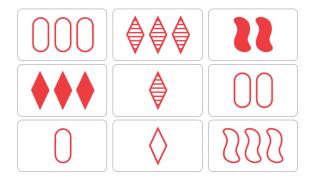
Mathletes Problem of the Week #17

Game, Set, Match



© The New York Times: https://www.nytimes.com/puzzles/set

Set® is a card-matching game. Cards have four features (color, shape, number, and patterning). For each feature there are three possibilities (color: red, green, or purple; shape: oval, diamond, or squiggle; number: 1, 2, or 3; patterning: empty, striped, or shaded). To play the game you have to make "sets" from the cards available. A set is three cards for which each feature is either common across all 3 cards or is different on each card. For example, one set in the cards above is shown below. It is a set because the colors are all the same, the shapes are all different, the numbers are all different, and the patterning is all the same.



(If you would like more help understanding the rules, you can find the instructions online here: http://bit.ly/setinstructions.)

- a) There are three more sets in the cards above. Can you find them? Describe or draw them below.
- b) Can you find four sets in the first group of cards on the back? (Be sure to print this in color!)
- c) Can you find six sets in the second group of cards on the back? (Be sure to print this in color!)
- d) Try to make your own set challenge! Draw cards on a separate page and attach them to this sheet. I will post them on the bulletin board for others to try.

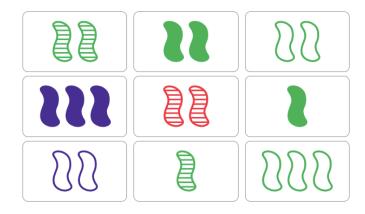
Solutions & Explanations: (Try one or try them all!)

Name Class	
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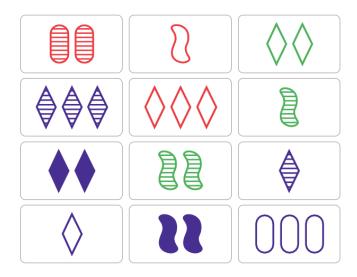
Solutions due: May 30th

(First and last name, please!)

b) Can you find four sets in these cards? (Be sure to print sheet this in color! Describe or draw the sets.)



c) Can you find six sets in these cards? (Be sure to print sheet this in color! Describe or draw the sets.)



d) Make your own set challenge! On a separate sheet of paper, draw 9 or 12 set cards that contain at least one set. I will post your challenges on the bulletin board for others to try!