INDIANA
DEPARTMENT *of*
EDUCATION

2024 INDIANA CONTENT CONNECTORS
MATHEMATICS

KINDERGARTEN

in.gov/doe

Indiana Content Connectors Context and Purpose

Introduction

The Indiana Content Connectors for Kindergarten Mathematics are the result of a process designed to identify, evaluate, synthesize, and create high-quality learning expectations for Indiana students with significant cognitive disabilities.

The Indiana Department of Education (IDOE) convened stakeholder committees to review proposed revisions to Indiana's Alternative Standards, known as content connectors. The content connectors are designed to measure the knowledge and skills of students with the most significant cognitive disabilities and are assessed with the state's alternate assessment. The content connectors are designed to ensure that all Indiana students in this population are prepared with essential knowledge and skills needed to access employment, enrollment, or enlistment leading to service.

What are the Content Connectors and how should they be used?

The Indiana Content Connectors are designed to help educators, parents, students, and community members understand the necessary content for each grade level, and within each content area domain, to access employment, enrollment, or enlistment leading to service. These content connectors should form the basis for strong core instruction for all students at each grade level and content area. The content connectors identify the minimum academic content or skills to which Indiana students need access in order to be prepared for success after graduation, but they are not an exhaustive list.

While the Indiana Content Connectors establish key expectations for knowledge and skills and should be used as the basis for curriculum, the content connectors by themselves do not constitute a curriculum. It is the responsibility of the local school corporation to select and formally adopt curricular tools, including textbooks and any other supplementary materials, that align with Indiana Content Connectors. Additionally, corporation and school leaders should consider the appropriate instructional sequence of the content connectors as well as the length of time needed to teach each one. Every content connector has a unique place in the continuum of learning, but each content connector will not require the same amount of time and attention. A deep understanding of the vertical articulation of the standards will enable educators to make the best instructional decisions. These content connectors must also be complemented by robust, evidence-based instructional practices to support overall student development. By utilizing strategic and intentional instructional practices, other areas such as STEM and employability skills can be integrated with the content connectors.

Acknowledgments

Kindergarten Mathematics

Standards and content connectors identified as essential for mastery by the end of the grade level are indicated with gray shading and an "E."

Indiana Academic Standards	Content Connectors
Number Sense	
K.NS.1: Count to at least 100 by ones and tens. Count by one from any given number. (E)	**K.NS.1a:** Count to ten by ones. Count by ones up to ten from any number. (E)
K.NS.2: Write whole numbers from 0 to 20 and identify number words from 0 to 10. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). (E)	**K.NS.2a:** Identify written whole numbers from 0 to 10. Identify the written numeral 0-10 when presented with the name of the number. Write or select the numerals 0-10. (E)
	K.NS.2b: Choose a corresponding written numeral 0-10 to represent a number of objects. (E)
K.NS.3: Say the number names in standard order when counting objects, pairing each object with one and only one number name and each number name with one and only one object. Understand that the last number name said describes the number of objects counted and that the number of objects is the same regardless of their arrangement or the order in which they were counted. Count out the number of objects, given a number from 1 to 20. (E)	**K.NS.3a:** Say the number names in standard order when counting objects. (E)
	K.NS.3b: Understand that the number of objects counted and that the number of objects is the same regardless of their arrangement or the order in which they were counted. Count out the number of objects, given a number from one to ten. (E)
K.NS.4: Identify sets of 1 to 10 objects in patterned arrangements and tell how many without counting. (E)	**K.NS.4a:** Identify sets of one to ten objects in patterned arrangements.
K.NS.5: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group (e.g., by using matching and counting strategies).	**K.NS.5a:** Use counting to identify a group of objects that is greater than, less than, or equal to another group of objects.
K.NS.6: Compare the values of two numbers from 1 to 20 presented as written numerals.	**K.NS.6a:** Compare the values of two numbers from one to ten presented as written numerals.

K.NS.7: Define and model a "ten" as a group of ten ones. Model equivalent forms of whole numbers from 10 to 20 as groups of tens and ones using objects and drawings. (E)	**K.NS.7a:** Model a group of ones to represent a ten by using objects and drawings. (E)

Computation and Algebraic Thinking

K.CA.1: Solve real-world problems that involve addition and subtraction within 10 using modeling with objects or drawings. (E)	**K.CA.1a:** Solve real-world problems that involve addition and subtraction within ten using modeling with objects or drawings. (E)
K.CA.2: Use objects or drawings to model the decomposition of numbers less than 10 into pairs in more than one way. Identify corresponding equations. (E)	**K.CA.2a:** Decompose numbers less than ten using objects or drawings. (E)
K.CA.3: Find the number that makes 10 when added to the given number for any number from 1 to 9 (e.g., by using objects or drawings), and record the answer with a drawing or an equation. (E)	**K.CA.3a:** Find the number that makes ten when added to the given number for any number from one to nine using objects or drawings. (E)
K.CA.4: Create, extend, and give an appropriate rule for simple repeating and growing patterns with numbers and shapes.	**K.CA.4a:** Extend or create a simple repeating or growing pattern with numbers or shapes within ten when given a rule.

Geometry

K.G.1: Compare two- and three-dimensional shapes in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners"), and other attributes (e.g., having sides of equal length).	**K.G.1a:** Compare two- and three-dimensional shapes. Use informal language to describe their attributes.

Measurement

K.M.1: Make direct comparisons of the length, capacity, weight, and temperature of objects, and identify which object is shorter, longer, taller, lighter, heavier, warmer, cooler, or holds more. (E)	**K.M.1a:** Make a direct comparison of two objects in terms of shorter, longer, taller, lighter, heavier, warmer, or colder given an attribute. (E)
K.M.2: Identify and use appropriate terms to describe intervals of time including: morning, afternoon, evening, today, yesterday, tomorrow, day, week, month, and year; describe how calendars and clocks are tools to measure time.	**K.M.2a:** Identify intervals of time including: morning, afternoon, evening, today, yesterday, tomorrow, day, week, month, and year. Match a calendar and clock to their function (e.g., a calendar tells the day, a clock tells time). (E)

Data Analysis	
K.DA.1: With guidance, collect and organize data into simple bar graphs, pictographs, and/or tables to identify patterns and make comparisons. (E)	**K.DA.1a:** With guidance, collect and organize data into simple bar graphs, pictographs, and/or tables.