



Kit of Factor-Referenced Cognitive Tests (1976 Edition)

A set of 72 tests that have been demonstrated to be consistent markers for 23 cognitive factors.

A research tool for studying: • Reasoning • Verbal Ability • Spatial Ability
 • Memory • and other cognitive processes

Also available from ETS: *Guide to Factor-Referenced Temperament Scales* (An index of published scales for 24 temperament factors and copies of ETS marker scales for 18 factors.)

Ordering Information

Copies of the *Kit of Factor-Referenced Cognitive Tests, Manual* and the *Guide to Factor-Referenced Temperament Scales* are available to qualified individuals who sign the agreement for use; students must have the agreement co-signed by their faculty advisors. A detachable order form is included on the last panel of this folder.

Licensing Agreements

The *Manual* for the *Kit of Factor-Referenced Cognitive Tests* states that "purchasers may obtain any number of copies from ETS at normal cost." We found however, that the cost of storing and providing multiple copies of the test would require prohibitive charges for them. Consequently, we no longer stock these tests.

To meet user needs for the kit tests, ETS issues, at its discretion, licensing agreements that permit researchers to produce the required number of tests from the specimen copies in the kit. For all requestors, the royalty is 15 cents per copy plus a charge of \$45 for the manual. Researchers requesting licensing agreements should use the attached form. Please specify the tests to be used (full titles with code letters and numbers), and the numbers of copies of each to be produced. Purchasers should identify themselves completely enough to permit some judgment as to their qualification to use psychological tests. Students seeking licensing agreements or purchasing tests should include a note from their advisors assuming responsibility for proper use of the test materials and scores. All individuals requesting licensing agreements will be asked to provide a brief description of the proposed use.

Technical Information

The *Manual* includes representative data (mean, standard deviation, reliability, etc.) for each test. Additional information about the research for the 1976 version of the kit is contained in *Cognitive Factors: Their Identification and Replication* by R. B. Ekstrom, J. W. French, and H. H. Harman. *Multivariate Behavioral Research Monographs No. 79-2*.

The *Kit of Factor-Referenced Cognitive Tests* contains two or more tests for each of 23 cognitive factors. The factors and tests are listed below. Each test has two parallel parts. Detailed information about the factors and the tests, as well as scoring keys, is contained in the *Manual*.



CF—Closure, Flexibility of

1. Hidden Figures Test
2. Hidden Patterns Test
3. Copying Test

CS—Closure, Speed of

1. Gestalt Completion Test
2. Concealed Words Test
3. Snowy Pictures

CV—Closure, Verbal

1. Scrambled Words
2. Hidden Words
3. Incomplete Words

FA—Fluency, Associational

1. Controlled Associations Test
2. Opposites Test
3. Figures of Speech

FE—Fluency, Expressional

1. Making Sentences
2. Arranging Words
3. Rewriting

FF—Fluency, Figural

1. Ornamentation Test
2. Elaboration Test
3. Symbols Test

FI—Fluency, Ideational

1. Topics Test
2. Theme Test
3. Thing Categories Test

FW—Fluency, Word

1. Word Endings Test
2. Word Beginnings Test
3. Word Beginnings and Endings Test

I—Induction

1. Letter Sets Test
2. Locations Test
3. Figure Classification

IP—Integrative Processes

1. Calendar Test
2. Following Directions

MA—Memory, Associative

1. Picture-Number Test
2. Object-Number Test
3. First & Last Name Test

MS—Memory Span

1. Auditory Number Span Test
2. Visual Number Span Test
3. Auditory Letter Span Test

MV—Memory, Visual

1. Shape Memory Test
2. Building Memory
3. Map Memory

N—Number

1. Addition Test
2. Division Test
3. Subtraction & Multiplication Test
4. Addition & Subtraction Correction

P—Perceptual Speed

1. Finding A's Test
2. Number Comparison Test
3. Identical Pictures Test

RG—Reasoning, General

1. Arithmetic Aptitude Test
2. Mathematics Aptitude Test
3. Necessary Arithmetic Operations Test

RL—Reasoning, Logical

1. Nonsense Syllogisms Test
2. Diagramming Relationships
3. Inference Test
4. Deciphering Languages

S—Spatial Orientation

1. Card Rotations Test
2. Cube Comparisons Test

SS—Spatial Scanning

1. Maze Tracing Speed Test
2. Choosing a Path
3. Map Planning Test

V—Verbal Comprehension

1. Vocabulary Test I
2. Vocabulary Test II
3. Extended Range Vocabulary Test
4. Advanced Vocabulary Test
5. Advanced Vocabulary Test II

VZ—Visualization

1. Form Board Test
2. Paper Folding Test
3. Surface Development Test

XF—Flexibility, Figural

1. Toothpicks Test
2. Planning Patterns
3. Storage Test

XU—Flexibility of Use

1. Combining Objects
2. Substitute Uses
3. Making Groups
4. Different Uses



Order form (page 1 of 2)

Complete this form and mail it to the address below or email it to the e-mail address below.

Mail to: ETS Research & Development (19-T)
Educational Testing Service
660 Rosedale Road
Princeton, NJ 08541

E-mail to: RDweb@ets.org

Note: Please print information clearly.

Name:

Address:

Phone: E-mail:

Kit of Factor-Referenced Cognitive Tests with manual Yes No
(\$45 for the manual plus a royalty of 15 cents per copy produced)

Guides to Factor-Referenced Temperament Scales Yes No
(\$15)

Estimated TOTAL:

After the order form has been received and approved, the ETS General Counsel's office will then email a licensing agreement along with payment instructions (either by check, money order, or credit card) for the tests that are to be used.

Agreement for Use

I understand that the test in the *Kit of Factor-Referenced Cognitive Tests* and the tentative marker scales in the *Guide to Factor-Referenced Temperament Scales* are research instruments not intended for use in selection or counseling. I warrant that I and those to whom I may provide these instruments to will use them and the resulting scores properly.

FACULTY CO-SIGNATURE FOR STUDENT USE

SIGNATURE



Order form (page 2 of 2)

Title of Study:

Subjects:

Method:

Relevance of *Kit* tests to problem(s) being studied:

Can you provide us with your procedures for ensuring test and item security while using our tests? And what will be done to both the paper and electronic format items after the study is complete (when will they be deleted/destroyed)?

Name of test(s) to be used:

Number of copies to be produced:



The *Guide to Factor-Referenced Temperament Scales* reviews the factor analytic literature pertinent to 28 temperament factors, provides tentative marker scales for 18, and suggests published scales for a partially overlapping set of 24.

As is the case with the tests in the *Kit of Factor-Referenced Cognitive Tests*, the scales in the guide are distributed for research use only. They should not be used for counseling, selection, or other operational purposes.

Factors in the *Guide*

Abbreviations & Factor Name	ETS Marker Scales	Recommended Published Marker Scales
Ac —General Activity	Yes	Yes
Ag —Agreeableness	No	Yes
Al —Alertness	No	No
Au —Autistic Tendency	No	Yes
Ca —Calmness	Yes	Yes
Co —Concentration	No	No
De —Dependability	Yes	Yes
Do —Dominance	No	Yes
Em —Emotional Maturity	Yes	No
Es —Emotional Stability	No	Yes
Gs —Gregariousness	Yes	Yes
In —Individualism	Yes	Yes
Me —Meticulousness	Yes	Yes
Mo —Morality	No	Yes
Na —Need for Achievement	No	Yes
Ob —Objectivity	Yes	Yes
Om —Open-Mindedness	Yes	No
Pe —Persistence	Yes	Yes
Po —Poise	Yes	Yes
Rt —Restraint	No	Yes
Sc —Self-Confidence	Yes	Yes
Se —Sensitive Attitude	Yes	Yes
So —Sociability	Yes	Yes
Ss —Self-Sufficiency	Yes	Yes
Su —Surgency	Yes	Yes
Th —Thoughtfulness	Yes	Yes
To —Tolerance	Yes	Yes
Wb —Well-Being	No	Yes