# Name

## 

## Grade 3 Math Extension Menu

**Concept and/or Topic: Place Value**

**Choose two or more** learning activities from the menu to complete. If you choose the square, “Write your idea here,” please see the teacher with your idea first. **Circle**the number of the learning activity you choose. **Check** to see the “criteria for good work” (poster or rubric) before beginning so that you know the expectations for each square. **Turn in**this paper with your work.

|  |  |  |
| --- | --- | --- |
| 1. **Use** the internet to find five cities and their populations in the state of Pennsylvania. **Put** them in order from the least to the greatest.  (see attached worksheet) | 2. **Think** of 2 four or five-digit “mystery numbers”. **Write** clues for your classmates to try and discover each number. **Be creative** when you use place value in your clues.  (use *What’s My Mystery Number?* worksheet) | 3. **Research** the distance of the planets in the solar system from the Sun. **Make** a chart that lists the planets and their distances in order from farthest to closest.  (use *How far are They?*  worksheet) |
| 4. **Select** four*Digit Cards* from the envelope. **Create** and **write** as many different numbers as you can using *all three* cards.    (Use the *Place Value Mix-up* worksheet for more ideas) | **5. Compare** two numbers. **Read** theworksheet: **“***Comparing* *Numbers for*the directions. Be sure to read the example on the worksheet before beginning. | 6. **Read** the book, *How much is a million?*  **Choose** your own item and **calculate** how much space it would take to reach a million. |

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Place Value Mix-Up**

**1. Select** four*Digit Cards* from the envelope. **Create** and **write** as many different numbers as you can using *all four* cards in the spaces below.

\_\_\_\_, \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_, \_\_\_\_ \_\_\_\_ \_\_\_\_

\_\_\_\_, \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_, \_\_\_\_ \_\_\_\_ \_\_\_\_

\_\_\_\_, \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_, \_\_\_\_ \_\_\_\_ \_\_\_\_

\_\_\_\_, \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_, \_\_\_\_ \_\_\_\_ \_\_\_\_

**2. Draw** a number line in on the back of this worksheet and **write** the numbers you created in the correct order on your number line.

***3****. Extension:* **Explain** using words and numbers why you placed the numbers the way you did on your number line.

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**What’s My Mystery Number?**

1. Example: Clues for the mystery number are:
   * It has two digits.
   * If you double the digit in the tens place, you get 4.
   * The sum of the digits is less than 6.
   * If you count by twos you will not say this number.
   * If you subtract the ones place from the tens place, you get 1.

My mystery number is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. You try it using four digits: Clues for the mystery number are:
   * It has 4 digits.
   * It is greater than \_\_\_\_\_
   * When you count by \_\_\_\_\_ you say this number.
   * It is less than \_\_\_\_\_.
   * When you add the two digits together you get a sum of \_\_\_\_\_.

My mystery number is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Try another one (use 4 or 5 digits): Clues for the mystery number are:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

My mystery number is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.



## Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Comparing Numbers

***Read*** *both the directions and the example before beginning.*

***Directions:***

## Choose two numbers that are between 1,000 and 2,000.

* **Think** about how the two numbers **compare** to each other.

***Example using the numbers*** **1,110** ***and* 1,150**:

* *Both* are even
* *Both* are less than 2,000
* *Both* have a zero in the one’s place
* *Both* have one hundred
* *Both* are greater than 1,000

Now you *choose* two numbers between 1,000 and 2,000 to **compare.**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Write** as many ways as you can think of to **compare** how the two numbers are alike. Be sure to include some examples of place value.

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**How Far are They?**

* **Research** the distance of the planets in the solar system from the Earth. (You may use books or the internet)
* **Review** the rubric for a chart before you begin to make it.
* **Make** a chart that lists the planets and their distances in order from farthest to closest.

**Notes:**

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**Criteria for Good Work:**

**Creating a Chart**

**The chart:**

* **is clear, logical and attractive**
* **has an appropriate title and symbols**
* **is clearly and correctly labeled**
* **includes the creator’s name**
* **includes all accurate data**

**Teacher Resource Page**

Grade 3 Math Extension Menu

**Concept and/or Topic: Place Value**

**Objectives and Standards (Based on PA 3rd Grade Standards):**

**Box 1** addresses:

2.1.3D Apply place value concepts and numeration to counting and/or ordering

Students will be able to locate and analyze how larger numbers are used in our

everyday world.

**Materials Needed:** Internet or atlas for research

**Box 2** addresses

2.1.3 A Explore, invent, and identify the value of a digit in a number up to 9,999

2.1.3D Apply place value concepts and numeration to counting and/or ordering

**Materials Needed:** *What’s My Mystery Number?* Worksheet

**Box 3** addresses:

2.1.3D Apply place value concepts and numeration to counting and/or ordering

Students will be able to locate and analyze how larger numbers are used in our

everyday world.

**Materials Needed:** Internet or atlas for research, large poster paper, markers, rubric for poster

**Box 4** addresses:

2.1.3 A Explore, invent, and identify the value of a digit in a number up to 9,999

2.1.3D Apply place value concepts and numeration to counting and/or ordering

Compare and order numbers on a number line and using >, <, and =

**Materials Needed:** A set of Digit Cards, *Place Value Mix-up* worksheet

**Box 5** addresses:

2.1.3 A Compare and numbers to 9,999

1.3.D,E Differentiate between and/or give an example of even and odd numbers

**Materials Needed:** *Comparing Numbers* worksheet

**Box 6** addresses

Explore and identify the value of one million.

2.5.3A Develop a plan to analyze a problem, identify the information needed to solve

the problem.

**Materials Needed:** *How much is a Million?* By David Schwartz (Harper Collins)