# **NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_DATE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_PER.\_\_\_\_\_\_**

## **2.1 CONDITIONAL STATEMENTS**

**For each conditional statement below, state the hypothesis and the conclusion.**

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| 1. Hypothesis:   Conclusion: | If a man is 7 feet tall, then he plays basketball. |
| 1. Hypothesis:   Conclusion: | If you are flying, then you are in a jet. |
| 1. Hypothesis:   Conclusion: | If you are in Alaska, then you are cold. |

For each conditional statement below, write its converse, determine whether it is true or false, and provide a counterexample if false.

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| 1. Converse:   TRUE or FALSE  Counterexample: | If it is a ring, then it is made of gold. |
| 1. Converse:   TRUE or FALSE  Counterexample: | If it is a bird, then it can fly. |
| 1. Converse:   TRUE or FALSE  Counterexample: | If your grade is a 96, then you are making an A. |
| 1. Converse:   TRUE or FALSE  Counterexample: | If you play football, then you wear a uniform. |

Write the inverse of each conditional statement below.

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| 1. Inverse: | If it is a battery, then it is rechargeable. |
| 1. Inverse: | If it is a computer, then it has a hard drive. |
| 1. Inverse: | If an animal is black and white, then it is a penguin. |

Write the contrapositive of each conditional statement below.

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| 1. Contrapositive: | If a species walks on two feet, then it is human. |
| 1. Contrapositive: | If a gem is a ruby, then it is red. |
| 1. Contrapositive: | If it is a fish, then it lives in water. |

Write a conditional statement for the situation described, then write its converse, inverse, and contrapositive.

***Sophomores must have at least 5 credits.***

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| 1. Conditional: |
| 1. Converse: |
| 1. Inverse: |
| 1. Contrapositive: |