

TRI-COUNTY CHARTER SCHOOL PARTNERSHIP  
Performance Assessment

## Adventures on the Island

**Grade Level: 5<sup>th</sup> to 6<sup>th</sup> Grade**

**Florida Sunshine State Standards Addressed:**

**Primary Standards:**

MA.B.12.1: Student uses concrete and graphic models to develop procedures for solving problems related to measurement including length, weight, time, temperature, perimeter, area, volume, and angle.

MA.E.1.2.2: Student uses and understands the tools to determine range, mean, median, and mode from sets of data.

MA.A.1.3.1: The student understands the different ways numbers are represented and used in the real world. Student also associates verbal names, written word names, and standard numerals with integers, fractions, and decimals; numbers expressed as percents; numbers with exponents; numbers in scientific notation; radicals; absolute value; and ratios.

MA.A.1.3.2: The student understands the different ways numbers are represented and used in the real world. Students also understand the relative size of integers, fractions, and decimals; numbers expressed as percents; numbers with exponents; numbers in scientific notation; radicals; absolute value; and ratios.

MA.A.1.3.4: The student understands the different ways numbers are represented and used in the real world. Student also understands that numbers can be represented in a variety of equivalent forms, including integers, fractions, decimals, percents, scientific notation, exponents, radicals, and absolute value.

MA.A.3.3.2: Student understands the effect of operations and selects the appropriate operation to solve problems involving addition, subtraction, multiplication, and division of rational numbers, ratios, proportions, and percents, including the appropriate application of the algebraic order of operations.

MA.A.5.3.1: Student understands and applies theories related to numbers and uses concepts about numbers, including primes, factors, and multiples, to build number sequences.

**Secondary Standards:**

LA.B.1.3.1: The student uses the writing process effectively to organize information before writing according to the type and purpose of writing.

LA.B.1.3.2: The student uses the writing process effectively to draft and revise writing that is:

- focused, purposeful, and reflects insight into the writing situation;
- conveys a sense of completeness and wholeness with adherence to the main idea;
- has an organizational pattern that provides for a logical progression of ideas;
- has support that is substantial, specific, relevant, concrete, and/or illustrative;
- demonstrates a commitment to and an involvement with the subject;
- has clarity in presentation of ideas;
- uses creative writing strategies appropriate to the purpose of the paper;
- demonstrates a command of language (word choice) with freshness of expression;
- has varied sentence structure and sentences that are complete except when fragments are used purposefully; and
- has few, if any, convention errors in mechanics, usage, and punctuation.

SS.B.1.3.1: The student understands the world in spatial terms and uses various map forms (including thematic maps) and other geographic representations, tools, and technologies to acquire, process, and report geo-graphic information including patterns of land use, connections between places, and patterns and processes of migration and diffusion.

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## Information for the Teacher

Students relate math skills to real life situations pertaining to Islands of Adventure.

### **Task Description:**

**Task 1** – Students will compare/contrast the estimated area and perimeter of Islands of Adventure and Disney World.

**Task 2** – Students will find the central tendencies of the length of time the wait is for five rides.

**Task 3** - Students will be given a \$25 budget to figure out what they can eat, drink, and buy (tax will be figured out by students).

**Task 4** – Students will create a color brochure of the information they have collected about Island of Adventure, which includes a map.

### **Required Materials:**

Worksheets to assist students with organization of collected data.

# **Size of Oh' Land Doe**

## **Assessment Scenario for Students**

You've been chosen to review Islands of Adventure for a local newspaper. Your editor wants the following information included in your article: size of the park, ride wait time, budget information, and a colorful description (in your words) of the park. You get a free ticket for accepting the job.

## **Task 1: Size of Oh' Land Doe**

Your first assignment is to compare the size of Islands of Adventure to Disney. You gather the needed information from the Disney website. Disney is \_\_\_\_\_ sq. feet, and has a perimeter of \_\_\_\_\_ ft. The only information on the Islands of Adventure website is measurements. The length is \_\_\_\_\_ feet and the width is \_\_\_\_\_ feet. (see worksheet 1)

# Scoring Guide – Task 1

## 4 Exemplary

- All proficient criteria met plus student solved math problems without assistance of given formulas.

## 3 Proficient

- Properly solves the real-world problems of perimeter and area.
- Properly compares and contrasts data.

## 2 Progressing

- Successfully solved perimeter but not area.
- Successfully solved area, but not perimeter.
- Successfully compares and contrasts the data.

## 1 Not meeting the standard(s)

- No criteria has been met.

# Task 1

## Disney World

Area= \_\_\_\_\_ square feet

Perimeter= \_\_\_\_\_ feet

## Islands of Adventure

Length= \_\_\_\_\_ feet

Width= \_\_\_\_\_ feet

Area= \_\_\_\_\_

Perimeter= \_\_\_\_\_

## Compare and Contrast

Disney World's perimeter is \_\_\_\_\_ larger or smaller than Islands of Adventure.

Disney World's area is \_\_\_\_\_ larger or smaller than Islands of Adventure.

## **Task 2:**

### **What do you MEAN I have to wait in line?**

The editor wants you to include data about the wait time for the rides. He tells you that timing all of the rides would ruin your fun, so pick five popular rides and time the amount of minutes you had to wait in line. (Round to the nearest minute).

(See Worksheet 2, \*enriching task added)

## Task 2: Scoring Guide

**4 Exemplary:**

- All proficient criteria met plus advanced work completed, such as graphs of results.

**3 Proficient:**

- Successfully computed mean, median, mode, and range.

**2 Progressing:**

- Met only two of the criteria.

**1 Not meeting the standard(s):**

- Less than two criteria met

## Worksheet for Task 2

### Key

**Mean=** sum of numbers divided by the total number of numbers

**Median=** middle number

**Mode=** number that appears most often

**Range=** difference between the largest and smallest number

\*\*\*\*\* Remember to round to the nearest second! \*\*\*\*\*

Ride Number	Ride Name	Minutes in Line
1		
2		
3		
4		
5		

### Answers

Mean: \_\_\_\_\_

Median: \_\_\_\_\_

Mode: \_\_\_\_\_

Range: \_\_\_\_\_

### **Task 3: Show Me the Money**

Since you are a kid, you don't have any money. The editor tells you that part of the assignment is figuring out a budget with \$25.00. Use menus and price lists to figure out if it's possible. Remember Florida has a 6% sales tax (price x .06). You must purchase one souvenir, lunch, and dinner. Also, you need to save money for drinks and ice cream. (See Worksheet 3)

## Task 3: Scoring Guide

### 4 Exemplary:

- All proficient criteria met plus advanced work completed. For example, money was put aside for additional drinks.

### 3 Proficient:

- Stayed within budget.
- Computed tax properly.
- Included all three categories in spending.

### 2 Progressing:

- Only one or two criteria met.

### 1 Not meeting the standard(s):

- Did not stay on budget nor compute the tax properly.

## Worksheet for Task 3

### Budget

LUNCH \$ \_\_\_\_\_ . \_\_\_\_\_

DINNER \$ \_\_\_\_\_ . \_\_\_\_\_

SOUVENIR \$ \_\_\_\_\_ . \_\_\_\_\_

DRINK \$ \_\_\_\_\_ . \_\_\_\_\_

ICE CREAM \$ \_\_\_\_\_ . \_\_\_\_\_

OTHER \$ \_\_\_\_\_ . \_\_\_\_\_

OTHER \$ \_\_\_\_\_ . \_\_\_\_\_

**SUBTOTAL** \$ \_\_\_\_\_ . \_\_\_\_\_

FLORIDA SALES TAX\* \$ \_\_\_\_\_ . \_\_\_\_\_

**FINAL TOTAL** \$ \_\_\_\_\_ . \_\_\_\_\_

- . FLORIDA SALES TAX IS 6%
- . SUBTOTAL TIMES 0.06 IS YOUR SALES TAX.

# Sample Price Sheet

## FOOD

Funnel Cake	\$2.95
Green Eggs Café	\$5.00-7.00 (No Drinks)
Enchanted Oak	\$4.99 Kids Meal
Pizza Slice	\$2.50
Freezy	\$2.50-5.50
Burger and Fries	\$7.50
Fries	\$3.00
Ice Cream	\$2.50-4.50
Candy	\$1.75-4.50
Water	\$3.00
Soda	\$2.75

## Souvenirs

Key Chain	\$5.00
Pencil	\$1.75
T-shirt	\$12.00-20.00
Toys	\$12.00-30.00
Picture Frame	\$5.00-10.00
Figurines	\$7.00
Stickers	\$3.50

**TAX IS NOT INCLUDED!**

## **Task 4: Islands of Adventure Brochure**

You've completed all the footwork. Now it's time to create the color brochure. To get paid you need to include the following information: area, perimeter of Islands of Adventure, wait time for rides, prices (food, drinks, treats, souvenirs). Your brochure needs to be neat, colorful, clearly written in paragraph form and include all the information.

## Task 4: Scoring Guide

### 4 Exemplary:

- All proficient criteria met plus advanced work completed. For example, details and illustrations in the brochure are especially well done.

### 3 Proficient:

- Content (length, own words/not copied)
- Organization (beginning, middle, end).
- Language/word choice (understandable with details)
- Sentence structure (complete sentences of variety)
- Mechanics (spelling/punctuation).
- Writing process (proper format).

### 2 Progressing:

- Student has met three to five of the proficient criteria.

### 1 Not meeting the standard(s):

- Fewer than three criteria have been met.