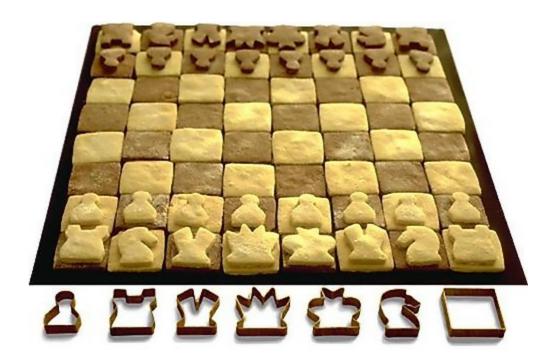
## 1. Objects and Classes

An object encapsulates data members and method members. Objects are instances of classes and a class specifies the data and method members of objects. A class is like a **blueprint** for objects of the class and is used to construct the object in memory at runtime.



## 1. Objects and Classes :: Example Class Point

```
// CLASS: Point (declared in Point.java)
public class Point {
 // A point in the Cartesian plane is located at (x, y) where x and y form the
 // coordinates of the point.
 private double x;
 private double y;
 // Constructor.
 public Point(double initX, double initY) {
   setX(initX);
   setY(initY);
 // Accessor method for \boldsymbol{x}.
 public double getX() {
   return x;
 // Accessor method for y.
 public double getY() {
   return y;
 }
```

## 1. Objects and Classes :: Example Class Point (continued)

```
// Mutator method for x.
public void setX(double newX) {
    x = newX;
}

// Mutator method for y.
public void setY(double newY) {
    y = newY;
}
```