

Cosmic Chemistry: Cosmogony

Quarks—Getting Down to Fundamentals

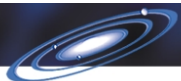
STUDENT ACTIVITY—PART I

MAKING ARRANGEMENTS

Arranger _____ Recorder _____

1. You should have the following set of squares to work with:
 - 3 squares labeled “red up” and 3 labeled “red down”
 - 3 squares labeled “blue up” and 3 labeled “blue down”
 - 3 squares labeled “green up” and 3 labeled “green down”

Using this set of squares, make as many different combinations of three squares as you can. Consider each square as being different from all the others, even if they are the same color and have the same “up” or “down” labels. Using lists, word descriptors or drawings, record your findings here.



2. How many combinations of three squares can you make if each group must have two “up” squares and one “down” square? Record your findings here.

3. How many combinations of three squares can you make if each group must have two “down” squares and one “up” squares? Record your findings here.

