

Kindergarten Lesson Sequence
(21 Lessons)

Free Exploration and Creative Learning

- Lesson One** Learn the rules, establish the environment. Students experience new materials on their own. Our questions guide their thinking.
- Topic Pattern Blocks.
Topic Power Blocks.
Topic Geoblocks, Unifix Cubes, toothpicks, or any other available materials.

Patterns and Connections

- Lesson One** Learn what is meant by "pattern." Learn the A-B system of describing patterns. The whole class invents patterns, then smaller groups devise ways to share. Pattern searches extend to the environment.
- Topic A-A-B.
Topic A-A-A-B.
Topic A-B, A-B.
Topic A-B-C and more.
Topic Five minutes now and then.
- Lesson Two** Learn to relate A-B patterns to materials. Students create and share A-B patterns. Students also learn to check their neighbors to ensure that everybody understands.
- Topic Pattern Blocks and A-A-B.
Topic Power Blocks and A-A-B.
Topic Other materials and A-B patterns.
- Lesson Five** Learn to extend pattern searches beyond the period set aside for math. Learn to connect mathematics to art. Students create pattern designs for themselves.
- Topic Pattern Block walls.
Topic Pattern Block mosaic designs.
Topic Graph paper patterns.
Topic Other patterned art we might choose to use.

Beginning Number

- Lesson One** Learn to count up and back by ones. We establish a counting environment.
- Topic Counting up.
Topic Counting back.
Topic Counting every time there are things to count.
- Lesson Two** Learn to look for patterns in the counting numbers. We post numbers for students to search for patterns.
- Topic Search the numbers from 0 to 100 for patterns.
Topic Learn to say the names of numbers.
Topic Look at the 00-99 matrix.
- Lesson Three** Learn the difference between 1, 2, 3 and 1st, 2nd, 3rd. We use numbers in language to convey meaning.
- Topic Language use is not lesson bound. The use of cardinal and ordinal numbers is done consciously everyday.
- Lesson Four** Learn the fiveness of five. We surround our students with the concept of numbers from three to as far as we decide to go.
- Topic 3 with squares.
Topic 3 with tooth picks.
Topic 3 with wooden cubes.
Topic 3 with Pattern Blocks.
Topic 4 with squares.
Topic 4 with tooth picks.
Topic 4 with wooden cubes.
Topic 4 with Pattern Blocks.
Topic 5 and more with each material, in turn.

Sorting, Classifying, Expanding Language

- Lesson One** Learn to sort by attributes. Students sort objects into groups in a variety of ways.
Teacher lists the ways.
Topic Each new material produces a variation of the basic lesson.
Topic Sorting buttons, making lists.
Topic Sorting keys, making lists.
Topic Sorting whatever else is available in quantity.
- Lesson Two** Learn to be aware of attributes everywhere. Students take sorting walks to learn to see what is already there.
Topic Sorting walks.
Topic Each walk taken is a different topic.
- Lesson Three** Use sorting and classification knowledge to create informal definitions of words. We sort shapes, words, or objects as students create definitions for the sorts.
Topic We use this lesson when we have a definition we wish to teach.
Topic Shapes—quadrilaterals, triangles, squares, etc.
Topic What other definitions might we choose to use?
- Lesson Four** Learn to find relationships between different shapes. Students play games with Attribute Blocks that focus on thinking logically and systematically.
Topic Pattern sorts, teacher at the overhead.
Topic Identify the missing piece.

Geometry, Shapes, Relationships and Constructions

- Lesson One** Provide a background in geometry equally for boys and girls, rich and poor, while exploring shapes in geometry. Students build as our questions focus their discoveries.
Topic Today is building day, let's see what you can build.
Topic Lego blocks, Tinker Toys, Geoblocks, Pattern Blocks, Power Blocks, straws, toothpicks and clay, kindergarten building blocks. Each material used for building is a topic.
- Lesson Three** Learn to recognize reflective symmetry in shapes. Students explore lines of symmetry with materials and mirrors.
Topic Free exploration with mirrors.
Topic Pattern Blocks and mirrors - exploring symmetry.
Topic Power Blocks and mirrors - exploring symmetry.
- Lesson Nine** Learn to be aware of the geometry in our lives. We ask our students to look more closely at what they already see.
Topic Make a list of rectangular shapes. What other shapes can we list?
Topic What shall we look for today?

Beginning Addition and Subtraction

- Lesson One** Learn to create and check addition problems. Students create addition problems that they can check by counting.
Topic Creating addition problems with handful of squares.
- Lesson Three** Learn to create and check subtraction problems. Students create subtraction problems that they can check by counting.
Topic Creating subtraction problems with handful of squares.

Graphing, Probability and Statistics

- Lesson One** Learn to use graphing as a tool for finding answers to questions. Students learn to turn their curiosity into data to graph.
Topic Students make graphs in response to questions asked or curiosity expressed that leads to numbers that can be represented pictorially.

Lesson Two Learn how to display information in a variety of ways. Students invent more ways to graph data than they had thought to use before.
Topic Examples of different kinds of graphs are shared as students think of ways to graph they have not used before.

Measurement, Estimation and Time

Lesson One Learn that measurement is a part of everything we do. We create a measuring environment in our room by making measurements a tool for finding out.
Topic Measurement is in the environment we create.
Topic Measurement is in the questions that we ask.
Topic Measurement is in "Is taller than..."

Lesson Four Learn about time. In general, we teach time by using it.
Topic Time is an experience. It is taught all day long, all the time.