

Triple Venn Diagram

Exploration Questions

1. Try playing 'Guess the Rule' several times. How soon are you able to confidently guess the rule? Do you have to have a shape placed in every section in order to guess the rule? Do you have to place every single shape on the diagram before you know what the rules are?
2. If you know that:
 - a. The top circle's rule is 'yellow'
 - b. The left circle's rule is 'solids'
 - c. In the section where all 3 circles overlap, there is a solid yellow square

What is the rule for the right circle?

3. If you know that:
 - a. The right circle's rule is 'blue'
 - b. The left circle's rule is 'small'
 - c. In the section where the top and right circles overlap, there is a large, blue, striped hexagon
 - d. In the section where the top and left circles overlap, there is a small, red, solid hexagon

What is the rule for the top circle?

What shape should be in the section where all 3 circles overlap?

4. If you know that:
 - a. The top circle's rule is 'squares'
 - b. The right circle's rule is 'big'
 - c. In the section where all 3 circles overlap, there is a big, red, striped square and a big, yellow, striped square

What is the rule for the left circle?

5. The Venn Diagram displays how items are related to one another with respect to three categories. For example, if an item fits into only one circle, then that item satisfies only one of the three categories; but if an item fits into the section where the three circles overlap, then that item falls into all three categories. Draw three different arrangements of the three circles to illustrate different relationships among the items in the circles. (Hint: It is not required that all 3 circles overlap.)