This thesis deals with a class of p-Banach spaces known as Lipschitz free p-spaces, where $0 < p \leq 1$. In the first part we describe their construction in detail and give proofs of their basic properties. Using these properties we then characterize the spaces. In the second part we derive a formula, which can under certain circumstances be used to calculate the p-norm on these spaces, and describe an algorithm which calculates the p-norm on finite-dimensional Lipschitz free p-spaces.