**ML #3 – Area Model for probability (Probability – Math 7 and Math 7 PLUS)**

* Area models can be used to find outcomes for the theoretical probability of 2-stage outcomes
* EXAMPLE: You have 2 buckets. Bucket 1 contains 3 marbles- 1 red and 2 green. Bucket 2 contains 4 marbles – 1 red, 1 blue, 1 green and 1 yellow.

**AREA MODEL**

**Bucket 2**

Y

B

G

R

R

**Bucket 1**

G

G

1. What is the probability of choosing the following combinations (order doesn’t matter)

RR \_\_\_\_\_\_\_ RB \_\_\_\_\_\_\_ RG \_\_\_\_\_\_\_\_RY\_\_\_\_\_\_\_GR\_\_\_\_\_\_\_\_\_ GB \_\_\_\_\_\_\_\_\_ GG\_\_\_\_\_\_\_\_ GY \_\_\_\_\_\_\_\_

1. What is the probability of choosing red from either bucket?
2. What is the probability of choosing green from either bucket?

* We are going to play the game Making Purple. The idea is to spin both spinners to get blue and red, which makes purple. You win if you make purple! What is the probability of making purple?

**Spinner B**

**Spinner A**

**Red**

**Red**

**Red**

**Blue**

**Green**

**Yellow**

**Green**

**Blue**

**Red**

1. We will construct an area model for the 2 spinners above.

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