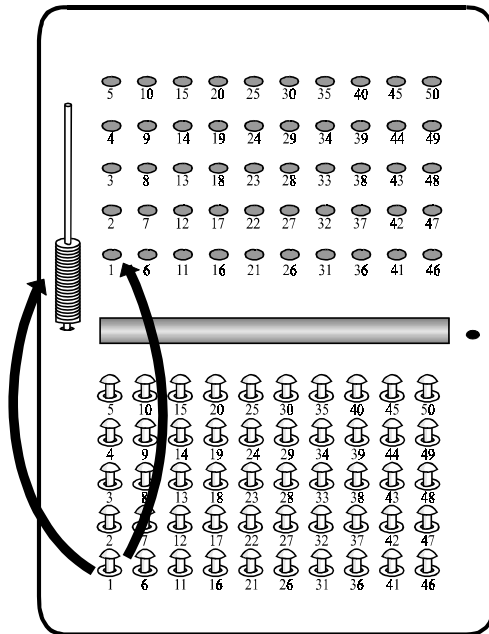
PART 11: DISASSEMBLE

The materials, assessment facilities, and seating arrangements for administering Part 11 are the same as those used for Part 10. The assessment administrator must check all equipment to ensure that the boards are in good condition and set up properly before administering Part 11. Diagram 7 shows two finger dexterity boards set up for disassembly. The numbers in the diagram show the order in which right-handed examinees and left-handed examinees must disassemble and move the rivets.

Diagram 7
Finger Dexterity Board Set-Up for the Disassemble Exercise

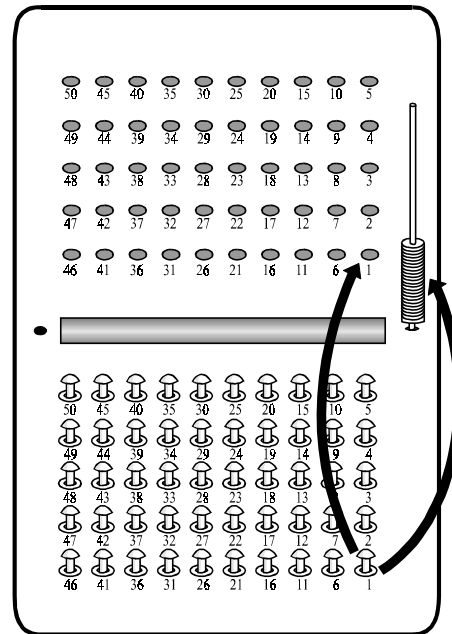
Directions: Examinee removes washer and rivet from bottom section, replaces washer onto washer stand, and places rivet in corresponding hole in the upper section.

For Right-Handed Examinees



Examinee sits here

For Left-Handed Examinees



Examinee sits here

Part 11: Disassemble (continued)

Each board is set up as follows:

- ▶ The first 5 columns of the lower part of the board are filled with assembled rivets and washers from the Part 10, Assemble Practice Trial.
- ▶ The assessment administrator's board is at the center rather than near either end of the table. Boards for the examinees are placed close enough to the administrator for each person to see the demonstration clearly and far enough apart to allow adequate working space.
- ▶ The lower edge of each board is at a comfortable distance from the examinee.
- ▶ A chair is placed in front of each board, and there are no extra chairs at the table.

The group should consist of either right-handed or left-handed examinees. When this is not practical, the administrator makes it clear to both right-handed and left-handed examinees that their preferred hand is used to move the rivets.

Seat each examinee in front of a board.

The administrator must demonstrate the methods of board disassembly before administering the practice trial.

Part 11: Disassemble (continued)

Scoring

When scoring Part 11, record the total number of *attempts* made by the examinee. The number of attempts is equal to the number of rivets moved, regardless of whether or not they were properly disassembled or reinserted. The Part 11 score can be determined by counting:

- ▶ The number of empty holes in the lower part of the board; or
- ▶ The number of rivets inserted in the upper part of the board plus the number of rivets dropped; or
- ▶ The number of rivets remaining in the holes in the lower part of the board subtracted from the total number of rivets (50).

Any two of these methods should be used in scoring, one being used as a check on the other. Verify each examinee's name when recording his or her score. The maximum score is 50. Place the Part 7 answer sheets where the scores can be entered easily, but also try placing them where the examinees are not distracted by seeing their scores being entered after this exercise.

Caution: *Examinees must not be given any indication whether or not they will be penalized for errors.*

The intent of this caution is to avoid a situation in which examinees could use this knowledge of the scoring procedure to their advantage.

PART 11: Disassemble - Practice Trial

1. Read the following practice instructions to the examinees *verbatim* and demonstrate the operations as described. The instructions are written for right-handed examinees. When assessing left-handed people, change the underlined words to the opposite hand.

THEN SAY:



(IF BOTH RIGHT- AND LEFT-HANDED EXAMINEES ARE IN THE SAME ASSESSMENT GROUP, GIVE SEPARATE DEMONSTRATIONS FOR EACH GROUP.)

“Now watch me while I show you how to do the next part. Do not start until I say ‘BEGIN.’

“You are going to move all of the rivets back to this part of the board and put the washers on the rod as fast as you can.

(POINT TO THE UPPER PART OF THE BOARD, THEN POINT TO THE ROD.)

“You will start with the rivet in the lower LEFT HAND corner. Pick the rivet up with your RIGHT hand; leave the washer on the board.

(PICK UP RIVET 1 BETWEEN THE THUMB AND INDEX FINGER OF YOUR RIGHT HAND.)

(Continue on next page)

Part 11: Disassemble - Practice Trial (continued)



“Then with your LEFT hand, SLIDE the washer to the BOTTOM of the board and pick it up.

(SLIDE THE WASHER TO THE BOTTOM OF THE BOARD WITH THE INDEX FINGER OF THE LEFT HAND AND PICK IT UP BETWEEN THE THUMB AND FINGER.)

“Put the rivet in the same hole in the top part of the board and put the washer back on the rod.

(PUT THE RIVET IN HOLE 1 AND PUT THE WASHER ON THE ROD.)

“Then do the same thing with the next rivet and washer like this.

(SIMILARLY, MOVE RIVET 2 TO HOLE 2 AND PUT THE WASHER ON THE ROD.)

“Finish each column before going on to the next.

(MOVE RIVETS 3, 4, AND 5 TO HOLES 3, 4, AND 5 AND PUT EACH WASHER ON THE ROD AS THE RIVET IS INSERTED.)

“Always begin each column at the bottom and work toward the top.

(BEGIN TO MOVE THE RIVETS AND WASHERS IN COLUMN 2.)

(Continue on next page)

Part 11: Disassemble - Practice Trial (continued)



“If you drop a rivet, don’t stop to pick it up; skip that hole and go right on.

(DROP RIVET 8 AND DON’T PICK IT UP.)

(LEAVE HOLE 8 EMPTY AND CONTINUE TO FILL THE OTHER HOLES IN THE COLUMN.)

“If you drop a washer, don’t stop to pick it up. Go right on.

(DROP THE WASHER THAT WAS ON RIVET 10 AND DON’T PICK IT UP. CONTINUE WITHOUT HESITATION, DISASSEMBLING RIVETS 11, 12, 13, 14, AND 15.)

“Now you will have a practice exercise. Don’t start until I say ‘BEGIN.’

“You are going to move the rivets in the first five columns back to the other part of the board and put the washers on the rod.

“Now set your board at a comfortable distance from you. Put your RIGHT hand on the first rivet.

(QUICKLY GLANCE AROUND TO MAKE CERTAIN THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

“Work as fast as you can. READY? **BEGIN!**”

2. Observe each examinee as s/he performs. Make corrections whenever an examinee deviates from standard procedures.

Part 11: Disassemble - Practice Trial (continued)



Common Errors

Error: An examinee slides a washer to the side edge.

Remedy: The assessment administrator tells the examinee to slide the washer to the bottom.

Error: An examinee slides a washer with the thumb.

Remedy: The administrator tells the examinee to use the index finger.

Error: An examinee picks a washer up instead of sliding it.

Remedy: The administrator tells the examinee to slide the washer to the bottom.

Error: An examinee drops a rivet while moving it.

Remedy: The administrator tells the examinee to skip that hole and to continue.

Error: An examinee drops a washer.

Remedy: The administrator tells the examinee to continue.

Error: An examinee takes a rivet from the top of a column first.

Remedy: The administrator shows the examinee where to start at the bottom of the column.

Error: An examinee puts a rivet at the top of a column first.

Remedy: The administrator shows the examinee where the rivet is placed at the bottom of the column.

Error: An examinee takes a rivet from the wrong column.

Remedy: The administrator shows the examinee the correct column from which to take the rivet.

Part 11: Disassemble - Practice Trial (continued)

Error: An examinee puts a rivet in the wrong column.

Remedy: The assessment administrator shows the examinee the correct column to put the rivet in.

3. During the practice trial, each examinee receives sufficient instructions to have a thorough understanding of the procedure.
4. Allow each examinee sufficient time to disassemble the first five columns.

THEN SAY:



“Pick up and replace any washers or rivets that you have dropped.

“Now please set your board at a comfortable distance from you.”

PART 10: Assemble - Timed Trial

1. Inspect each examinee's board to see that it is set up properly for the Part 10 timed trial. Make certain that:
 - ▶ there is a rivet in each hole of the upper part of the board;
 - ▶ washers are on the rod to within approximately ½ inch from the top;
 - ▶ rods are set firmly and the rivets and washers move freely; and
 - ▶ there are no loose rivets or washers lying on the board.

THEN SAY:



“Now you are going to put a washer on each rivet and move them to the other part of the board as you did before, as fast as you can.

“You will be allowed 90 seconds.

“This time do as many columns as you can.

“Don't start until I say 'BEGIN.'

“Remember to start each column at the bottom and to finish each column before going on to the next one.

“You will begin with this rivet.

(POINT TO RIVET 1 OF AN EXAMINEE'S BOARD.)

(Continue on next page)

Part 10: Assemble - Timed Trial (continued)



“Now put your RIGHT hand on the first rivet and your LEFT hand on the first washer.

QUICKLY GLANCE AROUND TO SEE THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

“Work as fast as you can. READY? **BEGIN!**”

(START THE STOPWATCH.)



Allow exactly **90 SECONDS**

THEN SAY:



“**STOP!** Don’t touch any more rivets or washers.

“If you have a rivet and washer in your hand, complete the assembly and place the assembled piece in the next hole.”

2. Record the scores for all examinees.

Part 10: Assemble - Timed Trial (continued)

THEN SAY:



“Now complete the rest of your board, putting one washer on each rivet.

“Pick up any washers or rivets you have dropped and put them in the proper place.

“Make sure that there is only one washer on each rivet.

“Remove any extra washers and put them on the rod.

(PAUSE)

“Now please set your board at a comfortable distance from you.”

PART 11: Disassemble - Timed Trial

1. Inspect each examinee's board to see that it is set up properly for Part 11 timed trial. Make certain that there are:
 - ▶ no rivets with more than one washer; and
 - ▶ no extra rivets or washers lying around.

THEN SAY:



“Now you are going to move the rivets back to the other part of the board and put the washers back on the rod as you did before, as fast as you can.

“You will be allowed 60 seconds.

“Do as many columns as you can.

“Don't start until I say 'BEGIN.'

“Remember to start each column at the bottom. Finish each column before going on to the next one, and SLIDE each washer to the BOTTOM of the board.

“You will begin with this rivet.

(POINT TO RIVET 1 OF AN EXAMINEE'S BOARD.)

“Now put your RIGHT hand on the first rivet.

(QUICKLY GLANCE AROUND TO SEE THAT EACH EXAMINEE IS IN THE PROPER POSITION.)

(Continue on next page)

Part 11: Disassemble - Timed Trial (continued)



“Work as fast as you can. READY? **BEGIN!**”

(START THE STOPWATCH.)



Allow exactly **60 SECONDS.**

THEN SAY:



“**STOP!** Don’t touch any more rivets or washers.

“If you have a rivet and washer in your hand, complete the disassembly and place the washer on the rod and the rivet in the next hole.”

2. Record the scores for all examinees.

Part 11: Disassemble - Timed Trial (continued)

THEN SAY:



“Move the remaining rivets to the upper part of the board and replace the remaining washers on the rod.

“Pick up any washers or rivets you have dropped and put them in the proper place.”

3. Tell the examinees what to do with the finger dexterity boards when they are done.
4. Thank the examinees for their cooperation, make some mention about the next step in the counseling process, then dismiss them.

