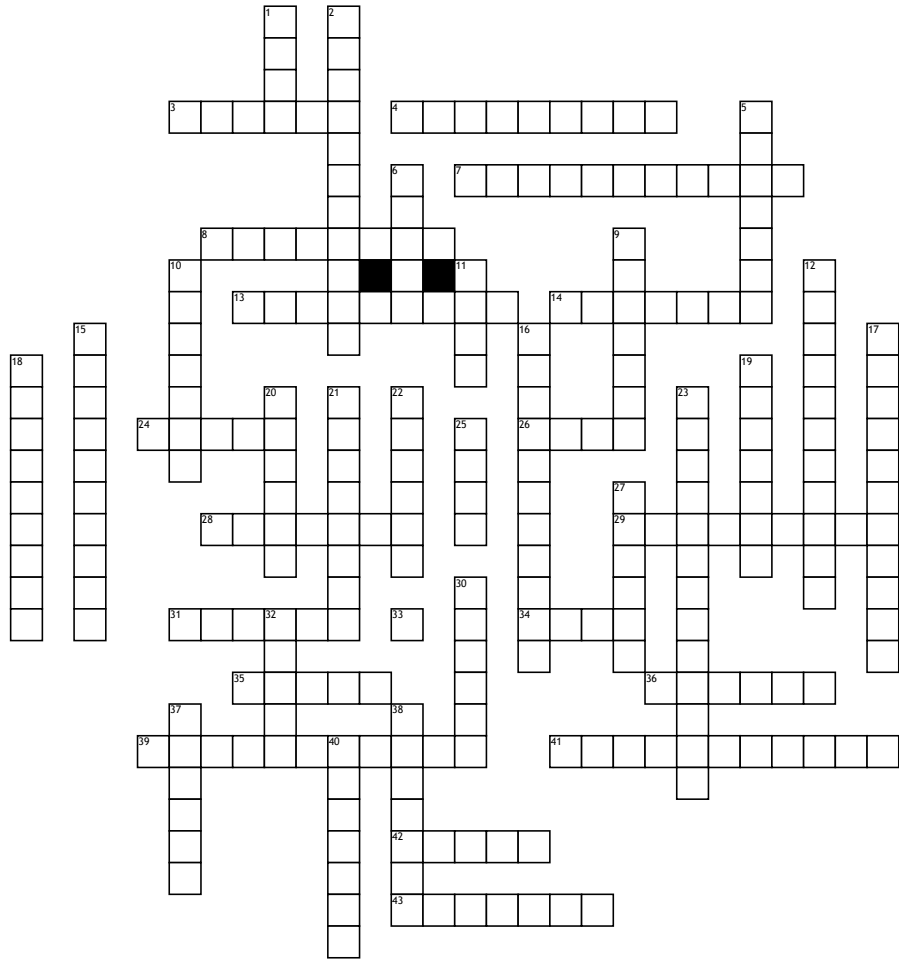Name: _____   Date: _____

Lesson 1.1 Algorithms and Agile Development

Across

3. Method A set of instructions grouped together to do something to or with an

4. Algorithm A step-by-step procedure, like a recipe, but often involving

7. Integrated Development Environment (IDE) Provides a developer with a way to create a program, run the program, and debug the program all within one

8. Syntax Precise rules defining how the letters, words, and punctuation of a programming language are required to be used

13. One-way Flag Variable Stores whether a condition has been true yet; reset before iteration and possibly raised during

14. Input Data that is used by a

24. Waterfall Design A method of software development that emphasizes completing each stage of the design process before beginning the next

26. Encapsulation Keeping details (like data and procedures) together in one part of a program so that programmers working on other parts of the program don't need to know about

28. Conditional The Boolean expression in an if-structure that is evaluated to determine which branch of code to

29. Walker Variable Stores one item from a list at a time during

31. State Diagram Shows the ways that a program could progress from each state to other

34. Memory The parts of computer that can store data or instruction, including volatile memory (lost when the computer is turned off) and non-volatile memory (retained when the computer is turned

35. Script A set of instructions. In Scratch a script is a single stack of blocks belonging to one sprite or to the

36. Aggregator Variable Stores a list of values built up over time and remembers separate individual

39. Sprint Task List A list of small specific tasks to be completed during the current sprint in the scrum method of software

41. Scrum The most common framework for Agile

42. Turing Test One method of determining the strength of artificial intelligence, in which a human tries to decide if the intelligence at the other end of a text chat is

43. Debugging The process of figuring out why code doesn't behave as expected and eliminating bugs to make it work as

Down

1. Central Processing Unit (CPU, or core) The part of the computer that executes one instruction at a

2. Boolean Expression Evaluates to either true or false; used in the conditional of an

5. State Data that describes everything about how a program exists at a given time; a snapshot of a

6. Event Handler A piece of code that responds to an

9. Variable Roles Describe why a variable is being used in a

10. Event A "trigger" from the user or from a program that causes a specific part of the program to

11. Pseudocode An outline of the basic ideas behind how algorithms will

12. Meta-information Information about a program or data file, including date created and author

15. Sprite A graphics object that can be moved on top of or behind a

16. Execute To run a program or a single

17. Output The effect that a program has on its

18. Iteration Repeating a step-by-step procedure several times; also used to refer to single execution of that repetitive

19. Code Instructions in a

20. Modular Code A group of instructive code that exists as an independent unit, which is easy to use with other code as

21. Agile Design A method of software development that emphasizes frequent client input to produce better end

22. If-structure Evaluates a Boolean expression and executes some code if the expression is true (and possibly other code if it is

23. Most Recent Variable Stores user input or stores information about a program's state that changes

25. Product Backlog A prioritized list of user stories, showing both short- and long-term goals of a software development

27. User Stories Plain-language description of a user's need for the software under development, usually phrased as "(who) wants to (do what within the software) so that they can (do what in real

30. Bug Part of a program that causes an error or undesired

32. Accumulator Variable Maintains a running

33. Stepper Variable A variable that counts in an arithmetic sequence, usually counting by ones starting at 0 or

37. Method Call An instruction to use a

38. Best-so-far Variable Keeps track of a record best or worst and updates when a new record best or worst has been

40. Fixed Variable Stores a value that will not change over the course of the entire