TASK #9

Student Worksheet – Did you Hear That?

Group Name_____ Group Members_____

Overview: The possibility of alien life forms present on NXTopia is quite high. NASA are concerned that they might be hiding and that the robot will not see them unless it can hear them approaching. Build a robot that can react to loud sounds.

We will need to take some readings to determine what values your robot reads for different noises.

View → Sound dB → Port 2

How loud is a clap? _____

How loud is silence? _____

Like previous challenges, we will be breaking this one down into small manageable programs

- Drive forward until you hear a sound and then stop
- Once the sound is heard, stop for 2 seconds and slowly turn around for 360 degrees of the robot.

How much duration does the wheel require to enable your robot to turn around 360 degrees? _____

We will now use 2 sensors to locate our alien.

- Drive forward until you hear a loud sound.
- Turn around slowly until you see an object within 30 cm (12")
- When you see your alien, stop and say hello

What was the most difficult part of this challenge? _____

How did you go about solving it? _____