**Let's Learn Design Thinking! Vocabulary Page**

**User =** The person you design for is called “**The User”**.

**Empathize=** Empathy means the ability to understand and share another person's feelings.

**Interview=**  A meeting where information is gathered by asking questions.

**Inference / Infer =**To form an opinion based on evidence.

**Evidence** = Something which shows that something else exists or is true.

**Define** = To narrow down to a specific point or idea.

**Statement**  =  something that you say or write in a formal or official way

(for the User Needs Statement or Point of View Statement)

**Ideation / Ideate** = Brainstorming. Coming up with A LOT of ideas quickly.

**Prototype** =

**verb**- To build an experimental model.

**noun** – an experimental model used to help your user interact with and see your solution for them.

**Feedback** = what your User thinks of the prototype.

**Test** = Showing your User the solution you came up with through prototyping.

                                 Show (Don't Tell).  Let your prototype speak for itself.

**FAIL UP!** = Failing is a good thing. Failing helps you to learn from your mistakes so you can improve and do better the next time!

**Discussion** = the process of talking about something to exchange ideas and thoughts.

**Reflection** = Sharing thoughts about the process of Design Thinking.  What you liked,   what you learned, what you would like to do better next time.

**Kindergarten Math Core Standards – Number and Operations in Base Ten**

* Work with numbers 11–19 to gain foundations for place value.
* Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8);
* understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

**First Grade Math Core Standards - Number and Operations in Base Ten**

* Extend the counting sequence.
* Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
* Understand place value.
* Understand that the two digits of a two-digit number represent amounts of tens and ones.
* Understand the following as special cases:
* 10 can be thought of as a bundle of ten ones—called a “ten.”
* The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
* The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones) Students need not use formal term for these properties.
* Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and

**Second Grade Math Core Standards - Number and Operations in Base Ten**

* Understand place value.
* Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones.
* Understand the following as special cases:
* 100 can be thought of as a bundle of ten tens—called a “hundred.”
* The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
* Count within 1000; skip-count by 5s, 10s, and 100s.
* Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
* Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.
* Use place value understanding and properties of operations to add and subtract. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
* Add up to four two-digit numbers using strategies based on place value and properties of operations.
* Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method.
* Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.
* Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.
* Explain why addition and subtraction strategies work, using place value and the properties of operations. (See standard 1.OA.6 for a list of mental strategies.) Explanations may be supported by drawings or objects.

**Third Grade Math Core Standards** - **Number and Operations in Base Ten**

* Use place value understanding and properties of operations to perform multi-digit arithmetic.
* Use place value understanding to round whole numbers to the nearest 10 or 100.
* Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
* Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.

**Fourth Grade Math Core Standards - Number and Operations in Base Ten**

* Generalize place value understanding for multi-digit whole numbers.
* Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.
* Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form.
* Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.
* Use place value understanding to round multi-digit whole numbers to any place.
* Use place value understanding and properties of operations to perform multi-digit arithmetic.
* Fluently add and subtract multi-digit whole numbers using the standard algorithm.
* Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations.
* Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
* Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.
* Find whole-number quotients and remainders with up to four-digit dividends and one digit divisors, using strategies based on place value, the properties of operations, and/ or the relationship between multiplication and division.
* Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

**“How I Feel About Math” Pre / Post Survey**

**Name: Grade:**

**How do you feel about Math? (Circle one)**

**I HATE it! Whatever. It’s Okay. I Like it. I LOVE it!**

**Where did you go to school last year?**

**Who was your Teacher and School last year?**

**What are the two things you find easy in Math?**

**>**

**>**

**What are the two things you find difficult in Math?**

**>**

**>**

**What is one thing you are excited about in Math Class this year?**

**What is one thing you are nervous about in Math Class this year?**