

Youth Work Resources
NASA consensus decision making task

NASA Exercise: Individual Worksheet

INSTRUCTIONS: You are a member of a space craft originally scheduled to rendezvous with a mother ship on the lighted side of the moon. Due to mechanical difficulties, however, your ship was forced to land at a spot some 200 miles from the rendezvous point. During landing, much of the equipment aboard was damaged and, since survival depends on reaching the mother ship, the most critical items available must be chosen for the 200 mile trip. Below are listed the 15 items left intact and undamaged after landing. Your task is to rank order them in terms of their importance for your crew in allowing them to reach the rendezvous point. Place the number 1 by the most important item; the number 2 by the second most important and so on, through number 15, the least important. You have fifteen minutes to complete this phase of the exercise.

- _____ Box of matches
- _____ Food concentrate
- _____ 50 Ft. of nylon rope
- _____ Parachute silk
- _____ Portable heating unit
- _____ Two 45-caliber pistols
- _____ One case dehydrated Pet milk
- _____ Two 100 lb. tanks of oxygen
- _____ Stellar map (of the moon's constellation)
- _____ Life raft
- _____ Magnetic compass
- _____ 5 gallons of water
- _____ Signal flares
- _____ First aid kit containing injection needles
- _____ Solar-powered FM receiver-transmitter

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NASA Exercise Group Worksheet

INSTRUCTIONS: This is an exercise in group decision making. Your group is to employ the method of group consensus in reaching its decision. This means that the prediction for each of the 15 survival items must be agreed upon by each group member before it becomes a part of the group decision. Consensus is difficult to reach. Therefore, not every ranking will meet with everyone's complete approval. Try, as a group, to make each ranking one with which all group members can at least partially agree. Here are some guides to use in reaching consensus:

1. Avoid arguing for your own individual judgments.

Approach the task on the basis of logic.

2. Avoid changing your mind only in order to reach agreement and avoid conflict. Support only solutions with which you are able to agree somewhat, at least.

3. Avoid "conflict-reducing" techniques such as majority vote, averaging, or trading in reaching your decisions.

4. View differences of opinion as helpful rather than as a hindrance to decision making.

Use list of equipment - same as in Individual Worksheet.

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ANSWERS FOR NASA EXERCISE

Correct Number

15 Box of matches
4 Food concentrate

6 50 Ft. of nylon rope
8 Parachute silk
13 Portable heating unit
11 Two 45-caliber pistols
12 One case dehydrated
Pet milk
1 Two 100 lb. tanks of
oxygen
3 Stellar map of the moon
9 Life raft

14 Magnetic compass

2 5 gallons of water
10 Signal flares
7 First aid kit containing
injection needles
5 Solar-powered FM
receiver-transmitter

Rationale

No oxygen
Can live about 20 days with no
food
For travel over rough terrain
Carrying things
Lighted side of the moon is hot
Some use for propulsion
Need water to work

No air on the moon

Needed for navigation
Some value for shelter or
carrying
Moon's magnetic field is
different from earth's
Die in about 4 days
No oxygen
First aid kit might be needed,
the needles useless
Communication