The classification of finite simple groups is one of the most celebrated accomplishments of mathematics of the last century. Less well known is a recent classification of finite $p$-groups, groups whose elements all have order a power of a prime $p$. This was accomplished by Leedham-Green and several others. In this classification the $p$-groups are sorted into families associated to objects called uniserial $p$-adic space groups. The space groups and the families can be reasonably described in terms of matrix groups. A large part of the lecture will be devoted to explaining the classification. Then the question is how do we use it? A few implications will be discussed.