

Name _____ **Infinity and Cardinality**

Try to write down a way for orderly listing (i.e. set up a one-to-one correspondence between \mathcal{N} and) the set of **finite** subsets of \mathcal{N} (the Natural Numbers).

After having tried to do the above, discuss in complete sentences what you think about the relationship between the cardinalities (are they the same, some bigger, some smaller) of the following three sets: \mathcal{N} , the set of finite subsets of \mathcal{N} and the power set of \mathcal{N} .