# Academic Growth Charts Pre-K

Adult & Child
Therapeutic Foster Care Licensing Program

### Academic Benchmarks

- \* States across the country are implementing new standards for student achievement, designed to better prepare young people for careers and college.
  - \* These academic benchmarks are meant to help parents understand the course material for each grade.
  - \* They are based on the standards in most of the country and are intended as a general resource for parents, not as a comprehensive breakdown of the contents of your child's curriculum.
- \* <a href="http://www.parenttoolkit.com/">http://www.parenttoolkit.com/</a>

### Pre-K Overview

- \* During these formative early years, your prekindergartener is developing crucial learning pathways in the brain that will lay the groundwork for his/her future academic success.
- \* He/She is learning to speak and communicate in new ways, and beginning to explore books and other written materials.
- \* His/her discovery of math will start with an understanding of how numbers work.

# Language Development

- \* Pre-kindergarteners hear and understand language through conversations, stories, and songs. They learn to understand and say new words, and communicate in new ways.
  - \* Understand and use new words.
  - \* Use language to express a variety of ideas and needs, like telling a story, explaining, or making a request.
  - \* Understand and speak in increasingly complex ways; for example, use longer sentences, and understand and ask questions with words like who or what.
  - \* Engage in classroom conversations, and use conversational skills like taking turns speaking, and responding to what a friend has to say.

# Early Stages of Reading & Writing

- \* Pre-kindergarteners are also laying the groundwork for reading and writing as they explore books and other printed material.
  - \* Explore sounds; for example, detect the beginning and ending sounds of familiar words and names, or listen for words that rhyme.
  - \* Learn about letters of the alphabet; for example, recognize and name letters, understand that letters are associated with a sound or sounds, and name some of those sounds.
  - \* Appreciate print and understand that it carries meaning. Recognize common print, such as familiar signs and logos.
  - \* Understand the way print works: that it moves from left to right and top to bottom, and that letters are grouped to form words.

# Early Stages of Reading & Writing

- \* Show enthusiasm for books; for example, pretend to read a book, or listen to stories read aloud.
  - \* Ask and answer questions about a story, or retell information using words, pictures, or movement.
- \* Understand how books work; for example, how to hold a book correctly, turn the pages from front to back, and recognize features such as the title or author.
- \* Actively engage with a wide variety of rich texts including stories, poems, plays, and informational books read aloud.
- Explore writing and recognize that it's a way of communicating.
  - \* Experiment with writing tools; use scribbling, shapes, letter-like forms, or letters to represent ideas.
- Copy, trace, or independently write letters.

#### \* Read Every Day

\* Perhaps the single most important thing you can do at this stage to foster your child's early reading and writing skills is to read to her every single day. A recent OECD study comparing the role of parents in education in several countries found that the factor that best predicts better reading performance when a child is 15 is whether he/she was read to during his/her early years. So read as often as you can to your child, even if just for 20 minutes a day, and do your best to make reading time a fun experience that both of you enjoy.

#### \* Point Out Authors and Illustrators

\* When you sit down to read a book with your child, start by reading the title and the name of the author and illustrator. This will help to familiarize him/her with these important attributes of a book. Soon he/she may have favorite authors or illustrators, such as Dr. Seuss, and will be able to recognize their work.

#### \* Read the Same Books

\* Make sure to read the same books to your child over and over again, over extended periods. The better he/she gets to know a book, the more ways he/she will find to enjoy it. During one reading he/she may just focus on the pictures. A week later, he/she may pay more attention to the story itself. A couple months later, he/she may notice the rhyming patterns of the words or focus on new vocabulary words.

#### \* Make Reading Engaging and Interactive

\* When you are reading to your pre-kindergartener, make it as engaging and interactive an experience as possible for him/her. Pause from time to time to ask questions about what you've read so far and what is to come. Ask how he/she thinks a character is feeling or what he/she thinks will happen next. Make sure he/she understands it's fine if he/she guesses wrong. The fun is in the guessing.

#### \* Discuss Stories

\* Once you've finished a story, have a little discussion with your child about it. Ask what he/she liked best about the story, who his/her favorite character was, and why they did specific things in the story. Learning to talk about what he/she has read will be an important foundation for the critical thinking skills that will be so important throughout his/her life.

#### \* Read Non-fiction

\* Make sure to include non-fiction books in the titles you choose. Prekindergarteners are fascinated by the world around them and learn a lot about how it works from non-fiction books. They especially love books about animals (including dinosaurs, of course!), outer space, and trucks and machines.

#### \* Establish Good Reading Habits

Reading skills will always be essential to your child's academic success, so do everything you can to make sure that he/she develops good reading habits. It's especially important that he/she sees you and other adults enjoying reading. This will help him/her view reading in a positive light.

#### \* Use Songs and Lyrics

\* Reading to your child isn't the only way to ensure that he/she becomes a strong reader as he/she gets older. Singing songs with him/her and familiarizing him/her with a range of lyrics also helps develop language skills.

#### \* Make Eye Contact

\* Make sure that you make eye contact with your child when you speak to him/her. Adults are often so busy sitting at the computer, checking our iPhones, or doing household chores that we don't pause and look directly at our children when they're speaking. Try to stop what you're doing and give him/her your attention when your child speaks to you.

#### \* Fill in the Word

\* When reading nursery rhymes, poems, or books with rhyming words, read the verse then let your child "read" by filling in the rhyming word. When reading "Hickory Dickory Dock. The mouse ran up the \_\_\_\_\_," pause to let your child fill in the word "clock." This will come naturally and your child will enjoy helping you read.

#### \* Encourage Writing and Drawing

\* Encourage your child to write and draw as early as possible. Make sure he/she has access to plenty of crayons and markers. Don't worry about whether he/she's holding them correctly at this point. The important thing is that he/she learns to love using writing and drawing tools.

#### \* Incorporate Toys

\* Using play-dough and toys that require him/her to manipulate small shapes will encourage the development of dexterity in his/her fingers that will be important as he/she learns to hold a pencil correctly and to write.

### Mathematics

- \* In pre-kindergarten, children (ages 3-5) develop a basic understanding of numbers and counting, and connect both to the idea of "how many."
- \* They work on recognizing, grouping, and comparing objects of different sizes, colors and shapes, and identifying patterns.
- \* Children begin to work with numbers, count objects, and associate numbers and counting with how many things are in a group.
- \* Children begin to understand how changing the number of objects in different groups adding some, or taking some away changes "how many" count.
- \* By playing with blocks of many shapes, shape-sorters, snaptogether construction pieces, clay and other materials, prekindergartners are introduced to geometry.
- \* Students begin to notice patterns in counting and in arrangements of shapes to build understanding.

### Numbers

- Counting Out Loud
  - \* Count out loud from 1 through 10 (or beyond).
  - \* Begin to recognize and name written numbers from 1 through 10.
- Counting Objects
  - \* Count objects, one at a time, using one number name for each object, up through 10.
  - \* Answer "how many?" questions about groups of objects.
  - \* Use fingers to count.
- Sorting Objects into Groups
  - \* Sort objects into groups by shape, color or size.
  - \* Re-sort objects into different groups for example, after sorting blocks by size, resort them by color.
  - Pair objects by shape, color or size.
- \* Numbers in Everyday Life
  - \* Develop awareness of numbers in everyday life, and think through answers to questions about what the numbers tell you.

### Addition & Subtraction

- \* Connect counting to adding.
- \* Know basic number facts, such as 1 + 1 is 2.
- \* Use fingers, blocks or other objects to answer questions such as: If you have two nickels, and I give you two more nickels, how many nickels do you have?

# Shapes

#### Recognizing Common Shapes

- \* Begin to recognize and name common shapes, including circles, squares and triangles.
- \* Look for and identify shapes in the classroom, the playground, outside, and at home for example: books, food trays and dishes, street signs, windows and doors, etc.
- Create and build shapes using blocks, snap-together construction pieces, clay and other materials.

#### Comparing Shapes

- Tell if two shapes are the same shape, or the same size.
- \* Use words like bigger/smaller, longer/shorter to describe differences.
- \* Sort objects into pairs or groups by shape, color or size.

#### Positions and Directions of Shapes

\* Play and build with, arrange and line up objects, then identify the positions and direction of shapes, using words such as: on, off, over, under, on top, on bottom, over, under, in front of, behind, above, below, etc.

### **Patterns**

- \* Find patterns in what they see around them for example, prints in fabric used in their clothing, wallpaper borders, arrangement of petals on a flower.
- \* Create patterns by arranging or building with blocks, making paper chains or stringing beads, drawing or coloring, etc.
- \* Work on duplicating patterns, and extending simple patterns.

### Measurement

- Everyday Measurements
  - \* Begin to understand measurement as "how many" units of the same size.
  - \* Identify different things in everyday life that are measured, and why for example, how long a foot is (to get the right size shoe); how wide a door is (to cut wood the right size); how cold it is outside (so we know if we need a sweater or coat); how much water to put into the bowl (so we can follow a recipe).
- \* Connecting Types of Measurement
  - \* Begin to connect kinds of measurements with common tools of measurement and units of measurement, including:
    - \* bathroom scales tell us how heavy a person is (weight) in pounds
    - rulers and yardsticks tell us how tall (height) or long (length) something is, in inches and feet
    - \* thermometers tell us how warm (temperature) something is, in degrees
- Practice Estimating Measurements
  - Practice estimating measurements and amounts.
    - \* For example: How many blocks will fit in that box? How many glasses of water will it take to fill that sand pail? Test to see how close estimates were. Repeat estimations and testing, to improve estimation skills.

### Measurement

#### \* Making Comparisons

- \* Focus on how big, little, long or short things are, and figure out how to tell.
- \* Compare objects of different sizes and lengths, using the same unit of measurement.
- \* Find convenient units of measurement other than rulers for example, cereal boxes or yogurt containers.
- \* Use measurements in daily activities water play, cooking, science experiments.

#### Understanding Time

- Understand time as something measured by clocks, in hours and minutes.
- \* Begin to develop understandings of lengths of time, by having time limits set on activities for example: "Let's color for 5 more minutes." "Everyone has 10 seconds to sit down: 10, 9, 8, 7...."
- Start to develop an understanding of portions of a day after breakfast, after lunch, before nap time and begin to understand time in larger units, such as days: yesterday, tomorrow.

#### \* Practice Counting

\* Practice counting regularly with your child. He/She should know how to count to 10 and beyond and understand what the numbers represent. Play games that involve counting, such as hide and seek, and incorporate counting into everyday activities, such as climbing stairs or eating.

#### \* Practice Comparing Items

\* Ask your child to compare different groups of items, such as carrot sticks and apple slices, and to tell you which group has more and which has fewer items. Incorporate these sorts of comparisons into ordinary activities around the home, including eating, organizing groceries, or sorting laundry.

#### \* Practice Addition and Subtraction

\* Practice basic addition and subtraction by having your child count how many objects are in a group, such as a plate of crackers, and then taking away some of those objects or adding more.

#### \* Practice Recognizing Shapes

\* Practice recognition of different shapes. Have your child spot things that are triangular, like pieces of pizza or the roof of a house, or rectangular, like paper money. As you talk about different shapes, have him/her describe why a shape he/she spots is a triangle (three sides), a square (four equal sides), or a rectangle (two opposite equal sides and two other opposite equal sides of longer length).

#### \* Practice Comparing Different Sizes

\* Practice ways in which your child can compare different sizes. Have him/her organize a selection of toys in order from the smallest to the largest. Or have him/her talk about the members of your family, describing who is tallest, second tallest, and so on.

#### \* Do Puzzles With Your Child

\* Doing puzzles is a great way to develop important visual discrimination skills, or the ability to recognize differences and similarities in shape, form, pattern, size, position, and color.

#### \* Play "Higher" or "Lower"

\* Think of a number for your child to guess. After each guess respond with the words "higher" or "lower." At different times, use the words "more" or "less" so he/she learns different arithmetic vocabulary. This game helps him/her correlate number words and counting sequence with actual amounts.

#### \* Practice Sequencing

\* Practice sequencing with your child to develop his/her ability to recognize and store math procedures and number sequences. Make a peanut butter and jelly sandwich or build a snowman together, then ask him/her to describe in order the actions that took place. He/She can also describe the sequence of events that took place in the day, in a movie he/she saw, or in a story he/she read.

#### \* Use Timers to Develop a Sense of Time

\* Use a timer for activities like watching TV or using the computer, so that your child becomes familiar with the concept of time and how long different units of time last. If your child doesn't want to leave the playground, tell him/her that he/she can stay for 5 more minutes. He/She'll start to develop an understanding of time and how long different units of time last if you do this regularly.

#### \* Give Your Child a Piggy Bank

\* Give your child a piggy bank and help fill it with spare change. Every month or so, empty it together and have your child sort the coins by denomination. Have him/her match the coins to the denominations indicated on coin wrappers, which can be obtained from some banks or purchased inexpensively. This will help your pre-kindergartner with counting, value recognition, and sorting, as well as hand-eye coordination.