As you can see from Figure 3-4, the get methods successfully display the updated values in the properties. If any properties were not updated, the get methods would display the default values.

Program design recommendation—While in coding and testing phase it is a good idea to display the values in your properties often to ensure that they are updated at the proper times. However, when you move a program from testing mode to production you should reduce the amount of display shown to the users. It probably is not necessary to show the users the update values in properties. It is usually best to just indicate to the users that the update was successful. You can simply comment out your unneeded print code lines before production. This then could help to quickly debug future upgrades to the application by simply removing comments from those lines.



Figure 3-4. Dog class output with set and get methods

Do It

1. In addition to creating an additional property (\$dog_gender) and set method in the Dog class, create a get method to display the updated values. Also update the lab.php file to include a print statement (similar to the examples in this section) to call the get methods.

Constructor Method

One difficulty with the previous examples is the amount of calls to set routines that would be required if you are initially creating an object and populating the properties of the object with values. The Dog class requires that you call four set methods (set_dog_name, set_dog_breed, set_dog_color, and set_dog_weight) in order to place values in all the properties. You can use a much more efficient way of updating all these properties at once. This could reduce the code in the lab.php file. You could then use the set routines in the Dog class to make any changes (maybe the dog gained some weight) after you have provided initial values. The initial values are not default values. You still need default values in case the initial values are invalid.

When an instance of a class (object) is created in memory, the operating system executes a constructor method that builds the object with any properties and methods. The system also builds tables in memory to keep track of the location of the object and the values that exist in the properties of the object. When the object is no longer needed, the operating system's garbage collector will call by the object's destructor method, which will remove it from memory.