Sort the Numbers

Riley wants to sort numbers and shapes. Can you help her use a Venn diagram to sort the numbers and shapes she sees?

A Venn diagram uses two circles to sort items and show different traits. *Traits* are things we see that items have in common. The two circles overlap so that we can sort by one trait, another trait, and by both traits. We will use the word "Both" to show that the traits are overlapping! Let's help Riley sort the numbers and shapes using a Venn diagram!

Here are some of the shapes Riley sees. The shapes that have four sides will go here. The shapes that are green will go here. The shapes that have four sides and are green will go here. Those shapes have both traits! Which shapes have four sides?

Yes! These three shapes have four sides. Which shapes are green?

That's right! These three shapes are green. Are there any shapes that have four sides and are green?

This one! There is one shape that has four sides and is green.

Now, we can show the sorting we did on the Venn diagram. This shape that has four sides and is green will go in the middle. These shapes that have four sides will go on the left. These shapes that are green will go on the right. Now, we can see the two shapes that have four sides, these two shapes that are green, and the one shape that has four sides and is green!

Riley wants to sort some numbers. She wants to sort the shapes into the numbers that have a 1 in them, the numbers that have a 5 in them, and the numbers that have both. Do you see any numbers that have a 1 in them?

Yes! These three numbers have a 1 in them. Do you see any numbers that have a 5 in them?

That's right! These two numbers have a 5 in them. Do you see any numbers that have a 1 and a 5 in them?

You've got it! This number has a 1 and a 5 in it.

Can you use the Venn diagram to show the number we sorted? Here is the number with a 1 and a 5 in it. Where does it go on the Venn diagram?

Good job! The number with a 1 and a 5 in it goes in the middle. Here is the number that has a 5 in it. On which side does it go?

Great work! The number that has a 5 in it goes on the right. That means the numbers that have a 1 in them go on the left. Now, we can see the two numbers that have a 1 in them, the one number that has a 5 in it, and the one number that has a 1 and a 5 in it!

Here is another group of shapes. Riley wants to sort the shapes into the ones that are red, the ones that have more than 3 sides, and the ones that have both traits. Can you find the shapes that are red?

Yes! Can you find the shapes that have more than 3 sides?

That's right! Are there any shapes that are red and have more than 3 sides?

You've got it!

Now let's sort the shapes on the diagram. Where do the shapes that are red and have more than 3 sides go?

Good job! Where does the shape that is red go?

Great work! Now the last shapes go here that have more than 3 sides.

Thank you for helping Riley sort shapes and numbers with Venn diagrams!