**EACH QUESTION BELOW IS WORTH 10 POINTS. PLEASE ANSWER CLEARLY IN THE SPACE PROVIDED.**

**Jake Lorah**

1. How is an array similar/different from a regular variable?

An array is similar to a variable because they both hold data and information. However an array holds more data than a variable, where a variable would just hold a numeric value or something in that case.

1. Describe two differences between array syntax in javascript and java.

The array syntax in JavaScript is var ArrayName = new Array(size);

The array syntax in Java is DataType[] ArrayName;

ArrayName = {values};

In Java, data type must be specified in arrays. You didn’t have to specify it in JavaScript. Also the formation of the syntax is different for both.

1. How many arrays were needed to complete the online piano project and why?

Two arrays were needed. One for the keys itself and one for the sound for each key.

1. A pre-programmed robot is working its way through a Mars-like terrain collecting specimen samples for later use. This is an example of robotic mode known as Autonomous Mode because the robot is not controlled by a controller/joystick. The other option would be to use the manual mode which would require the use of a controller/joystick.
2. The Task Main() section of RobotC code is similar to the <body> found in HTML code.  This is where all of the actions/code/syntax would be found.
3. Explain how RobotC is similar to Javascript in terms of syntax.

RobotC is similar to JavaScript in terms of syntax because they are both case sensitive, and every line of code must end with a semi-colon. Also they both have a similar starting point, where Task Main() is similar to the <body> tag in JavaScript. All the code is after those tags.

1. Explain how RobotC is similar to Java in terms of handling code.

RobotC is similar to Java because the code must be compiled after every edit you make to the code, no matter how small it may be.

1. Please update the code below to make the robot move forward at 50% of full speed for 10 seconds. 2 is right, 3 is left.

*task* *main*()  
{  
**motor**[port2] = 64;  
**motor**[port3] = 64;  
**wait1Msec**(10000);  
}

1. Please update the code below to have the robot spin counterclockwise at any speed for 25 seconds.

*task* *main*()  
{  
**motor**[port2] = 127;  
**motor**[port3] = 0;  
**wait1Msec**(25000);  
}

1. Please update the code below to make the robot move backwards at 10% of full speed for 15 seconds.

*task* *main*()  
{  
**motor**[port2] = -112;  
**motor**[port3] = -112;  
**wait1Msec**(15000);  
}