Individual Constants

- Every individual constant must name an (actually existing) object.
- No individual constant can name more than one object.
- An object can have more than one name, or no name at all.

Predicate Symbols

- Every predicate symbol comes with a single, fixed "arity," a number that tells you how many names it needs to form and atomic sentence.
- Every predicate is interpreted by a determinate property or relation of the same arity as the predicate.

Blocks Language Predicates

Atomic

Sentence

Interpretation

| Tet(a) | a is a tetrahedron |
|-----------------|----------------------------|
| Cube(a) | a is a cube |
| Dodec(a) | a is a dodecahedron |
| Small(a) | a is small |
| Medium(a) | a is medium |
| Large(a) | a is large |
| SameSize(a, b) | a is the same size as b |
| SameShape(a, b) | a is the same shape as b |
| Larger(a, b) | a is larger than b |
| Smaller(a, b) | a is smaller than b |

Predicates cont'd

| SameCol(a, b) | a is in the same column as b |
|------------------|--|
| SameRow(a, b) | a is in the same row as b |
| Adjoins(a, b) | a and b are located on adjacent (but |
| | not diagonally) squares |
| LeftOf(a, b) | a is located nearer to the left edge of |
| | the grid than b |
| RightOf(a, b) | a is located nearer to the right edge |
| | of the grid than b |
| FrontOf(a,b) | a is located nearer to the front of the |
| | grid than b |
| BackOf(a, b) | a is located nearer to the back of the |
| | grid than b |
| Between(a, b, c) | a, b and c are in the same row, col- |
| | umn, or diagonal, and a is between b |
| | and c |