AP Computer Science A
Ticket Out the Door
Set 17: Objects and Classes

Name _____ Period _____

Skill 17.1 Exercise 1
Consider the elements on the periodic table.
(a) Indicate the name of a data type that could be used to represent each element
(b) Indicate the types of data that are required to represent each element

Skill 17.2 Exercise 1
The Elements class represents different elements on the periodic table. Write the elements class below.

Skill 17.3 Exercise 1
The ElementMaker class creates elements by instantiating the Elements class above. Write code that could be used to create the elements Nitrogen and Oxygen.

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Skill 17.4 Exercise 2

Modify the Element class above to accept parameters and assign the instance variables defined above to the their values.

Skill 17.4 Exercise 2

A student executes the following command. Write code that could be used to create Element objects for the arguments helium and neon. Call these Element objects, element1 and element2

```
java ElementMaker helium neon
```

```
public class ElementMaker{

    public static void main(String args[]){




    }
}
```

Skill 17.4 Exercise 3

What is printed?

```
public class StudentMaker{

public static void main(String args[]){


Student student3 = new Student("Marvin",
12);

    }
}
```

```
public class Student{

public String name;
public int gradeLevel;

public Student(String n, int gl){

System.out.println("My name is " +
n + "I am in " + gl + "th grade");
}
```

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