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| **Name: KEY** | **Period:** |

1. What does *program flow* follow?

*The sequence of written program statements*

2. Programs in what computer language require control structures?

*Java and all other program languages*

3. What are the 3 general types of control structures?

*Simple sequence, selection and repetition*

4. How does *Simple Sequence* work?

*Program statements are written in the sequence that they should be executed.*

5. What are 2 synonyms for *Selection*?

*Decision making and branching*

6. What are the 3 types of *Selection*?

*One-way, two-way and multiple-way*

7. Selection control structures use a special \_\_\_\_\_\_\_\_\_\_\_\_\_ statement.

*condition*

8. In *one-way selection*, when does the program flow *branch off*?

*If the condition is true*

9. In *one-way selection*, what happens if the condition is *false*?

*The program flow continues without change in program sequence.*

10. In *two-way selection*, what happens if the condition is *false*?

*The program executes the else statement.*

11. Explain *Multiple-Way Selection*.

*A variable value is compared against multiple values. When a match occurs, the statement with the match is executed.*

12. Explain *Repetition*.

*Repetition repeats the same statement or statements as long as some condition is valid.*

13. What do *Selection* and *Repetition* control structures have in common?

*They both use conditional statements.*

14. What is the essence of understanding, and using, control structures?

*Use the correct control structure for the correct purpose.*

15. What is a *conditional statement*?

*A statement that is true or false*

16. Most conditional statements will require what?

*A logical or Boolean operator*

17. All conditions must be placed inside what?

*Parentheses*

18. What kind of operator is required to make an expression evaluate to *true*or *false***?**

*A logical or Boolean operator*

19. List the 6 *relational operators*.

= =

>

<

>=

<=

!=

20. Java does not use “=” to test for equality? What does it use instead?

= =

21. What kind of operator is “=”?

*An assignment operator*

22. What *library* is the **Scanner** class located in?

*the java.util library*

23. Why is a *prompt* necessary for program *input*?

*Without the prompt the program user has no clue what is happening and certainly does not know what type of input is required.*

24. What does the **nextInt** method do?

*The nextInt method "reads" in an int value from the keyboard.*