**Prospecting Plan**

Team recap of day before - what was accomplished and what still needs completed? (5min)

Prospecting expert shares out information gathered from day before. (10min)

1. What are the 3 available methods?
2. What are the costs and benefits of each?

Asteroid type expert shares out information gathered from day before.

1. Which asteroids available are which type?

Discussion of prospecting plan: (10min)

1. What are the risks with each method?
2. What future costs might be incurred?

Fill in Prospecting type, cost and reasoning. Present to teacher for approval and implementation.

Reflection:

1. Did you get the results expected?
2. What surprised you?
3. If you could do this process again would you choose a different method and why?

**Mining Plan**

Team recap of day before - what was accomplished and what still needs completed? (5min)

Harvester expert shares out information gathered from functional groups to assist in determination of mining material.

1. What materials were plentiful and easy to obtain? Which were rare and hard to obtain?
2. What tools were useful for each type of material?
3. Which materials give the most return and which give the least?

Now that you know the material, discuss the asteroid types and data from your prospecting the day before and determine which asteroid you would like to mine.

To choose harvester size consider the following:

1. What will the volume of your processor need to be to hold the total amount being processed at one time?
2. How large will the opening of your processor need to be to accept the flow of each scoop?

Reflection:

1. What are the risks and rewards of each choice? How does the risk and reward change as you add each choice?
2. If you had disagreements, how did you handle them?
3. If you had to explain your decisions to someone else, how would you sell them on your ideas?

**Design and Build**

Each team member creates processor design to share out with team. After each member shares out to group the other members comment by going through I like…., I think…., I wish…. sentences.

Create one initial design incorporating the best ideas from all members.

1. How did material costs influence your design choices?
2. If you had disagreements in creating your design, how did you handle them?
3. How did your mining plan influence your design choice?

Once your design has been approved you may begin building.