

Introduction to the PICAXE

Start the PICAXE Programming editor on one of the classroom computers. Click on the Help menu, and select PICAXE Manual 1. Read through the PICAXE Getting Started manual (picaxe_manual1.pdf) and answer the following questions on this sheet.

1. What is a microcontroller?

2. List some of the applications microcontrollers are used in.

3. List the advantages of using microcontrollers in a product design.

4. Other than BASIC, how can the PICAXE be programmed?

5. What is an input transducer? List some input transducers.

6. What is an output transducer? List some output transducers.

7. Identify the five things that are required to use the PICAXE system.

8. What operating system is required to run the software?

9. How does the download cable connect to the computer?

10. On the computer, what are the 9 pin serial ports identified as?

11. Draw and label the 7805 voltage regulator circuit.

12. Draw out the PICAXE 14M minimum operating circuit and label the pins on the chip.

13. What must be done to the Reset pin?

14. Identify the three types of memory and list some of their characteristics.

15. What is the drawback of the flowchart method of programming?

16. What is the purpose of the On Screen Simulator?

17. What is the maximum current the PICAXE microcontrollers can source or sink on the output pins?

18. What component must be used to source higher current output devices?

19. Draw how a motor can be connected to an output pin.