We investigate computability-theoretic properties of countable structures. Frequently, interesting phenomena are first obtained on structures of special kind, which result from specific complicated constructions and may not come from natural classes. It is often desirable to find such phenomena on structures in other, well-known classes. We will present algorithmic ways of transforming certain countable structures and their isomorphisms into other types of algebraic structures and their isomorphisms in such a way that relevant computability-theoretic properties are transferred. (Received February 11, 2016)