# Playing to Win Questionnaire Summer 2003

#### Dear Student:

Welcome to Playing to Win. We look forward to spending a wonderful few weeks with you. In order to help us accommodate your needs and interests we have devised a short questionnaire. Please take a few moments to answer the questionnaire and return it to your teacher. Your answers will be kept confidential and will be used only for research purposes.

Have a great summer!

The Robotics Initiative Team

1. Info	ormation							
Your na	me:							
Age:		Grade:						
Gender:	Male	Female						
2. Ba	ckground							
How did	you come to join F	Playing to Win?						
Do you	plan on attending c	ollege? Yes [	No 🗌					
If yes	s, what do you wan	t to major in?						
3. Pre	evious Courses							
Indicate subjects	the number of high	school courses	that you have suc	cessfu	lly complet	ed in the	following	
						ber of Cou		
				0	1	2	3	4+
	Mathematics							
	Science							
3.	Computers							
4.	Robotics							

### 4. Course Interests

Based on your experiences, please indicate your level of interest in the following subjects. (1 = Very Low, 2 = Low, 3 = Neutral, 4 = High, 5 = Very High.)

	VERY LOW	<b></b>	000000	>	VERY HIGH
	1	2	3	4	5
1. Mathematics					
2. Science					
3. Computers					
4. Robotics					
<ul> <li>5. Personal Ability</li> <li>Based on your experience, rate your ability level in the following subjects. (1 = Very Poor, 2 = Poor, 3 = Average, 4 = Strong, 5 = Very Strong.)</li> </ul>					
	VERY POOR	4	000000	>	VERY STRONG
	1	2	3	4	5
1. Mathematics					
2. Science					
3. Computers					
4. Robotics					
Do you think you could build a robot? Yes N	o 🔲				
Have you ever built a robot before? Yes \(\simega\)	lo 🗌				
6. Computer Use					
Does your family own a computer?  Yes  N	lo 🔲				
Please indicate approximately how many hours you spe following reasons:	end each wee	k using th	e comput	er for the	•
			r of hours pe		
	0-1	1-2	3-4	4-5	5+
Looking for Information					
2. Entertainment (Games, movies etc)					
3. Homework					
4. Communications (Email, IM etc)					

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## 7. Problem Solving

## Challenge 1:

You are in the subway station and you pull out your metro-card. You go to swipe your metro-card but it won't work. What are some of the possible reasons it did not work? How would you go about fixing the possible problems?

#### Challenge 2:

Sta	rŧ	Q+	ata	
Ola	Iι	OL	alc	

Goal	State
Oua	ı Olak

2	8	3
1	6	4
7		5

1	2	3
8		4
7	6	5

Arrange the tiles so that all the tiles in the start state are in their correct positions in the goal state. You do this by moving tiles. You can move a tile up, down, left, or right, so long as the following conditions are met:

- A. There's no other tile blocking you in the direction of the movement; and
- B. You're not trying to move outside of the boundaries/edges.

Use the grids below to show your progression from the start state to the goal state. Make sure to write down every step. If you make a wrong move do not erase; just move on to the next grid. Please circle the grids that lead to the final solution. (Note: you do not need all these grids to solve the problem.)

Below are four cards. There is a rule that states, "If a card has a vowel on one side, then it has an even number on the other side." Circle the card or cards you would turn over to find out if this rule is true?
Cards: E K 4 7
Why did you pick the card(s) you circled?

Challenge 3: