Revision

- Short term memory can store ? items
- What are the two "things" inside a class
- Explain the meaning of each of the following word/character

```
public class MyAge {

  public static void main(String[] args) {

    double age = 19;

    System.out.println("My age is " + age);
  }
}
```


Some Statements in Methods

- output statement (15 converted to a string "15" first)

```
System.out.println("The result is " + 15);
```

- local variables declaration / assignment

```
double aValue;
aValue = 3.3 * 5;  // assignment
// double aValue = 3.3 * 5;
```

- return statement

```
return aValue / 2;
```


Student class

```
public class Student {
  private String name;

  // getter method, returns value of an attribute
  public String getName() {
    return name;
  }

  // setter method, assigns parameter to an attribute
  public void setName(String aName) {
    name = aName;
  }
}
```

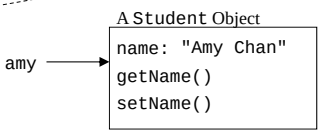
- We have a class now. How to create an object?

Testing class

```
public class TestStudent {
  public static void main(String[] args) {
    // create a student object
    // format: Class variable = new Constructor()
    Student amy = new Student();

    // call method format: object.method(parameters)
    amy.setName("Amy Chan");
    String aName = amy.getName();
    System.out.println("Student object: " + aName
                       + " created");
  }
}  //output: Student object: Amy Chan created
```

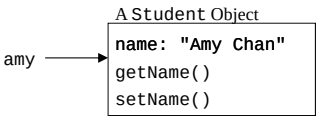

Statement execution: setter

```
    Student amy = new Student();
    amy.setName("Amy Chan");

public class Student {
  private String name;
  ...
  public void setName(String aName) {
    name = aName;
  }
}
```



Statement execution: getter

```
    // call method format: object.method(parameters)
    String aName = amy.getName();

public class Student {
  private String name;
  ...
  // getter method, returns value of an attribute
  public String getName() {
    return name;
  }
}
```



Student class: more

```
public class Student {
  private String name; // old attribute
  private int age;

  // getter/setter methods of attribute name omitted
  ...
  public void setAge(int anAge) {
    age = anAge;
  }
  public int getAge() {
    return age;
  }
  public String allInformation() {
    return name + ", " + age;
  }
}
```


Testing class: more

```
public class TestStudent {
  public static void main(String[] args) {
    Student amy = new Student();
    amy.setName("Amy Chan");
    amy.setAge(19);
    System.out.println("Student information: " +
                       amy.allInformation());
  }
}  //output: Student information: Amy Chan, 19
```