

Team Member Names: _____

Date: _____

Engineering a Mountain Rescue Litter Activity – Litter Design Worksheet

Directions

Part 1

In the space below, draw your rescue litter design, including labels. Think about your design using the supplies that are available to you (materials list shown in Part 2).

When finished, show your design to your teacher/instructor for review and approval.



Part 2

Next, using the materials list in the table below, figure the total cost to build your litter.

Material	Unit size	Cost per unit	Quantity purchased	Total Cost
Toothpick	1	\$1.00		
Paper towel	1	\$2.00		
Popsicle stick	2	\$2.00		
Straw	2	\$1.00		
Sponge	1	\$3.00		
Piece of paper	1	\$1.00		
Aluminum foil square	1	\$3.00		

TOTAL DESIGN COST (maximum of \$20.00): _____

Part 3

Write a short (1-2 sentences) description of how your design satisfies the discussed constraints.

Part 4

As groups demonstrate their rescue litter design, fill in the table below.

Group/Team	Mass of Litter	Cost of Litter	Time to Rescue	Stability (circle answer)		
				stable	kind of stable	unstable
				stable	kind of stable	unstable
				stable	kind of stable	unstable
				stable	kind of stable	unstable
				stable	kind of stable	unstable
				stable	kind of stable	unstable
				stable	kind of stable	unstable
				stable	kind of stable	unstable
				stable	kind of stable	unstable

Conclusion

Write a short (1-2 sentences) description of how you would improve your design based on your own group’s testing and based on the observations of other groups’ designs after testing.
