### **Fantastic Tasks and Where to Find Them**

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## Self Pre- / Post- Assess:

	Emerging	E/D	Developing	D/P	Proficient	P/A	Advanced
Math Content	I identify a few important quantities and variable in a problem		I can sometimes identify and use important quantities and variables in a problem		I usually identify and use important quantities and variables in a problem		I can create a model to simplify a complicated situation
Collaboration: Group Roles	I know my role and fulfill it only some of the time		I accept my role and show understanding by fulfilling it		I know the roles of myself and others, and use the roles to maximize group effectiveness		In addition, I use group roles as opportunities to use strengths or address areas of weakness.  I encourage my group members when
							they are fulfilling their role.

Goal:

# **Problem Solving Framework**

Define the Problem					
What is the problem about? What is it asking you to do?					
Analyze the Problem					
What do you <b>know</b> from the problem scenario or lessons that can help solve the problem?	What concepts or information do you <b>need to know</b> in order to solve the problem?				
Strategies and Solutions					
Your work & decision					
	Check in with Mr. Krall:				

## Problem Entry Event: "A Day Out"

### Good morning class,

I'm so excited about our upcoming field trip! You'll recall we have three options for our field trip: Growlets Zoo, the Prison Museum, and the Space Science Show. Yesterday I had you list your first and second choice. The results are here:

Name	First Choice	Second choice
Olivia	Zoo	Space show
Grace	Space show	Prison museum
Jessica	Prison museum	Zoo
Ruby	Zoo	Space show
Emily	Space show	Prison museum
Sophie	Prison museum	Zoo
Chloe	Prison museum	Space show
Lucy	Prison museum	Space show
Lily	Space show	Prison museum
Ellie	Space show	Prison museum
Ella	Zoo	Space show
Charlotte	Space show	Prison museum
Katie	Space show	Prison museum
Mia	Zoo	Space show
Hannah	Zoo	Space show

Name	First Choice	Second choice
Jack	Prison museum	Zoo
Thomas	Zoo	Prison museum
Joshua	Zoo	Prison museum
Oliver	Space show	Prison museum
Harry	Prison museum	Zoo
James	Zoo	Space show
William	Space show	Space show
Samuel	Zoo	Prison museum
Daniel	Zoo	Space show
Charlie	Prison museum	Prison museum
Benjamin	Space show	Zoo
Joseph	Zoo	Prison museum
Callum	Zoo	Prison museum
George	Prison museum	Space show
Jake	Space show	Prison museum

I would like you to analyze the results from the survey and come to a consensus as a group on which field trip to take. Be sure to employ as *fair reasoning* as possible, while acknowledging the *benefits* and *drawbacks* of your method. Please use our **Problem Solving Framework** on the back of this paper to help organize your information and work.

After you come to a decision, you will be asked to communicate your decision and the reasoning behind it to the class. Lastly, you will need to tabulate the *total* cost of the trip and the *cost per student* based on entry fees and travel mileage. Please check in with me once your group has come to a decision for those instructions.

I look forward to your presentations (and your mathematical reasoning)!

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