

# Melting Ice Challenge Day ONE

Name \_\_\_\_\_ Class # \_\_\_\_\_ Class Period \_\_\_\_\_

Your job as an engineer in Cedar City is to design a method for melting ice the fastest way possible! Using the building materials below design a contraption that will melt ice AND allow you to watch as the ice melts ☺ You will be allocated \$100 in budget money and will only be ALLOWED ONE TRIP TO THE "STORE". You should PLAN CAREFULLY!!

Draw your engineering project and LABEL all pieces used in the project:

Your Budget for the project is \$100  
Cost of Goods:

Item	Cost	Purchased	Total
Tape-1 meter	\$20		\$
Poster Board 6x6	\$25		\$
Cotton Balls-5	\$20		\$
Aluminum Foil 6x6	\$25		\$
Wax Paper 6x6	\$15		\$
Ziploc Baggie - 1	\$5		\$
Popsicle Stick - 1	\$10		\$
Paper-1 Sheet	\$10		\$
	\$10		\$
Cork 4x4	\$35		\$
Mylar 4x4	\$30		\$
		<b>Total of Goods</b>	\$

1. Mass of Ice Cube BEFORE Protection \_\_\_\_\_g
2. Length of Time to Melt Ice Cube: \_\_\_\_\_ Minute(s) \_\_\_\_\_ Seconds
3. Based on your results, what do you think went well with your project and what do you think went wrong?

# Melting Ice Challenge Day TWO

Name \_\_\_\_\_ Class # \_\_\_\_\_ Class Period \_\_\_\_\_

You have contracted for a SECOND build! As a group evaluate your findings from Day One and re-build your contraption. Today is important in your building process because the fastest time today will earn a reward!! You will be allocated \$100 in budget money and will only be ALLOWED ONE TRIP TO THE "STORE". You should PLAN CAREFULLY!!

Draw your engineering project and LABEL all pieces used in the project:

Your Budget for the project is \$100

Cost of Goods:

Item	Cost	Purchased	Total
Tape-1 meter	\$20		\$
Poster Board 6x6	\$25		\$
Cotton Balls-5	\$20		\$
Aluminum Foil 6x6	\$25		\$
Wax Paper 6x6	\$15		\$
Ziploc Baggie - 1	\$5		\$
Popsicle Stick - 1	\$10		\$
Paper-1 Sheet	\$10		\$
	\$10		\$
Cork 4x4	\$35		\$
Mylar 4x4	\$30		\$
		<b>Total of Goods</b>	\$

1. Mass of Ice Cube BEFORE Protection \_\_\_\_\_ g
2. Length of Time to Melt Ice Cube: \_\_\_\_\_ Minute(s) \_\_\_\_\_ Seconds
3. What did you discover was the biggest change in your building process AND how did that affect your ice cubes melting time?