

Definition (Category **Curr**). The *category of currencies* **Curr** is specified by:

1. *Objects*: a collection of currencies.
2. *Morphisms*: given two currencies $\mathbf{c}_1, \mathbf{c}_2$, morphisms between them are currency exchangers $\langle a, b \rangle$ from \mathbf{c}_1 to \mathbf{c}_2 .
3. *Identity morphism*: given a currency \mathbf{c} , its identity morphism is the currency exchanger $\langle 1, 0 \rangle$. We also call such morphisms “trivial currency exchangers”.
4. *Composition of morphisms*: the composition of morphisms is given by the formula ??.