

Additional Material

# Card Game Tutorial



Two people sit at the table facing each other,





with a deck of card, a pen and  
the worksheet provided at the course site.





Then, pick up 8 cards:  
King, Ace, 2 and 3 of spades and hearts.





Next, decide which suit the players take,  
by coin-flipping.



Spades

Hearts

heads

If the coin is “heads”, that player takes spades,  
and the other player takes the rest.



Hearts

Spades

tails

If the coin is "tails", that player takes hearts,  
and the other player takes the rest.



Black

Red

Now, take your card. Let's play.





Each player carefully chooses one card from your hand.





Which card can beat your opponent?



## Red player wins if ...

both choose K

players choose cards with different numbers

example



## Black player wins if ...

only one player chooses K

players choose cards with the same number



Which card can beat your opponent?



## Red player wins if ...

both choose K

players choose cards with different numbers

example



## Black player wins if ...

only one player chooses K

players choose cards with the same number



Think deeply, considering the rules above.





One, two, three!





example



with different numbers



**Black player wins if ...**

only one player chooses K



players choose cards with the same number



Black won!





Keep a log on the worksheet.



Round		1	2
K, 1, 2 or 3 →	Card chosen by Red	1	
K, 1, 2 or 3 →	Card chosen by Black	k	
	Winner (please circle)	Red <u>Black</u> Red Blac	
Winner gets 1 and loser gets 0	Total score of Red	0	
Record the accumulated score	Total score of Black	1	

Keep a log on the worksheet.





Then, collect your card from the table.





Prepare for the 2nd round.





Think again ...





One, two, three!





Red won!



Round		1	2	3	4	5
K, 1, 2 or 3 →	Card chosen by Red	1	3			
K, 1, 2 or 3 →	Card chosen by Black	k	1			
	Winner (please circle)	Red <u>Black</u> Red	Black	Red Black	Red Black	Red Black
l and loser gets 0	Total score of Red	0	1	← Accumulated Score		
accumulated score	Total score of Black	1	1			


Keep logs on the worksheet.





Play 30 rounds ...



	27	28	29	30
				
				
a				
				
				

Final score  
comes up here

What was your final result?  
Which won? Black or Red?



Report the number of times  
each card is chosen

	K	1	2	3	Total
Red player's choice					

	K	1	2	3	Total
Black player's choice					

Count the number of each card  
played by each player. With this,



# Reflect on your play!

- What was in your mind when choosing a card?
- Did you evenly choose the four cards?
- What was your strategy?
- What was your prediction on your opponent's strategy? Was it correct?

etc...

**Let's discuss better strategies  
with your opponent!**



### Questions 1 - 2

Round 1

Red Player's Choice

Black Player's Choice



### Questions 3 - 4

Round 2

Red Player's Choice

Black Player's Choice



Round	1	2	
Card chosen by Red	1	3	
Card chosen by Black	K	1	
Winner (please circle)	Red Black Red	Black Red	Red
Total score of Red	0	1	
Total score of Black	1	1	

Submit your result through  
the Card Game Result Survey.



### Questions 1 - 2

Round 1

Red Player's Choice

Black Player's Choice



### Questions 3 - 4

Round 2

Red Player's Choice

Black Player's Choice



Round	1	2	
Card chosen by Red	1	3	
Card chosen by Black	k	1	
Winner (please circle)	Red Black Red	Black Red	Red
Total score of Red	0	1	
Total score of Black	1	1	

Only the history of cards played by each player is necessary.





THE UNIVERSITY OF TOKYO