Section 11.2 Math Link

This worksheet will help you with the Math Link on page 425.

In the stick game, each stick can land in one of two ways—decorated or bare side up.

1. Sometimes the game uses different numbers of sticks. How many outcomes are there for each of the following number of sticks? The second one has been done for you. **Note:** B means bare, D means decorated.

Number of Sticks	Outcomes	Total Number of Outcomes
1		
2	(B, B), (B, D), (D, B) (D, D)	4
3		
4		
5		

2. Describe and explain any pattern you can see in the number of outcomes as the number of sticks increases.

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3. a) If the pattern you found in #2 continues, how many outcomes would there

be for a six-stick game? _____
b) If there are 128 outcomes, how many sticks are being used? _____