DISCOVERY PARK OF AMERICA
See beyond.

Name: _____

Date: _____

MATH SCAVENGER HUNT
Eighth Grade

I. *Find the **automobiles** on the lower level of the Discovery Center*

1. Where did you find them? The _____ Gallery
2. Make a chart displaying the **date**, **maximum speed**, **weight**, and **original cost** of the following:
   Lincoln Sport Phaetom, Ford Thunderbird, Brush Runabout, Plymouth Special Deluxe, Cadillac Series 6200.

Use the chart to answer the following questions.

8.EE.A.3 3. Using the weight of the Plymouth Special Deluxe and the weight of the Ford Thunderbird, write an inequality of their weights in scientific notation. _____

8.EE.A.3 4. Using the dates of the 1.91×10^3 Brush Runabout, the 1.959×10^3 Cadillac Series 6200, and the 1.948×10^3 Plymouth, find the range of the dates written in standard form.

_____

8.EE.A.4 5. Multiply $(8.5 \times 10^1)(3.5 \times 10^1)$. Write the product in scientific notation.

_____

8.EE.A.4 6. Convert the product to standard form. _____

8.EE.A.4 7. Find the sum of the costs of the five automobiles. _____
Write the sum in scientific notation. _____

8.EE.A.4 8. Write the costs in order of least to greatest in scientific notation.

_____

II. *Find the **Ark of the Covenant** on the lower level of the Discovery Center.*

9. Where did you find it? The _____ Gallery

10. The Ark of the Covenant is a replica of the one detailed in the book of Exodus. The measurements presented have been translated into modern units of measure. It measures 52 × 31 × 31 inches.

8.G.C.9
8.EE.A1

Find the volume. _____

8.EE.C.7b
8.EE.A.1

Find the surface area. _____

8.EE.C.7b

11. There is a suit of armor near the Ark of the Covenant. If the first knight weighs 194 lbs with the suit on, and a second knight weighs 219 lbs with the suit on, and the armor weighs 44 lbs, what would a third knight weigh if the total weight of all three knights in armor is 657 lbs?

_____

8.NS.A.1
8.EE.C.7b

12. The driftwood horse heads weigh 300 lbs together. The first horse head weighs *w,* and the second horse head weighs ⅓ the weight of the first head. What is the weight of each horse head?

_____

8.NS.A.1
8.G.C.9

13. Find the skulls on display in the next gallery. One of the specimens, La Chappaux-aux-Saints 1 was found in a rectangular burial pit about 1 ft deep, 4.5 ft long, and 3 ft wide. What was the volume of the rectangular pit?

_____

III. *Find the **large globe** on the lower level of the Discovery Center.*

14. Where did you find it? The _____ Gallery
    What is it called? _____
15. The globe is 4 feet in diameter.

8.G.C.9 What is the radius of the globe? _____

8.EE.A.1

What is the surface area of the globe? _____

IV. *Find the **Discovery Center Admission Desk.***

A family of four entered the Discovery Center to spend their day at Discovery Park. The family consists of a mother, father, teenage son, and teenage daughter.

16. Find the cost of adult admission. _____

8.F.A.2 17. Write a rule to find the total costs of adult admission for a family of four.

_____

8.F.A.1 Complete a function table to find the total costs of adult admission for a family of four.

What is the total cost for the family to enter the Discovery Center?

_____

18. Find the cost of one Special Attraction. _____

8.F.A.2 The mother and father want to see the Tower. Write a rule to find the cost of two tickets to see the Tower.

_____

8.F.A.1 Complete a function table to find the total cost of the two Tower tickets.

What is the total cost for two Tower tickets for the parents? _____

19. Find the cost of one Special Attraction Package. _____

8.F.A.2 The son and the daughter want to see all three attractions. Write a rule to find the cost of two Special Attraction Packages.

_____

8.F.A.1 Complete a function table to find the total cost of the Special Attractions for the son and daughter.

What is the total cost for two Special Attractions Packages? _____

20. What is the total cost for Special Attractions for the whole family? _____

21. What is the total cost for the whole family, with admission and Special Attractions combined? _____

V. *The Tower*

The Tower, including the flagpole, reaches 199 feet into the air and displays an American flag measuring over 40 feet long. The observation deck stands 120 feet above the ground.

8.EE.C.7b 22. What is the distance from the observation deck to the bottom of the flag? _____