

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

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