```
class Creator {
public:
    Product* GetProduct();
protected:
    virtual Product* CreateProduct();
private:
    Product* _product;
};

Product* Creator::GetProduct () {
    if (_product == 0) {
        _product = CreateProduct();
    }
    return _product;
}
```

4. *Using templates to avoid subclassing.* As we've mentioned, another potential problem with factory methods is that they might force you to subclass just to create the appropriate Product objects. Another way to get around this in C++ is to provide a template subclass of Creator that's parameterized by the Product class:

```
class Creator {
public:
    virtual Product* CreateProduct() = 0;
};

template <class TheProduct>
class StandardCreator: public Creator {
public:
    virtual Product* CreateProduct();
};

template <class TheProduct>
Product* StandardCreator<TheProduct>::CreateProduct () {
    return new TheProduct;
}
```

With this template, the client supplies just the product class—no subclassing of Creator is required.

```
class MyProduct : public Product {
public:
    MyProduct();
    // ...
};

StandardCreator<MyProduct> myCreator;
```

5. *Naming conventions.* It's good practice to use naming conventions that make it clear you're using factory methods. For example, the MacApp Macintosh application framework [App89] always declares the abstract operation that defines the factory method as `Class* DoMakeClass()`, where `Class` is the Product class.