Paired Comparison Analysis:

This tool is helpful in ranking a small number of choices.

Uses:

- ♣ When a group needs to rank 4-6 attractive options
- **♣** To understand the group's thoughts on the options
- ♣ When the group needs to select the most appealing choice

Possible Applications:

- Selecting which theme to use for our performance.
- ♣ Deciding the best type of glue to use on our balsa wood structure.
- Deciding which character will be the comedian.
- ♣ Determining which vehicle is most likely to complete all the necessary tasks.
- ♣ Deciding which genre we will use to develop our storyline (mystery, farce, satire etc.)

Steps:

- 1. State the challenge or problem.
- 2. List the Options and assign each a letter. (e.g., A-D)
- 3. Make sure each person has a set of "voting cards." A set of voting cards consists of four cards marked **A D** and three cards marked **1 3**. The lettered cards will indicate which option is their preference, and the numbered cards will indicate how strongly the person feels about each preference.

3 = a very strong preference

2 = a moderate preference

1= minimal preference (close call)

- 4. Compare Options **A** and B. To do this:
 - a. Have each member of the group vote by holding up (or placing face down in front of them for "secret ballot") their **A** or **B** card, and **1**, **2**, or **3** for how strongly they feel about that preference.
 - b. After all have voted on this pair, (turn cards over if face down) add the total point value of all **A** cards. Do the same thing for all **B** cards.

The greater total will tell you the preferred option, and difference between the totals will tell you how strongly the group felt about that option.

For example, if the **A** cards showing total 19 points and the **B** cards showing equal 12 points, the difference between them is 7. The group preferred Option **A** and the strength of their preference was 7.

- c. Circle the letter identifying the preferred Option and write the number indicating the strength of the preference on the Group Summary Worksheet for that pair.
- 5. Repeat this process for all other paired comparisons.
- 6. Rank the letters from the highest number (highest, best liked ranking) to the lowest number (least selected ranking).
- 7. Return to the original challenge or problem, and decide the next steps.

Paired Comparison Summary Sample Worksheet

Challenge: What materials should we use to make our clown costume unique?

List the options to be compared:

Options: A. Rainbow-colored feathered suit

B. Inflated balloon costume

C. Duct tape suit

D. Papier-mache dress

Look at all the pairs.

For each pair below, record the choice your group preferred. Circle it. Enter a number to indicate how strongly your group felt about its choice. [preferences underlined here]

A/B 6 A/C 6 A/D 2

B/C 2 B/D 4

$$C/D$$
 A

Use the results to rank or prioritize the options.

Total Scores for:

A <u>2</u> B <u>12</u> C <u>10</u> D <u>0</u>

Rank or Priority:

Our Group's top choice is: Inflated Balloon Costume

2 nd choice was: Duct Tape Suit

3 rd choice was: Rainbow-colored feathered suit

4 th choice was: Papier-mache dress