

Lost on the Moon Instruction Sheet

Your spaceship has just crash-landed on the moon. You were scheduled to rendezvous with a mother ship 200 miles away on the lighted surface of the moon, but the rough landing has ruined your ship and destroyed all the equipment on board, except for the 15 items listed below.

Your crew's survival depends on reaching the mother ship, so you must choose the most critical items available for the 200-mile trip.

Your task is to prioritize or rank the 15 items in terms of their importance for your survival. Place a number 1 by the most important item, number 2 by the next most important, and so on through the number 15.

| Rank | ITEMS |
|------|--|
| | Box of matches |
| | Food concentrate |
| | Fifty feet of nylon rope |
| | Parachute silk |
| | Solar-powered portable heating unit |
| | Two .45 caliber pistols |
| | One case of dehydrated milk |
| | Two 100 pound tanks of oxygen |
| | Stellar map (of the moon's constellation) |
| | Self-inflating life raft |
| | Magnetic compass |
| | Five gallons of water |
| | Signal flares |
| | First aid kit, including injection needles |
| | Solar-powered FM receiver/transmitter |

Lost on the Moon Worksheet

| My Rank | Diff | Key Rank | Diff | Our Rank | ITEMS |
|---------|------|----------|------|----------|--|
| | | | | | Box of matches |
| | | | | | Food concentrate |
| | | | | | Fifty feet of nylon rope |
| | | | | | Parachute silk |
| | | | | | Solar-powered portable heating unit |
| | | | | | Two .45 caliber pistols |
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| | | | | | Stellar map (of the moon's constellation) |
| | | | | | Self-inflating life raft |
| | | | | | Magnetic compass |
| | | | | | Five gallons of water |
| | | | | | Signal flares |
| | | | | | First aid kit, including injection needles |
| | | | | | Solar-powered FM receiver/transmitter |

Lost on the Moon Scoring Key

| ITEMS | Key Rank | NASA Reasoning |
|--|----------|---|
| Box of matches | 15 | No oxygen on moon - useless |
| Food concentrate | 4 | Efficient means of supplying energy needs |
| Fifty feet of nylon rope | 6 | Useful in scaling cliffs, tying injured together |
| Parachute silk | 8 | Protection from sun's rays |
| Solar-powered portable heating unit | 13 | Not necessary, unless on dark side of the moon |
| Two .45 caliber pistols | 11 | Possible means of propulsion |
| One case of dehydrated milk | 12 | Bulkier duplication of food concentrate |
| Two 100 pound tanks of oxygen | 1 | Most pressing survival need |
| Stellar map (of the moon's constellation) | 3 | Primary means of navigation |
| Self-inflating life raft | 9 | Carbon dioxide bottle in military raft may be used for propulsion |
| Magnetic compass | 14 | Magnetic field on moon is not polarized. Worthless. |
| Five gallons of water | 2 | Replacement for tremendous liquid loss on lighted side of moon |
| Signal flares | 10 | Distress signal when mother ship is sighted |
| First aid kit, including injection needles | 7 | Needles for vitamins, medicines will fit aperture in space suit |
| Solar-powered FM receiver/transmitter | 5 | For communication with mother ship, but FM requires line of sight transmission and short ranges |