Global Notational Conventions

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Objects of type 0:
     a, b, \ldots, e, i, j, \ldots, w
                                                                          natural numbers = elements of \omega
Objects of type 1:
    \alpha, \beta, \gamma, \delta, \varepsilon
                                                                          total unary functions \omega \rightarrow \omega = elements of "\omega"
    f, g, h, E, F, \ldots, K
                                                                          partial functions ^k\omega \rightarrow \omega
    A, B, C, D, M, N, O, W
                                                                          sets of natural numbers = subsets of \omega
    P, Q, \ldots, V
                                                                          k-ary relations on \omega = subsets of \omega
Objects of type 2:
    E, F, . . . , K
                                                                          partial functionals ^{k,l}\omega \rightarrow \omega
    A, B, C, D, M, N, W
                                                                          sets of (total unary) functions = subsets of \omega
    P, Q, \ldots, V
                                                                          (k, l)-ary relations = subsets of ^{k, l}\omega
Objects of type 3:
                                                                          partial functionals ^{k,l,l'}\omega \rightarrow \omega
    E, F, . . . , K
    A, B, C, D, M, N, W
                                                                          sets of total unary functionals = subsets of ^{(\omega_{\omega})}\omega
                                                                          (k, l, l')-ary relations = subsets of ^{k, l, l'}\omega
    \mathbb{P}, \mathbb{Q}, \dots, \mathbb{V}
Objects of type 4:
                                                                          partial functionals ^{k,l,l',l''}\omega \rightarrow \omega
     \mathscr{E}, \mathscr{F}, \ldots, \mathscr{K}
                                                                          (k, l, l', l'')-ary relations = subsets of ^{k, l, l', l''}\omega
    \mathcal{P}, \mathcal{Q}, \ldots, \mathcal{V}
Other:
                                                                          ordinal numbers
    \kappa, \lambda, \mu, \nu, \pi, \rho, \sigma, \tau, \upsilon
    \Gamma, \Lambda
                                                                          inductive operators
    \mathscr{L}
                                                                          formal language
                                                                          formal theory
    A, B, C
                                                                          formulas of a formal language
    M. N. U
                                                                          structures, models
                                                                          arbitrary objects
    x, y, z
    X, Y, Z
                                                                          arbitrary sets
                                                                          arbitrary functions
    \varphi, \psi, \chi, \theta
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The last three categories are often subject to local conventions

In most instances a bold-face letter denotes a finite sequence of objects of the type denoted by the light-face letter, Exceptions: Σ , Π , Δ , ∇ , κ , ω_1 [-].