

5: Squid Symbols

A few years ago, when investigating a strange outburst of tsunamis in the Indian Ocean, we discovered the ruins of a bizarre race of pygmy squid people in a deep sea cave system. Most baffling of all were their pastimes. They had a strange pictographic writing system (putting their opposable tentacles to good use), and they enjoyed puzzles where certain symbols or combinations of symbols could be turned into other combinations of symbols by applying certain fixed transformations, or 'rules', to them. They would come up with a set of rules, and then pose challenges, demanding that you turn one combination of symbols into another by applying only a certain number of rules. Failure at this meant a loss of honor, or even sometimes death if the tribe judged you unworthy. Now that they have faded into apocalyptic oblivion, thanks to increased shark activity and an outbreak of Calimarius Febrius, we are left with only this final set of rules and challenges. Some of the rules seem to be lost to the mists of time, but hopefully the challenges are still completable...

Rule 1: $\Omega\Sigma \Rightarrow \Omega\Delta\Omega$

Rule 5: $\Delta\lambda \Rightarrow \Omega\lambda$

Rule 8: $\phi\Omega \Rightarrow \lambda\Sigma\lambda$

Rule 9: $\lambda \Rightarrow \phi\Sigma\Sigma$

Rule 13: $\Omega \Rightarrow \Omega\Delta\Delta\Omega$

Rule 14: $\Sigma \Rightarrow \lambda\Sigma$

Rule 16: $\Sigma\Delta \Rightarrow \Sigma\Sigma$

Rule 18: $\Delta \Rightarrow$

Rule 19: $\phi \Rightarrow \lambda$

Rule 20: $\lambda\phi \Rightarrow \Omega$

Challenge 1: $\Omega\phi\lambda\phi \Rightarrow \Omega\lambda\Sigma\Sigma\Sigma\lambda$ - - - - -

Challenge 2: $\lambda\phi\phi\Sigma \Rightarrow \lambda\Omega\Omega$ - - - - -

Challenge 3: $\Delta\phi\phi\Omega \Rightarrow \Omega\Omega\Omega$ - - -

Challenge 4: $\Omega\lambda \Rightarrow \Omega\lambda\Sigma\Sigma$ - -

Challenge 5: $\phi\Omega\Sigma\Delta\lambda\phi \Rightarrow \phi\Omega\Delta\Omega\Delta\lambda\phi$ -

Challenge 6: $\Omega\Delta\Sigma\Delta \Rightarrow \Omega\Delta\Omega\Delta\Delta\Omega\Delta$ - - -