***The Number Devil* – Reading Notes Chapter 2**

Take notes as you read chapter 2.

1. While you read The Second Night, think about the number “0”.

What do we know about the history of “0” from the Number Devil?

**2. Give some examples of what the Number Devil means when he says,**

*“That tricky little zero. I told you we couldn’t do without it.”*

**3. Did the Number Devil teach Robert any “math tricks?” List them.**

**4. What math appears in the Second Night? Explain or give examples.**

**5. Below is a table of the Roman Numerals that the Number Devil and Robert discussed on pages 32 – 34. Complete the table.**

**Rules of**

**Roman Numerals**

1. If a smaller value comes after a larger value you add them.

(Example: VI = 5 + 1 = 6)

1. If a smaller value comes before a larger value you subtract them.

(Example: IV= 5 – 1 = 4)

1. You never subtract more than two of a value!!!

|  |  |
| --- | --- |
| **Roman Numeral** | **Standard Numeral** |
|  I | 1 |
| V |  |
| X |  |
| L |  |
| C |  |
| M |  |
|  | 16 |
|  | 28 |
|  | 1976 |
| MCMLXXIV |  |
|  | 2015 |
|  | The year you were born \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**6. Hopping Numbers** (pgs. 38 – 42)

Explain Hopping Numbers:

Complete the table below

|  |  |  |
| --- | --- | --- |
| **Expanded Form** | **Exponential Form** | **Standard Form** |
| 1 x 1 |  |  |
| 1 x 1 x 1 x 1 x 1 x 1 |  |  |
| 2 x 2 |  |  |
| 2 x 2 x 2 |  |  |
| 2 x 2 x 2 x 2 |  |  |
| 2 x 2 x 2 x 2 x 2 |  |  |
| 5 x 5 |  |  |
| 5 x 5 x 5 |  |  |
| 10 x 10 |  |  |
| 10 x 10 x 10 |  |  |

**7. On pages 42 – 44, Robert wrote the number 1986 using “hopping numbers” as 6 x 1 + 8 x 10 + 9 x 100 + 1 x 1000 and said it equaled 6 + 80 + 900 + 1000 = 1986. Use this method to write the numbers…**

 5,236 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 403, 358 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 5, 208,307 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **8. Write the year you were born in “hopping numbers” and standard numbers**