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| **APCS Exposure Java** | **Exercises 15.06-08** | **Date:** |
| **Name:** | | **Period:** |

1. What are the 3 ways classes can interact?

2. Give an example of a *Utility class*.

3. Inheritance is called a(n) \_\_\_\_\_\_\_\_\_\_relationship.

4. Composition is called a(n) \_\_\_\_\_\_\_\_\_\_relationship.

5. Refer to the previous few questions.

Your program will probably rely more on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than any other type of class interaction.

6. What is a *unit class*?

7. What are the 3 types of error?

8. It is not uncommon for a program to have compile errors. How many of them will the compiler catch?

9. Does the compile error message always tell you exactly what is wrong and where?

10. What type of error is it when the computer *crashes*?

11. Refer to the previous question. What does Java call this type of error?

12. When does a **NullPointerException** occur?

13. When does an **IllegalArgumentException** occur?

14. When does an **ArrayOutOfBoundsException** occur?

15. When does an **ArithmeticException** occur?

16. Give an example of something that will cause an **ArithmeticException**.

17. What does **NaN** stand for?

18. When does a **ClassCastException** occur?

19. When working with files there is a great potential for input and output *Exceptions* occurring.

What command tells Java you simply do not want to deal with them?

20. When does a *Logic Error* occur?

21. How can *Logic Errors* be caught?

22. What is *Minimal Test Data*?

23. What is *Thorough Test Data*?

24. What type of error is it when the computer screen is black and the program is stuck in an infinite loop?

25. What is *Information Hiding*?

26-28. List 3 reasons for Information Hiding. *(This counts as 3 questions.)*

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