C-Style Casting

Orc\* pOrc = (Orc\*)pEnemy;

C++ Casting

Static Cast

Enemy\* enemy = static\_cast<Enemy\*>(orc);

* When you know the type is correct.
* Checks if valid during compile.
* No runtime check.

Dynamic Cast

Enemy\* enemy = dynamic\_cast<Enemy\*>(orc);

* Performs runtime check, if object is not if that type, returns null.
* Can only be used to convert between compatible polymorphic types.

Reinterpretive Cast

Enemy\* enemy = reinterpret\_cast<Enemy\*>(orc);

* Forces a conversion between two types even if not compatible.
* Potentially dangerous.

Const Cast

Enemy\* enemy = const\_cast<Enemy\*>(orc);

* Add or remove const.