Activity Set 8.2: # 4, 5 (20/20)

Understanding	Accuracy	Communication	Presentation	Total
2	a) 2 b) 2	2	2	10

4. *Math Concepts:* Suppose you are dealing cards from a 16-card set with 4 each of the cards numbered 1, 2, 3, and 4.
a. What is the probability of being dealt a pair (two cards with the same number) if you are dealt two cards at a time? Set up a probability tree to explore this idea. Show your procedure and explain your thinking.
b. What is the probability of being dealt two cards that sum to at most 5? Set up a probability tree to explore this idea. Show your procedure and explain your thinking.

Understanding	Accuracy	Communication	Presentation	Total
2	a) 2 b) 2	2	2	10

5. *Math Concepts:*
a. Does rolling two four-sided tetrahedral dice with sides numbered 1, 2, 3, and 4 instead of two standard cubical dice with sides numbered 1, 2, 3, 4, 5, and 6 increase or decrease your chances of rolling doubles? Set up a probability tree to explore this idea. Show your procedure and explain your thinking.
b. Does rolling two eight-sided octahedral dice with sides numbered 1, 2, 3, 4, 5, 6, 7, and 8 instead of two standard cubical dice with sides numbered 1, 2, 3, 4, 5, and 6 increase or decrease your chances of rolling doubles? Set up a probability tree to explore this idea. Show your procedure and explain your thinking.