
Grade 12
Consumer Mathematics
Standards Test

Project Resource Package

**“Grand Days”
at Fun Beach**

December 2010

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This resource will also be available on the Manitoba Education website at www.edu.gov.mb.ca/k12/assess/archives/index.html.

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Ce document est disponible en français.

Welcome to the “*Grand Days*” at *Fun Beach* Project

General Information

The purpose of the first session is to provide an opportunity for you to

- develop an understanding of the project requirements
- become familiar with the information contained in this *Project Resource Package*
- share ideas related to the project in a brainstorming session
- begin developing your individual project

After the first project session

- two additional classwork periods will be provided
- your teacher cannot assist you in developing or revising your project
- you must submit an individual project that reflects your own work

Guidelines for the “Grand Days” at Fun Beach Project

In this project, you are hired as an activity coordinator for the revival of the “Grand Days” at Fun Beach.

In doing this project the following scenarios and requirements apply:

1. You will organize a sand sculpture contest at Fun Beach for a day in August.
2. The sculpting area is 50 feet wide by 200 feet long.
3. There are categories for the different levels of sculptors. The requirements for each category are listed in the chart below:

Category	Plot Size (in feet)	Volume of Additional Sand Required per plot (in ft ³)	Minimum Number of Plots Required	All-inclusive Entry Fee per Participant
Professional	10' × 10'	100	10	\$50
Amateur	5' × 5'	25	14	\$20
Youth 10–15 years	5' × 5'	25	10	\$5
Children 9 and under	5' × 5'	25	10	Free

4. You must provide extra sand for each plot for the contest at a cost of \$0.10 per cubic foot (ft³).
5. Each plot needs to be sectioned off with stakes (every 5 feet) and plastic tape. There must be 5 feet between each plot.
6. You must provide prizes for the participants and winners at each level. The winner of the “Professional” category will receive a cash prize worth 25% of the professional fees. You will decide on the prizes for the other categories.
7. You must choose a minimum of 3 food vendors to be present during the contest. These vendors are located on the boardwalk.
8. You must provide security and first aid personnel during the day.
9. You must choose a minimum of one advertising option.
10. The number of visitors expected for this day at Fun Beach is 13 000.
11. Any profits from the contest are to be donated to a local wildlife fund.
12. All applicable taxes have been included.

Directions for the “Grand Days” at Fun Beach Project

Your completed project must include the following information:

- a detailed scale drawing showing the used plots in the contest area
- a list of prizes available to the participants
- a list of revenues and expenses for the contest

Your completed project must

- be separate from this *Project Resource Package* booklet
- be well organized with an introduction and a conclusion
- be clearly presented with appropriate headings/subheadings
- include justifications of any assumptions or decisions you make in completing your project
- be printed from a computer, or written in blue or black ink

A scoring guide similar to the one below will be used to grade your project.

Organization, Structure and Communication	Data Selection/Analysis	Concepts/Reasoning
5 Marks	5 Marks	5 Marks
<ul style="list-style-type: none">• Is your project organized and does it follow a logical presentation?• Is your project easy to read?• Is your information clearly presented?	<ul style="list-style-type: none">• Did you select and use the required data?• Did you explore patterns or relationships in the data where appropriate?• Did you use mathematical procedures correctly?	<ul style="list-style-type: none">• Did you include evidence that mathematical concepts are understood?• Did you include clear and logical reasons, explanations, and conclusions that are appropriate to the project?

Project Resource Package

This resource package includes:

- history of Fun Beach and map of the area
- vendor options
- list of supplies and expenses
- contest area diagrams

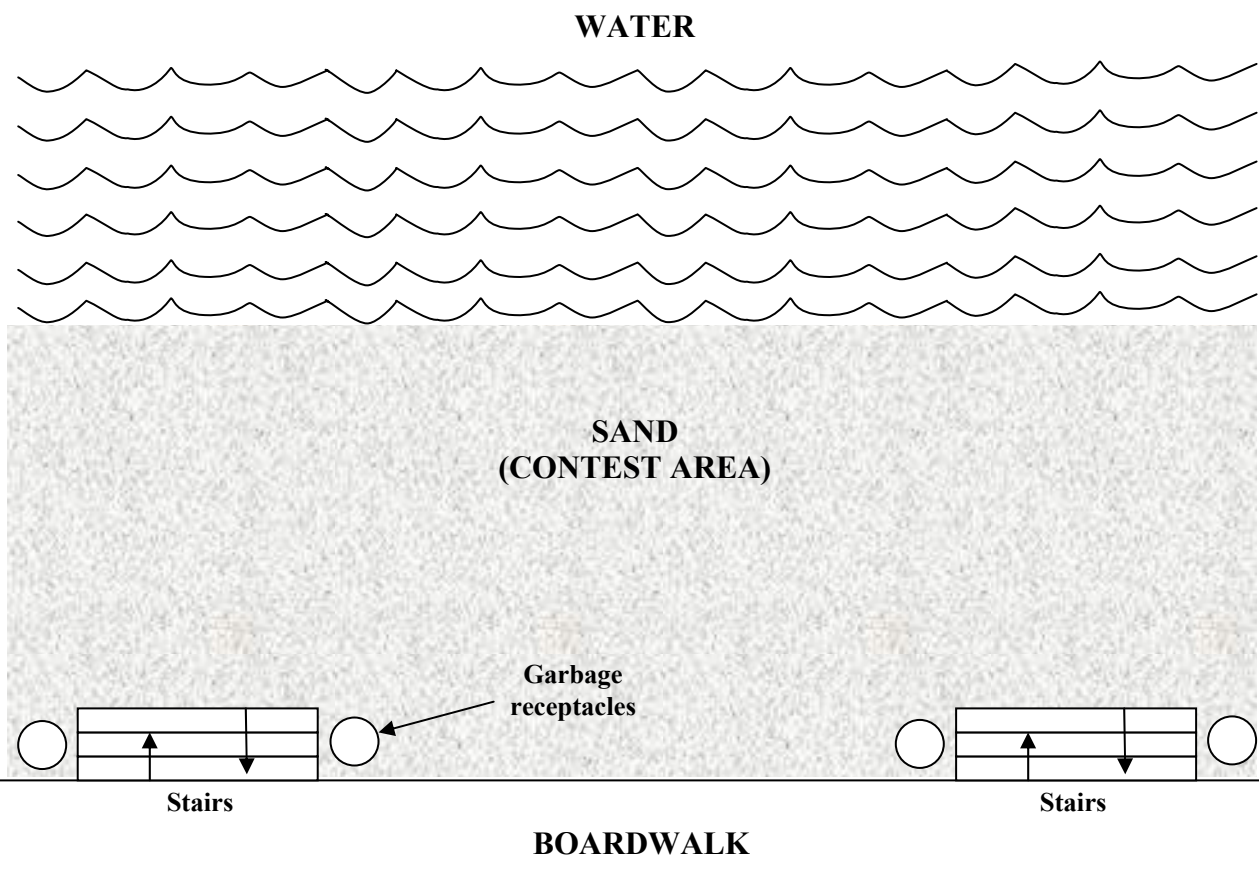
Use of resource package:

This resource package is designed to provide background information to assist you in completing your project. Remember to submit your project separate from this booklet.

HISTORY OF FUN BEACH

Fun Beach has been a Manitoba hot spot for grand days in the hot sun since the early 1900s.

- The beach is 6.5 km long with soft white sand.
- The boardwalk spans 1.6 km in length.
- The lake is shallow with lots of sand bars and fun waves.
- Washroom and shower facilities are available.
- Campground and hotel are available.



This is a snapshot birdseye view of a portion of the beach area...it is not to scale.

Vendors (minimum of 3)

You will charge a flat fee of \$175 to each vendor to set up at “Grand Days” at Fun Beach. You will also receive a commission based on a percentage of their sales:

Vendor	Product	Average Order Price	Percentage of Visitors Purchasing	Commission Rates
Jumpin’ Dog Hot Dog Cart	Hot dogs, hamburgers, bags of chips, and cold drinks	\$8.50	14%	3%
Frozen Fruzzies	Fresh frozen fruit drinks	\$3.50	19%	4%
Pappa’s Pizza	Pizza by the slice	\$7.75	6.5%	5%
On a Stick	Almost anything on a stick: chocolate strawberries, pork, spaghetti, veggies...	\$7.00	5%	3%
Fritz Wagon	Homemade French Fries	\$5.00	25%	4%

Supplies and Expenses

Required Expenses	Stakes (one per 5 feet of perimeter)	\$0.30 each stake
	Plastic rolls of tape (200 feet per roll)	\$8 each roll
	Security	\$750 for the day
	First aid personnel	\$500 for the day
	Sand for each plot	\$0.10 per cubic foot (ft ³)

Prize Options	Participation ribbons (box of 20)	\$4 per box
	Medals	\$7.50 each medal
	Small Trophy	\$10 per trophy
	Medium Trophy	\$13 per trophy
	Large Trophy	\$20 per trophy

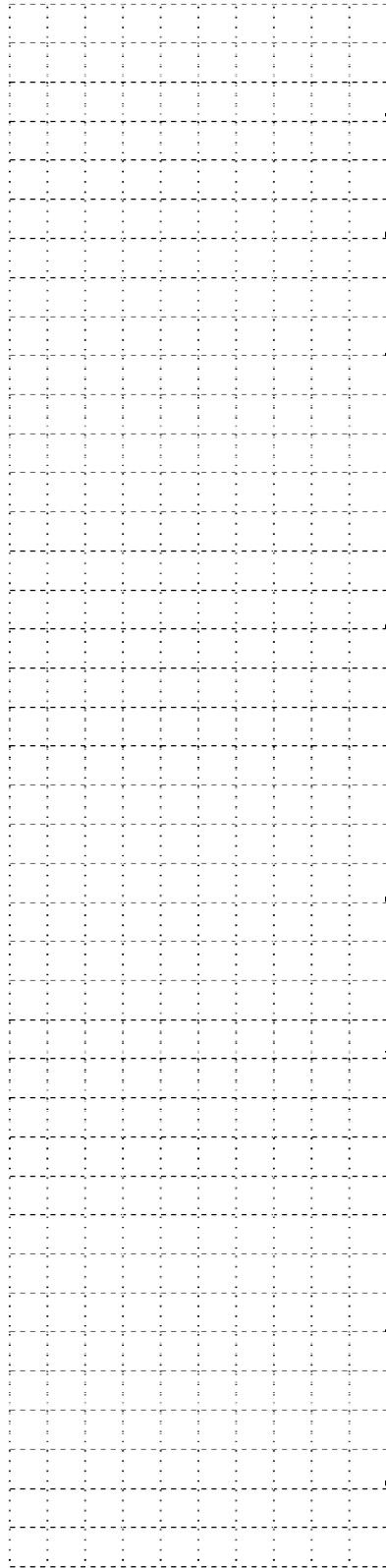
Advertising Options	Flyers for local beach	\$200
	Advertisement in major newspaper (3 prior Saturdays)	\$300
	Announcement on community TV segment	Free

Optional Expenses	Music	\$300 for 4 hours \$800 for the day
	Fireworks	\$800 per 10 minutes

Contest Area



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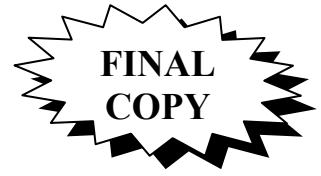
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 Children

Scale: 1 square = 5 feet

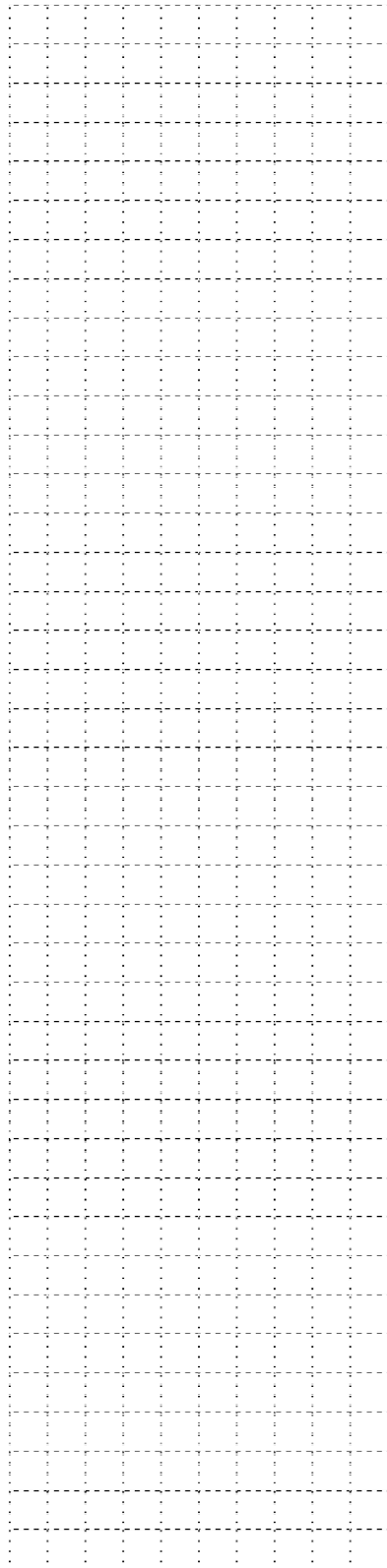
Contest Area



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BOARDWALK



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 Children

Scale:
1 square = 5 feet

