We will discuss a local-global principle for certain integral Kleinian sphere packings. Examples of Kleinian sphere packings include Apollonian circle packings and Soddy sphere packings. Sometimes each sphere in a Kleinian sphere packing has a bend (1/radius) that is an integer. When all the bends are integral, which integers appear as bends? For certain Kleinian sphere packings, we expect that every sufficiently large integer locally represented as a bend of the packing is a bend of the packing. We will discuss ongoing work towards proving this for certain Kleinian sphere packings. This work uses orientation-preserving isometries of $(n+1)$-dimensional hyperbolic space, quadratic polynomials, the circle method, spectral theory, and expander graphs.