ICD2O – Unit 2 Test Review

Question 1 - Modes

1. What are the 3 modes that make up AppLab?	Design mode, Code mode, Run mode
2. Which AppLab Mode allows you to choose things on the screen?	Design
3. Which AppLab Mode allows you to pick the default text on the screen?	Design
4. Which AppLab Mode allows you add a sound object?	Code
5. Which AppLab Mode allows you to click on the buttons?	Run
6. Which AppLab Mode allows you to hear the sounds?	Run
7. Which AppLab Mode allows you to write the questions for users.	Code
8. Which AppLab Mode allows you to see if all the pieces are working?	Run
9. Which AppLab Mode allows you test the buttons to see if they work?	Run
10. Which AppLab Mode allows you type in a prompt?	Run
11. Which AppLab Mode allows you to move a widget's position on the screen?	Design

Question #2 – Variable names

12. What is a keyword? (3 points)	1. A word that is already used for something in the coding. 2. Eg, Var or onEvent 3. Don't name your variables keywords
13. What are the 5 rules for variable names?	1. Can't START with a number 2. No spaces 3. No special characters 4. Not a keyword 5. Make it meaningful

Question #3 & 4 – Variable types

14. What is a named piece of RAM?	Variable
15. Define variable type. (2 points)	1. How much RAM your variable gets (text gets more than number) 2. The kinds of functions your variable can do (number can do math)
16. Identify the two variable types	Number and text
17. Identify the variable type used to hold a noun	Text
18. Identify the variable type used to hold a name	Text
19. Identify the variable type used to hold a phone number	Text
20. Identify the variable type used to hold a price	Number
21. Identify the variable type used to hold a tax rate	Number
22. Where are variables stored?	RAM
23. In Mad Libs, what makes the fill-in-the-blanks?	Variables

Question #5 – Design Mode

24. Why is output useful?	It allows you to display the results of a program to a user.
25. What are three kinds of output in applab?	Sound Change image Change text
26. Why is input useful in applab?	It allows the user to input information. This might customize the results or give instructions.
27. What are three kinds of input in applab?	Prompt PromptNum Clicking on a button
28. What is the name for a piece of a user interface, like a button or an image?	Widget
29. What widgets have we used in AppLab?	Buttons Labels Images TextAreas Screens
30. How many onEvent blocks do you need?	One for each button
31. What needs a meaningful id? (2 things)	Buttons Widgets that change
32. Why do things need a meaningful id?	To make our code easier to understand

Question #7 – Internet Pieces

33. What does ISP stand for?	Internet Service Provider
34. What is a computer or device that connects to the internet? It requests webpages and information on the internet.	Client
35. What are computers that connect pieces of the internet?	Routers
36. Is your phone a client, server, router or ISP?	Client
37. What computers direct packets on the internet?	Routers
38. What is a company that sells a connection to an internet?	ISP
39. What is an example of an ISP?	Bell, Rogers….
40. What kinds of cables are used on the internet?	Fiber Optic Cables
41. What is the name of a piece of an internet message?	Packet
42. What are 3 things in a packet header?	Destination IP Address Return IP Address Sequence Number
43. What are 2 things in a packet body?	The data (payload) Error checking

Question #9 – Paragraph Detail and Analysis

44. What does BFS stand for?	Breadth-First-Search
45. What does DFS stand for?	Depth-First-Search
46. Another word for a Depth First Search	Backtracking Algorithm
47. Another word for the Flood Fill Algorithm	Breadth First Search
48. Why would you use BFS over DFS?	The solution is likely to be close to its neighbours.
49. Why would you use DFS over BFS?	The solution is likely to be close to the leaves (the bottom).
50. The search that looks at neighbours first.	Breadth First Search
51. The search that looks to the bottom of a tree first.	Depth First Search
52. The AI for a Sudoku game would use this search.	DFS
53. Dijkstra's Algorithm uses an adaption of this search.	BFS
54. Google Map's algorithm to find a route uses an adaption of this search.	BFS.
55. Deep Blue uses this search.	DFS.
56. What was Deep Blue's accomplishment?	It was the first AI to beat the best human in the world at chess.

Question #6 – Terminology (from other sections too)

57. A graph that has no circuits (loops).	Tree
58. A graph were each node has at most two children.	Binary Tree
59. On a tree, the node directly above another.	Parent
60. On a tree, the node directly below another.	Child
61. On a tree, a node that has no children	Leaf
62. Two keys hit together to perform a task.	Keyboard shortcut.
63. The keyboard shortcut for save.	Ctrl-S
64. The keyboard shortcut for undo.	Ctrl-Z
65. Keeping your computer in good running order.	Housekeeping.
66. A second copy of a file in another location.	Backups.

Application Questions

67. What are two ways to write x^2 in applab?	x*x OR x^2
68. What is the symbol for multiply in applab?	*
69. What is the symbol for divide in applab?	/
70. How do you find variables in applab?	When declared, they have "var" in front In the output, they don't have quotes around them.
71. How do you join variables and text in output in applab?	+