

Jack, Queen, and King, Part I

Objective: Determine the probability of turning up a face card.

Materials: Jack, Queen, and King Activity Sheet per Group
Jack, Queen, and King Transparency
One deck of cards per group of two or three

Procedures:

1. Introduce the activity by asking participants to predict how many face cards will be showing if you turn up 13 cards.
2. Shuffle a deck of cards. Turn 13 cards face up. Count the number of face cards. Use the "Jack, Queen, King" activity sheet transparency to record this number.
3. Discuss the "Jack, Queen, King" activity sheet. Each group will need a deck of cards. Pass out a "Jack, Queen, King" activity sheet to each group for participants to complete.

Extensions:

1. What would happen if you turned up 26 cards?
2. What would happen if you only used black cards?
3. Change the rules; make a prediction; perform the experiment, then explain what actually happened.

Notes:

1. These extension activities would be excellent alternative assessment activities.
2. Children must understand what "average" means. You can extend the discussion here to include mean, median, and mode as all examples of average. Mean, median, and mode are covered later in this section; however, this is a good place to introduce the terms.

JACK, QUEEN, AND KING

Part I

1. How many face cards do you predict will turn up in each trial? _____

Shuffle a deck of cards. Turn 13 cards face up. How many face cards appear? Record this number on the table below. Shuffle the cards and deal again. Repeat this activity 10 times. Record your results on the table below.

TRIAL	Face Cards Showing
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

2. What was the average number of face cards to appear? _____
3. Explain what happened. _____
Explain why you think this happened. _____
Express the results of the experiment as a fraction. Explain what this fraction means. _____
4. Considering the number of cards in a deck and the number of face cards in a deck, do your results seem reasonable? Why or why not? _____
5. How close to the prediction that you made at the start of this activity did the actual results of your experiment come? _____