Figure 15.3 The class *Object*.

All classes, regardless of whether they are user-defined or intrinsic Java classes, are subclasses of the class **Object**.

If you omit the “extends” clause in a class header, that class implicitly extends **Object**. Consequently, there is a single hierarchy of classes:

Two important capabilities arise from this hierarchy:

1. We can write methods that accept *any* object as a parameter, because *every* object is an **Object**. Recall that the methods of class **Vector** use this capability:

   void addElement(Object obj) { … }

   Object elementAt(int index) { … }

   Object set(int index, Object obj) { … }

   …etc.

2. The designers of Java were able to define methods available for all objects by including them in class **Object**. We've seen and used such a method on many occasions. What is it?