

Any time you use public inheritance, you should make sure that any function or object that expects a base class object will also be satisfied by a derived class object as well, because the derived class object "is a" base class object. If you're creating a class that "is a" base class (such as a math student "is a" student), then inheritance is fine.

If your new class needs to utilize the behavior of the base class, but can't actually be substituted for a base class object (even if just in one special case), then layering (using a nested class) is a better approach. That's referred to as the "is implemented in terms of" relationship.