# Initial Survey 

## Early Learning Study-Survey

Please enter the first name of your 4-year-old child that you will play games with for our study.

Please answer the questions on the following pages about your child, [childname_initialsurvey]:

How important is it for your child to achieve each of the following benchmarks before first grade?

| unimportant | neither important nor unimportant | important | very important | extremely important |
| :---: | :---: | :---: | :---: | :---: |

Count to 100
Read written numbers up to 100
Know simple sums (for example, $2+2$ )

Write all 26 alphabet letters
Read a few words
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Read simple picture books
Notice patterns or rules in the count sequence (for example, that when we count backwards we are subtracting 1 each time)

Represent patterns using number or letter labels (for example,
pink-pink-blue-pink-pink-blue is an A-A-B pattern)
Identify the part that repeats in a pattern

How good is your child currently in each area listed below?

|  | $\begin{aligned} & 1 \text { (Not good } \\ & \text { at all) } \end{aligned}$ | 2 | 3 | 4 | 5 | 6 | 7 (Very good) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Noticing and making patterns | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Comparing the magnitudes (size) of numbers | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Learning to read and write | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Counting and naming numbers | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Figuring out what should come | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

hat should come next in patterns

How well do you think your child will do in each of these areas in Kindergarten?


Noticing and making patterns $\bigcirc \bigcirc$
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$\bigcirc$
$\bigcirc$
Comparing the magnitudes
(size) of numbers
Learning to read and write
Counting and naming numbers
Figuring out what should come next in patterns

Compared to other children, how much innate ability or talent does your child have in each of these areas?

| 1(Much | 2 | 3 | 4 | 5 | 6 | 7 (Much <br> more than <br> other <br> less than <br> other <br> children) |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |
| children) |  |  |  |  |  |  |

Noticing and making patterns
Comparing the magnitudes (size) of numbers

Learning to read and write
Counting and naming numbers
Figuring out what should come next in patterns

How useful do you think each of these kinds of skills will be to your child in the future?


Noticing and making patterns
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$\bigcirc$
$\bigcirc$
$\bigcirc$
Comparing the magnitudes
(size) of numbers
Learning to read and write
Counting and naming numbers
Figuring out what should come next in patterns

How much does your child like each of the following activities?


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Comparing the magnitudes$\bigcirc$
(size) of numbers
Learning to read and write
Counting and naming numbers
Figuring out what should come next in patterns

Please rate your level of agreement for each of the following statements:

| I sometimes feel anxious when helping my child with learning math | Strongly Disagree | Disagree <br> O | $\begin{gathered} \text { Agree } \\ \mathrm{O} \end{gathered}$ | $\begin{aligned} & \text { Strongly Agree } \\ & \bigcirc \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| I am confident that I can help my child learn math as he or she grows | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Sometimes I am nervous when my child asks me questions about math | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I feel uneasy when I have to solve a tough math problem | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| I am confident that I know how to help when my child struggles with math | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |

Which of the following approaches do you use on a regular basis at home to help your child develop mathematical knowledge and skills? (Select all that apply)I give my child math-related tasks or ask math-related questions during ongoing daily living experiences or routines (for example, we use measuring cups or spoons while preparing food)I set aside time to focus on teaching my child math skills (for example, we look at a math workbook or use math flashcards)I enrich my child's playtime by providing math-related toys and materials that they use alone or with other children (for example, my child spontaneously plays with cards or shape puzzles alone)I play math games with my child or incorporate math during activities that I think my child will enjoy to engage my child's math interest (for example, we talk about math while playing board games or watching Sesame Street together)Not Applicable

Which of the following approaches do you use MOST OFTEN at home to help your child develop mathematical knowledge and skills?I give my child math-related tasks or ask math-related questions during ongoing daily living experiences or routines (for example, we use measuring cups or spoons while preparing food)I set aside time to focus on teaching my child math skills (for example, we look at a math workbook or use math flashcards)I enrich my child's playtime by providing math-related toys and materials that they use alone or with other children (for example, my child spontaneously plays with cards or shape puzzles alone)
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play math games with my child or incorporate math during activities that I think my child will enjoy to engage my child's math interest (for example, we talk about math while playing board games or watching Sesame Street together)

Rank the following approaches from least important (1) to most important (4) in your home.

I give my child math-related tasks or ask math-related questions during ongoing daily living experiences or routines (for example, we use measuring cups or spoons while preparing food)

I set aside time to focus on teaching my child math skills (for example, we look at a math workbook or use math flashcards)
I enrich my child's playtime by providing math-related toys and materials that they use alone or with other children (for example, my child spontaneously plays with cards or shape puzzles alone)

I play math games with my child or incorporate math during activities that I think my child will enjoy to engage my child's math interest (for example, we talk about math while playing board games or watching Sesame Street together)

Which of these academic skills are appropriate to work on with typically developing 4-year-old children in the United States?
(Please select "Yes" for each skill that you think is appropriate. Otherwise select "No".)
Count a row of 15 objects (for example, count 15 plastic worms)
Continue a pattern of cubes (for example, blue, blue, red, red, blue, blue, red, red, $\qquad$ -'
$\qquad$ ' $\qquad$ , $\qquad$ _)

Use colored beads to make a simple pattern, such as a "blue-purple" pattern

Figure out what should come next in a simple pattern (for example: clap, stomp, clap, stomp, $\qquad$ , -

Sort a set of objects into 3 groups based on color such as red, blue, and green

Which of these academic skills are appropriate to work on with typically developing 4-year-old children in the United States?
(Please select "Yes" for each skill that you think is appropriate. Otherwise select "No".)
Yes
No
Arrange sticks in order of increasing length (for example, long, longer, longest)

Solve single-digit addition or subtraction problems presented on flashcards (for example, $5+$ 3 = $\qquad$
Identify two patterns that follow the same rule made with different materials (for example, a block-block-ball pattern and a sun-sun-moon pattern are similar)

Recite number words from 1 to 100

Use number patterns to solve problems (for example, fills in the blanks when presented with 26, 22, 18, $\qquad$ 10, $\qquad$

Which of these academic skills are appropriate to work on with typically developing 4-year-old children in the United States?
(Please select "Yes" for each skill that you think is appropriate. Otherwise select "No".)
Yes
Counts out the correct number of things when asked for a specific number of things up to 10 (for example, gives 6 cookies when asked for 6 cookies)

Name the written numbers from 1 to 10 (for example, points to the 9 when asked "where is the number nine?")

Measure the angles of a triangle
Solve small addition or subtraction problems presented with objects (for example, 3 blocks and 2 blocks is $\qquad$ blocks)
Fill in the missing part of a pattern made of repeating objects (for example: circle, square, square, circle, square,
$\qquad$ , circle, square, square)

Which of these academic skills are appropriate to work on with typically developing 4-year-old children in the United States?
(Please select "Yes" for each skill that you think is appropriate. Otherwise select "No".)
Measure the length of a pencil using string

Figure out what comes next in a growing pattern that subtracts two cubes for each stair in a staircase (for example, 9 cubes, 7 cubes, 5 cubes, 3 cubes,

Make the same kind of simple pattern in their bracelet as their friend's bracelet, but using different colors (for example, your child makes a yellow-green pattern to match a friend's red-blue pattern)

Tell which of two spoken numbers between one and ten is bigger (for example, says "five" in response to "Which is bigger, five or two?" )

Describe the properties of shapes (for example, says "It has three sides and three points so it's a triangle.")

# Which of these academic skills are appropriate to work on with typically developing 4-year-old children in the United States? 

(Please select "Yes" for each skill that you think is appropriate. Otherwise select "No".)
Tell which of two written numbers between one and ten is bigger (for example, points to the written number 9 when shown the written numbers 2 and 9 and asked "Which is bigger")

Understand location words such as "under", "on", "next to", and "behind"

Name the written numbers from 1 to 100 (for example, says the word "ninety-three" when shown the written number 93)

Answer questions by adding or subtracting small numbers (for example, says "three" in response to "If you have four stickers and then you give me one of your stickers, how many stickers would you have left?")

Describe even numbers (for example, $2,4,6,8,10$ ) as "skipping" every other number on a 100 s chart

Makes a repeating pattern (for example, makes a clap, spin, snap, clap, spin, snap pattern)

Copy a pattern someone else makes in the same way (for example, your child beats a drum in a loud-soft pattern just like you do)

Overall, how did you decide which answers to choose when deciding which academic skills most children in the United States develop by age five? Please share anything that you thought about.

How often do you do the following activities with your child?
Never Once a month A few times a About once a A few times a Daily or less month week week
Count items
Count out loud without objects
Talk about written numbers (for example, "That's a 7")

Add simple sums or talk about number facts (for example, $2+2=4$ )

Practice subtracting items (for example, when playing with 2 toy cars, asking "How many cars will you have if I take away one of your cars?")

Compare quantities (for example, when playing card games or serving food for dinner or sharing toys)

Compare written numbers (for example, " 5 is bigger than 4")

Compare the cost of items when shopping (for example, "This milk costs less because it costs \$3 and the other milk costs \$4.")

Talking about number words (for example, say "Now we will add one cup of flour to the bowl" while preparing food)

Read books that show and talk about numbers (for example, "One Fish, Two Fish", "The Very Hungry Caterpillar")

Watch TV shows or videos that show and talk about numbers (for example, "Peg + Cat", "Monster Math Squad")

Play computer games or use apps or interactive websites that include number games (for example, "Elmo Loves 123s", "PBS Kids math games")

Play board games that involve numbers (for example, "Chutes \& Ladders", "Drafts/Checkers", "Ludi/ Ludo", "Dominos")

Play card games that involve numbers

Play hand or movement games that involve numbers (for example, "Slide/Back Front", "Down by the River", "Hide and Seek", "Chinese Skip/Chinese Jump Rope")

Create art that involves numbers

## How often do you do the following activities with your child?

Never Once a month A few times a About once a A few times a Daily or less month week week
Use spatial words like: between, below, behind, next to, on, above, near, under, in

Play with puzzles (for example, picture puzzles, tangrams)
Do mazes
Do connect the dots activities
Build with construction toys (for example, Building blocks, Legos, Magnet sets, Lincoln logs)

Play computer games, apps or visit interactive websites that involve building things

Draw maps or plans

How often did you do the activities below with your child in the PAST TWO WEEKS?

Make patterns with objects or sounds (for example, putting blocks in a red-green-red-green pattern)

Copy a pattern by making the same pattern with the same materials (for example, use two sets of identical toys to make the same pattern)

Figure out what comes next in a pattern (for example, tell what activity or step you would do next in a daily routine)

Describe patterns in words
Copy a pattern by making the same kind of pattern but with different materials (for example, use circles and squares to make the same kind of pattern as in a red-blue pattern)

Discuss patterns in days of the week, months of the year, or seasons

Recognize a repeating pattern (for example, stripes on a shirt)

Figure out what part is missing in a pattern

Figure out which part of a pattern repeats over and over

Talk about what makes two patterns similar (for example, say "Both patterns are an every-other-one pattern")

Watch TV shows or videos that show and talk about patterns

Read books that show or talk about patterns (for example, "Beep, Beep, Vroom, Vroom" or "Brown Bear Brown Bear What Do You See?")

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week week



Play computer games or use apps or interactive websites that include pattern games

Play hand games or do dances that involve patterns (for example, "Miss Mary Mack," "Hokey Pokey," "Head,
Shoulders, Knees \& Toes")
Create art that involves patterns
(for example, stripes or checkers)

