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We give a construction of Cantor orbits and hybrid periodic orbits of a prefractal approximation of the Koch snowflake fractal billiard. We show that there exists a countably infinite collection of directions for which a compatible sequence of periodic orbits exists. We discuss properties of certain compatible sequences of orbits and describe other self-similar fractal billiard tables for which a number of our results hold. We then speculate on the criterion for our results holding on a general self-similar fractal billiard table. We finish by describing an analogy between a region with varying indices of refraction and cells of a prefractal approximation to the Koch snowflake fractal billiard. (Received September 16, 2011)