**Compound Events Notes Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Compound Events** occur when two or more events happen at the same time. For example, rolling a dice and flipping a coin, or pulling a marble out of a bag while pulling a card from a deck. An easy way to visualize the events and their outcomes is to draw an **area model.**

**1) Draw an area model for flipping a coin and rolling a dice.**

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Based on the area model, what is the probability that you will get a 3 and land on heads?

Based on the area model, what is the probability that you will get an even number and heads?

**2) Draw an area model for a bucket that is filled with 1 red, 2 yellow, and 1 blue marble and another bucket filled with 2 red, 1 yellow, and 1 blue marble.**

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Based on the area model, what is the probability that you will get a “purple” combination (one red and one blue)?

Based on the area model, what is the probability that you will get a “green” combination (one yellow and one blue)?

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**Pause the video and try the problems on the back on your own!**

**Then press play and check your answers with a color pen.**

**1) Draw an area model for flipping a coin and pulling a marble out of a bucket filled with 1 green, 2 pink, and 2 purple.**

Based on the area model, what is the probability that you will get a green and land on heads?

Based on the area model, what is the probability that you will get a purple and tails?

**STOP!** Do not try the next part on your own. Press play, check your “You Try,”

then come back and learn a neat short cut to compound probability ☺

**1) Flipping a coin and rolling a dice.**

What is the probability that you will get a 3 and land on heads?

What is the probability that you will get an even number and heads?

**You Try 1) Flipping a coin and pulling a marble out of a bucket filled with 1 green, 2 pink, and 2 purple.**

What is the probability that you will get a green and land on heads?

What is the probability that you will get a purple and tails?