A graph $H$ is said to divide a graph $G$ if $G$ has an $H$-decomposition. A decomposition $\{H_1, H_2, \ldots, H_k, R\}$ of $G$ is called an $H$-maximal $k$-decomposition if $H_i \cong H$ for $1 \leq i \leq k$ and $R$ contains no subgraph isomorphic to $H$. Let $\text{Min}(G,H)$ and $\text{Max}(G,H)$ be the minimum and maximum $k$, respectively, for which $G$ has an $H$-maximal $k$-decomposition. A graph $H$ without isolated vertices is said to possess the intermediate decomposition property if for each connected graph $G$ and each integer $k$ with $\text{Min}(G,H) \leq k \leq \text{Max}(G,H)$, there exists an $H$-maximal $k$-decomposition of $G$. Results and questions are presented in this area of research. (Received September 05, 2013)