

Applied Personnel Research
27 Judith Road
Newton, Massachusetts 02459-3721
(617) 244-8859
wiesen@personnelselection.com

An In-Depth, Content Review of Spatial Ability Tests

Joel P. Wiesen, Ph.D.
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2D Item Types

1. Identifying rotated but not flipped shapes [Morrisby, Shapes]
2. Identifying changed shapes (no flipping allowed) [SHL, ST8.1]
3. Line following [EAS, Visual Pursuit]
4. Little jigsaw puzzles [Psych Corp, Revised Minn Paper Form Board]
5. Assemble cut-up pieces [SRA, Test of Mech Concepts, Spatial Relations subtest]
6. Matching shapes [GATB, Matching Shapes]
7. Map reading [homegrown]

3D Item Types

8. Paper folding and punching [J O'Connor, Paper Folding]
9. 2D pattern to 3D, shape unknown [Psych Corp, DAT Spatial Relations, Form W]
10. 2D pattern to 3D, shape known [Psych Corp, DAT Spatial Relations, Form C]
11. Count Touching Blocks [EAS, Spatial]
12. Count hidden blocks [homegrown and various subtests]
13. Making square boxes [SHL, Spatial Reasoning]
14. Making rectangular boxes [Wiesen, unpublished]
15. Assemble parts [SRA, FACIT/FIT Assembly]
16. Rotated 3D objects [US Air Force, AFROTC]

Some Weaknesses of Existing Item Types

- A. Susceptible to test taking strategies
- B. Can be solved using analytical ability
- C. Content changed due to attempts to reduce adverse impact

Future Test Development

- Will post information about any new test on <http://www.aprtestingservices.com/>

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