**New Prospect Elementary School**

**School to Home Math Engagement for Families**

**Kindergarten Grade: 2023-2024**

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| **Math Unit** | **Links to Resources (Parents)** | **Links to Resources (Teachers)** |
| **Unit 1**  **Wondering About My World and Investigating to Find Answers** | Most children are curious about their environment and the things around them. Investigating, asking questions, and collecting information (data) from those questions are great to satisfy this curiosity. The following website provides foundational information as you begin to work with your child on these important skills.   * [Notice and Wonder](https://www.nctm.org/noticeandwonder/)   [Kindergarten – Make Mathematics Count](https://www.gpb.org/education/learn/make-mathematics-count-ga/kindergarten)   * Learn about what to expect in kindergarten mathematics.   [Let’s Learn, GA](https://www.gpb.org/education/learn/lets-learn-ga/mathematics)   * – Lessons for learning mathematics at all grade levels.   [Math Learning Center – App Activities](https://www.mathlearningcenter.org/apps/learning-activities)  [Counting Games on ST Math](https://www.stmath.com/play/kindergarten-math-games)  [Counting On - GPB](https://gpb.pbslearningmedia.org/resource/6a521054-370e-4c50-8708-971a4f3d37a7/counting-on/)  [Number Rack (Rekenerek)](https://www.mathlearningcenter.org/apps/number-rack)  [Five Frames](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Five-Frame/)  [Ten Frames](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/)  [Okta’s Rescue](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Oktas-Rescue/) | [Illustrative Mathematics Tasks](https://im.kendallhunt.com/k5/teachers/kindergarten/units.html)  [PBL Instructional Practices](https://www.sreb.org/sites/main/files/file-attachments/pblp_powerful_project-based_learning_instructional_practices.pdf?1608321301)  [Number Rack (Rekenerek)](https://www.mathlearningcenter.org/apps/number-rack)  [Virtual Rekenrek](https://apps.mathlearningcenter.org/number-rack/)  [Five Frames](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Five-Frame/)  [Ten Frames](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/)  [Okta’s Rescue](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Oktas-Rescue/) |
| **Unit 2**  **2D Shapes in my World** | [Count With Stuffed Animals](https://happytoddlerplaytime.com/stuffed-animal-counting/)  [Count Using Different Voices](https://earlyimpactlearning.com/16-fantastic-ideas-to-teach-rote-counting/)  [Counting Songs and Rhymes](https://childhood101.com/15-preschool-counting-songs-fingerplays-rhymes/)  [Mud Hopper Shapes](https://www.education.com/game/mud-hopper-shapes-quiz/)  [Sammy’s Shapes](http://primarygames.com/storybooks/sammy/start.htm)  [Sesame Street Hexagon Video](https://gpb.pbslearningmedia.org/resource/sesame-ty-burrell-hexagon/ty-burrell-hexagon-sesame-street/#.XnuWCahKiUk)  [Peg + Cat Shapes and Their Attributes Video](https://gpb.pbslearningmedia.org/resource/kids-lab-activity-pegpluscat-shapes-attributes/shapes-and-their-attributes/)  [Which One Doesn’t Belong?](https://www.mathanywhere.org/wp-content/uploads/2020/03/Breakfast-printable.pdf)  [Shapes Game](https://mrnussbaum.com/shapes-online-game)  [Shape Monsters](https://www.topmarks.co.uk/early-years/shape-monsters)  [Shape Patterns](https://www.topmarks.co.uk/ordering-and-sequencing/shape-patterns)  [Pattern Blocks Practice](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Patch-Tool/)   * Students use pattern blocks to create pictures or combine shapes to make new shapes.   [Tangrams](https://toytheater.com/tangram/)  [Shape Patterns Game](https://www.abcya.com/games/shape_patterns) | [Illustrative Mathematics Tasks](https://im.kendallhunt.com/k5/teachers/kindergarten/units.html) |
| **Unit 3**  **How Many? Numbers up to 20** | [Coin Identification](https://www.iknowit.com/lessons/k-coin-identification-and-values.html)  [Counting With Coins](https://www.usmint.gov/learn/kids/games/counting-with-coins)  [Teen Numbers Card Sort](https://teacher.desmos.com/activitybuilder/custom/57a26df4908dc7b763f2d724)  [Count With Allie](https://pbskids.org/curiousgeorge/busyday/allie/)  [Number BINGO!](https://www.abcya.com/games/number-bingo)  [Connect the Dots](https://www.abcya.com/games/connect_the_dots)  [Number Chart](https://www.abcya.com/games/one_hundred_number_chart_game)  [Compare Numbers by Counting](https://www.splashlearn.com/s/math-games/compare-by-counting)  [Click the Greater Number](https://www.splashlearn.com/s/math-games/compare-and-click-the-greater-number)  [Compare Numbers Within 5](https://www.splashlearn.com/s/math-games/compare-numbers-within-5)  [Compare Numbers Within 10](https://www.splashlearn.com/s/math-games/compare-numbers-within-10)  [Compare to Find More or Less](https://www.splashlearn.com/s/math-games/compare-to-find-more-and-less)  [Compare and Place Out the Correct Number](https://www.splashlearn.com/s/math-games/compare-and-place-out-the-correct-number)  [Comparing with Numbers](https://www.splashlearn.com/s/math-games/comparing-with-numbers)  [Comparing Number Values](https://www.abcya.com/games/comparing_number_values)  [Comparing Numbers](https://www.iknowit.com/lessons/k-compare-objects-to-5.html) | [Illustrative Mathematics Tasks](https://im.kendallhunt.com/k5/teachers/kindergarten/units.html) |
| **Unit 4 Understanding and Using Addition and Subtraction in My Life** | [Five Frames](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Five-Frame/)  [Ten Frames](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/)  [Bedtime Math](https://bedtimemath.org/category/daily-math/)   * Adults can choose an age category and skill to engage students in fun, real-life math stories.   [Five Frame Games](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Five-Frame/)  [Ten Frame Games](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/) | [Illustrative Mathematics Tasks](https://im.kendallhunt.com/k5/teachers/kindergarten/units.html) |
| **Unit 5**  **Using Numbers Within 20** | [Five Frames – How Many?](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Five-Frame/)  [Ten Frames – How Many?](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/)  [Number Rack (Rekenerek)](https://www.mathlearningcenter.org/apps/number-rack)  [Notice and Wonder](https://www.nctm.org/noticeandwonder/)  [Collecting Activity](https://nrich.maths.org/13528) | [Illustrative Mathematics Tasks](https://im.kendallhunt.com/k5/teachers/kindergarten/units.html)  [Notice and Wonder](https://www.nctm.org/noticeandwonder/) |
| **Unit 6**  **3D Shapes in My World** | [3D Shapes: Let’s Learn!](https://gpb.pbslearningmedia.org/resource/ll108-3d-shapes-video/lets-learn/)  [3D Botopolis House Home Activity - Cyberchase](https://gpb.pbslearningmedia.org/resource/kids-lab-activities-cyberchase-3d-botopolis-house/3-d-botopolis-house-cyberchase/)  [I Spy Peg](https://gpb.pbslearningmedia.org/resource/0ba68b1d-0a45-4c75-87af-4e6e46f85267/3-d-shapes-media-gallery-peg-cat/) | [Illustrative Mathematics Tasks](https://im.kendallhunt.com/k5/teachers/kindergarten/units.html) |
| **Unit 7**  **Using Numbers and Data to Make Sense of My World** | [How Many Under the Shell?](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/How-Many-Under-the-Shell/)  [Five Frame Games](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Five-Frame/)  [Ten Frame Games](https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/)  [Poddle Weigh In](https://pbskids.org/cyberchase/games/poddle-weigh-in)  [Roll to the Finish](https://www.abcya.com/games/roll_to_the_finish)  [Marble Math Addition](https://www.abcya.com/games/addition)  [Molly Adds Up to 10](https://www.abcya.com/games/kindergarten_word_problems_add_to_10)  [Molly Adds and Subtracts from 10](https://www.abcya.com/games/kindergarten_word_problems_add_subtract)  [Curious George’s Trains](https://pbskids.org/curiousgeorge/busyday/trains/)  [Ribbit](https://pbskids.org/curiousgeorge/busyday/frogs/)  [Space Patterns](https://gpb.pbslearningmedia.org/resource/7f71e3ad-1584-48f1-961b-aaad89a9ffb8/space-patterns-peg-cat/)   * This video helps children recognize and continue a pattern. Peg, Cat, and Richard make patterns using planets and stars.   [Patterns and Relationships](https://gpb.pbslearningmedia.org/resource/ba75d077-764e-4027-86f4-014863b3716b/ba75d077-764e-4027-86f4-014863b3716b/)   * This resource focuses on patterns and relationships by having students create, extend, and describe arithmetic patterns found in floral table designs. | [Illustrative Mathematics Tasks](https://im.kendallhunt.com/k5/teachers/kindergarten/units.html) |
| **Unit 8**  **Capstone Unit** |  | [Kindergarten Capstone Project](https://lor2.gadoe.org/gadoe/file/229725e6-b8b8-4e0a-89a0-b4174cfbdd0a/1/Kindergarten-GaDOE-Mathematics-Capstone-Project.pdf) |

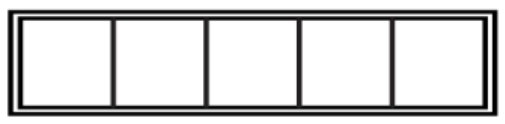
***Additional Activities that do NOT include Screen Time:***

**Unit 3:**

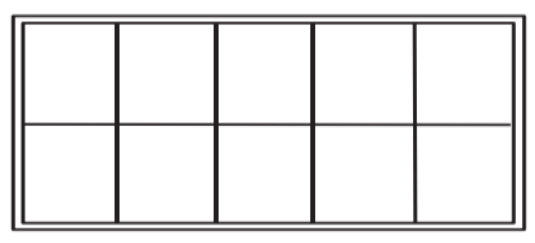
* **Family Game Night**
  + Families may have a Family Game Night to play War with Playing Cards as well as Dominoes. These games will help the student solidify the concept of “Greater than”, “Less than”, and “the same as” in different situations.

**Unit 4:**

* **Five Frame**
  + Using items found around the house such as beans, cereal, dry pasta, or rocks, create number sentences to make 5. Let students create stories as they place objects on the 5 frame. You might use a sentence frame like the following.
    - (Your child’s name) had \_\_\_\_\_\_ (amount of objects) \_\_\_\_\_\_\_(objects) and John gave her \_\_\_\_\_\_ (amount of objects) \_\_\_\_\_\_\_(objects). (Your child’s name) has \_\_\_\_\_\_ (amount of objects) \_\_\_\_\_\_\_(objects) now.
      * ***For example, Moesha had 2 pencils and John gave her 3 pencils. Moesha has 5 pencils.***



* Another possible activity could be placing one bean on the 5 frame and then asking how many more are needed to make 5. Continue this starting with a different quantity each time.
* **Ten Frame**
  + Using items found around the house such as beans, cereal, dry pasta, or rocks, create number sentences to make 10. Let students create stories as they place objects on the 10 frame.



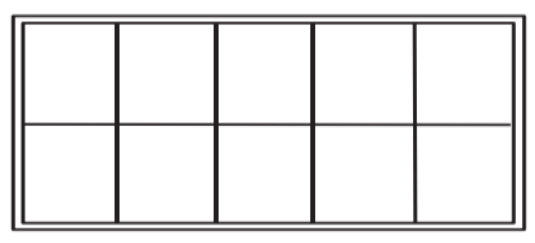
* Another possible activity could be placing one bean on the 10 frame and then asking how many more are needed to make 10. Continue this starting with a different quantity each time.
* **Creating Patterns**
  + Create patterns using common objects like beans, pasta, buttons, or coins.
  + Example:



* Go on a pattern hunt around your house. What patterns did you find? Discuss the patterns in their day and what time of the day these events occur.

**Unit 5:**

* **Count the Objects:**
  + Gather a set of objects and have your student count them.
    - Example: beans, matchbox cars, dishes at the table, etc.
* **Count in Action:** 
  + Have children count around the house, the playground, and in the car.
    - Example: count the steps from the kitchen to the bathroom, count the forks on the dinner table or count the shoes on the students on the playground.
* **Ten Frame Counting:** 
  + Refer to the ten frame, below, with students and have them fill the ten frames with objects to count them.



* **Ten in the Bed** 
  + Introduce children to the activity talking about counting backwards.
  + Then play the video [Ten in the Bed](https://www.bbc.co.uk/teach/school-radio/nursery-rhymes-ten-in-the-bed/z7bnmfr).
    - Encourage children to talk about the counting in this song.
      * Do they notice the counting backwards instead of forwards?
      * Repeat this and extend the start number.
        + For example, “thirteen, twelve, eleven…” three, two, one, zero”. Then “sixteen, fifteen, fourteen…” Then “seventeen, sixteen, fifteen…” You might want to use visual support such as number cards or a number.

**Unit 6:**

* **3D Shape Hunt**
  + Go on a three-dimensional shape hunt at home. Students will take time looking throughout their home to find examples of cones, cubes, cylinders, and spheres. Students may draw pictures of the items they found. If parents are helping with the search, the parent may write down the name of the objects. Parents and students can have a conversation about what shapes the student found. Some questions that can be asked are as follows:
    - What shape did you find the most?
    - What shape did you find the least?
    - Were there any shapes you could not find?
    - Why do you think this was a hard shape to find?
* **Listen and Do!**
  + While on a walk, families could set up their own “Listen and Do” activity. One person would be the leader and give others directions such as; going over three objects, around one object, and under two objects, etc.
* **3D Scavenger Hunt**
  + Have students search their home and outside for 3D shapes. Have them describe the objects as taller, shorter, heavier, lighter, wider than another object.
  + Have students create 3D shapes at home using toothpicks, marshmallows, playdough, or gummies.

**Unit 7:**

* **Number Balance**
  + Have students find different sets of objects that have the same number in each of them. For instance, they might have 9 pencils. They may find 6 large paper clips and 3 small paper clips. They each have 9 objects.
* **Word Problems at Home**
  + A parent can collect a variety of items and present them to the student. The student can arrange the items in a way that makes sense to the student. The student can ask the adult a question about the arrangement of items. The questions should focus on combining or separating the items to arrive at a total amount. The adult and student may change roles and the adult may arrange the items in another way and ask a different question for the student to solve. This can be done with buttons, coins, beans, or small toys or items found in the home.
* **Patterns Scavenger Hunt**
  + Have students search their home and outside for patterns. Have them describe the patterns using letters.
    - For example, if a student sees a pattern in the kitchen counter tile with a small rectangle, big rectangle, small rectangle, big rectangle. Then the letters to describe that pattern is A B A B.
* **Living and Non-Living Math**
  + Take your child outside and have them collect items or take pictures of items that are living and non-living.
    - Have students sort the objects by living and non-living. Your child can compare the groups to determine if they collected more living or non-living items.
    - Have students add the objects together that they collected to determine how many items they collected in all.
    - Have students create a pattern using their living and non-living items