

“EUROPE 1 to 4: Learning through New Methodologies”

SCHOOL: CEIP Bilingüe J.L. Palmireno

LEVEL:6th year



Erasmus+

COUNTRY: Spain.

Name of the activity: NASA game

Instructions:

The group is told the situation. Their spacecraft crashed 200 miles from the moon base and they need to make it safely back using only the fifteen items salvaged from the spacecraft. These fifteen items need to be out in order of importance (from 1 most important to 15: least important first individually. Then as a team. Finally the NASA answer is given and scores are compared.

Drawing

My ranking	Salvaged items	Team ranking
	Box of matches	
	Food concentrate	
	50 feet of nylon rope	
	Parachute silk	
	Two .45 caliber pistols	
	One case of dehydrated milk	
	Two 100-pound tanks of oxygen	
	Stellar map	
	Self-inflating life raft	
	Magnetic compass	
	Five gallons of water	
	Signal flares	
	First aid kit containing injection needles	
	Solar powered FM receiver	
	Portable heating unit	
Score		Score

Answers

Item	Ranking	NASA's Reasoning
Box of matches	15	Virtually worthless -- there's no oxygen on the moon to sustain combustion
Food concentrate	4	Efficient means of supplying energy requirements
50 feet of nylon rope	6	Useful in scaling cliffs and tying injured together
Parachute silk	8	Protection from the sun's rays
Portable heating unit	13	Not needed unless on the dark side
Two .45 calibre pistols	11	Possible means of self-propulsion
One case of dehydrated milk	12	Bulkier duplication of food concentrate
Two 100 lb. tanks of oxygen	1	Most pressing survival need (weight is not a factor since gravity is one-sixth of the Earth's -- each tank would weigh only about 17 lbs. on the moon)
Stellar map	3	Primary means of navigation - star patterns appear essentially identical on the moon as on Earth
Self-inflating life raft	9	CO ₂ bottle in military raft may be used for propulsion
Magnetic compass	14	The magnetic field on the moon is not polarized, so it's worthless for navigation
20 litres of water	2	Needed for replacement of tremendous liquid loss on the light side
Signal flares	10	Use as distress signal when the mother ship is sighted
First aid kit, including injection needle	7	Needles connected to vials of vitamins, medicines, etc. will fit special aperture in NASA space suit
Solar-powered FM receiver-transmitter	5	For communication with mother ship (but FM requires line-of-sight transmission and can only be used over short ranges)

Aims:

Prove that working as a team is more effective and efficient than working alone.

Materials:

List of items
Pen

Variation: