isomorphism-closed subcategory

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Defines	strictly full

A subcategory $\mathcal{A}$ of a category $\mathcal{B}$ is said to be *isomorphism-closed* if for any $A \in \mathcal{A}$ and a $\mathcal{B}$-isomorphism $h : A \to B$, also the $\mathcal{B}$-object B belongs to $\mathcal{A}$.

More simply: the subcategory $\mathcal{A}$ contains with each object all isomorphic $\mathcal{B}$-objects.

Another name commonly used for isomorphism-closed subcategories is *replete subcategory*.

This condition is very natural. E.g in the category of topological spaces we usually study properties which are invariant under homeomorphisms – so called topological properties. Every topological property corresponds to a strictly full subcategory of **Top**.

A subcategory which is isomorphism-closed and full is called *strictly full*.