



MATH SCAVENGER HUNT

Seventh Grade

Find the **KEVA Planks** on the upper level of the Discovery Center.

- I.
1. Where did you find them? The _____ Gallery
 2. Use the KEVA Planks to make a triangle, rectangle, rhombus, and trapezoid. Draw and label the shapes.

Which shapes above are parallelograms? _____

Which shape is not a quadrilateral? _____

Why? _____

Which shape is not a parallelogram? _____

Why? _____

- 7.G.B.6 3. If the area of a rectangle is 216 in^2 and the perimeter is 60 in , what are the dimensions of the rectangle? _____

$$P = 2(L + W) \quad A = L \times W$$

- 7.G.B.6 4. What is the area of a rhombus if $P = 12\text{cm}$ and $Q = 12\text{cm}$? _____
(P and Q are the diagonals of the rhombus)

$$A = (P \times Q) \div 2$$

- 7.G.B.6
7. NS.A.2c 5. What is the area of a right triangle whose base is 2.25mm and height is 0.4mm ? _____

$$\text{Area} = (B \times H) \div 2$$

- 7.G.B.6 6. Find the area of a trapezoid with a base¹ (top of the trapezoid) of 9cm , a base² (bottom of the trapezoid) of 7cm , and a height of 3cm . _____

$$\text{Area} = [(base^1 + base^2) \times H] \div 2$$

II. Find the **cars** on the lower level of the Discovery Center.

7. Where did you find them? The _____ Gallery
8. Make a chart displaying the **date**, **original cost**, and **weight** of the following vehicles:
Chevrolet Cameo Pickup, Brush Runabout, Plymouth Special Deluxe.

7.SP.B.4 9. Using the information above, what is the **range** of the costs of the vehicles? _____

7.SP.B.4 10. Find the **sum** of the costs of all three vehicles. _____
What is the **mean** cost of the vehicles? Round to the nearest whole number. _____

7.SP.B.4 11. What is the **mode** of the dates? _____

7.SP.B.4 12. What is the **median** weight of the vehicles? _____

7.NS.A.2b 13. Is the weight of the Brush Runabout divisible by 5? _____

7.NS.A.2b Is the date of the Plymouth Special Deluxe divisible by 4? _____

7.NS.A.2b Is the cost of the Brush Runabout divisible by 3? _____

7.EE.B.3 Write the weight of the Plymouth Special Deluxe in scientific notation. _____

7.EE.B.3 Write the weight of the Brush Runabout in scientific notation. _____

7.EE.B.3 Using an inequality, compare the weights of the Brush Runabout and Plymouth Special Deluxe written in scientific notation. _____

III. *Find the Giant Human Slide on the upper floor of the Discovery Center. If the Giant Human stood up, he would be about 48 feet tall.*

7.RP.A.2c 20. Set up a proportion to help convert 48 feet to yards.

21. Solve the proportion to find out how many yards tall he is.

7.RP.A.2c 22. The Giant Human Slide is 32 feet long. Set up a proportion to help convert 32 feet to inches

23. Solve the proportion to find out how many inches long the slide is.

IV. *Find the admission desk on the entry level of the Discovery Center.*

A family of five wants to buy annual memberships for the family. The family includes a father, mother, teenage daughter and son, and a ten-year-old son. See the sign above the front desk for current prices.

7.NS.A.3 24. How much would it cost for the entire family to buy memberships?

7.EE.B3
7.RP.A.3 25. If Tennessee sales tax is 9.75%, how much would tax cost for the combined memberships? _____

26. What would the total cost be after tax? _____
