

## Sorting Activity

In each box, you are given two statements. The first is a conditional statement, and the second could be its converse, inverse, or contrapositive. Cut the boxes apart and sort them into a converse group, an inverse group, and a contrapositive group.

If two angles are congruent, then they have the same measure.

If two angles have the same measure, then they are congruent.

If it snows, then school will be cancelled.

If it does not snow, then school will not be cancelled.

If you add two even numbers, then the sum will also be even.

If the sum of two numbers is not even, then the two numbers you added were not even.

If a polygon has six sides, then it is a hexagon.

If a polygon is not a hexagon, then it does not have six sides.

If a student has his driver's license, then he is at least 16 years old.

If a student is at least 16 years old, then he has his driver's license.

If the sum of two angle measures is  $90^\circ$ , then they are complementary.

If the sum of two angle measures is not  $90^\circ$ , then they are not complementary.

If an animal has hair, then it is a mammal.

If an animal does not have hair, then it is not a mammal.

If the sum of the measures of the interior angles of a polygon is  $180^\circ$ , then the polygon is a triangle.

If a polygon is not a triangle, then the sum of the measures of its interior angles is not  $180^\circ$ .

If you brush your teeth, then you will not get cavities.

If you do not get cavities, then you brush your teeth.

If you lift weights, then you are strong.

If you are strong, then you lift weights.

If a fruit is yellow, then it is a banana.

If a fruit is not yellow, then it is not a banana.

If you smoke cigarettes, your breath will stink.

If your breath does not stink, then you do not smoke cigarettes.