1. Objects: a collection of currencies **C**.

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

- 2. Morphisms: given two currencies $\mathbf{c}_1, \mathbf{c}_2 \in \mathbf{C}$, morphisms between them are currency exchangers $\langle a, b \rangle$ from \mathbf{c}_1 to \mathbf{c}_2 .
- 3. *Identity morphism:* given an object $\mathbf{c} \in \mathbf{C}$, 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 ??.