Indiana Department of Education
Dr. Katie Jenner, Secretary of Education

Formative (Interim) Assessment Grant Program Evaluation Protocol

Assessment data provides valuable knowledge for student support and educational decision-making when that data is valid, reliable, and reflective of required content. Indiana requires vendors to submit evidence of validity prior to approving assessment programs for purchase with state funds.

This rubric is used to evaluate programs submitted for approval under Indiana's Formative (Interim) Assessment Grant beginning with the 2024-2025 school year. Six criteria are considered:

1. **Interim/Benchmark Assessment Program:** Assesses English/language arts and/or mathematics.
2. **Construct Coherence:** Aligns to the breadth and depth of Indiana Academic Standards (IAS) as applicable and employs strong test development processes.
3. **Comparability and Reliability:** Provides a reliable measure across forms and administrations.
4. **Fairness and Accessibility:** Provides a fair and accessible measure for all students.
5. **Consequences and Uses:** Provides data to differentiate instruction for students and to inform educational decision-making.
6. **Predictive Measures:** Provides data to predict student performance on Indiana's statewide accountability assessment.

The requestor must follow the process outlined in the *Indiana Formative Assessment Grant Program Approval Process* to submit evidence for consideration. To receive approval, the requestor must pass all criteria labeled in the rubric as Pass/Fail. Strong responses receive "Adequate" determinations for all other criteria within the rubric. Programs may receive approval with one or two "Incomplete" or "Lacking" criteria based on the determination of the review committee.

The rubric is adapted from *Strengthening Claims-based Interpretations and Uses of Local and Large-scale Science Assessment Scores Project (SCILLSS). (2017). Ensuring Rigor in Local Assessment Systems: A Self-Evaluation Protocol. Lincoln, NE: Nebraska Department of Education.*

Assessment Program Name: Click here to enter text.
Assessment Program Vendor: Click here to enter text.
Assessment Program Content Areas: Click here to enter text.
Assessment Program Grade Levels Serviced: Click here to enter text.

Contact Name: Click here to enter text.   **Email**: Click here to enter text.   **Phone**: Click here to enter text.
Contact Name: Click here to enter text.   **Email**: Click here to enter text.   **Phone**: Click here to enter text.
IDOE Contact: Click here to enter text.   **Email**: Click here to enter text.   **Phone**: Click here to enter text.

Reviewer Group: Click here to enter text.
Review Begin Date: Click here to enter text.   **Review Completion Date**: Click here to enter text.

Final Status: ☐ **Approved**   ☐ **Not Approved**

Approval Notes: Click here to enter text.

Criterion 1: Interim/Benchmark Assessment Program

The assessment program provides data to measure content knowledge and skills for English/language arts and/or mathematics.

Research Questions	Evidence Required	Expectations for Acceptability
Is the submitted product an assessment program?	The requestor must provide evidence of the degree to which the program is an assessment.	The program must consist of interim, benchmark, or similar assessments. Curricula (or "lesson-based" programs) will not be approved.
Does the program assess English/language arts and/or mathematics?	The requestor must submit evidence of any proficiency or growth indicators provided as well as the content areas assessed.	The program must measure student achievement and/or growth related to performance on Indiana Academic Standards (IAS) over the course of the school year. The assessment program must provide (at minimum) either a proficiency indicator or a growth indicator for content as delineated in Indiana Academic Standards.

Adequacy of Evidence: ☐Pass   ☐Fail

Committee Comments:

Criterion 2: Construct Coherence (Alignment, Test Development, Scoring)

The assessment aligns to the breadth and depth of Indiana Academic Standards and employs strong test development processes that support valid scores. **All assessment program vendors may choose (but are not required) to submit an updated third-party alignment study using the streamlined 2023 IAS for the 2024-2025 school year. The Indiana Department of Education (IDOE) will accept an alignment study to 2020 or 2023 IAS for the 2024-2025 school year.**

Alignment Requirement Instructions: The assessment program vendor must select **one** of the three alignment options (labeled below and marked with an asterisk) and clearly label their submitted documentation with the alignment option selected. Only one option may be selected for each submission. If assessment program vendors wish to use different alignment options for different grade level bands, the vendor must submit the grade level bands separately for review and approval.

Alignment Option 1		
Research Questions	**Evidence Required**	**Expectations for Acceptability**
Alignment Option: Full (Grades K-10)* Does the assessment measure the breadth and depth of Indiana Academic Standards? What evidence shows that the assessment is sufficiently rigorous?	The requestor must provide a formal alignment study verifying the degree of the assessment's alignment to Indiana Academic Standards. The alignment study must: ● Use a research-based process; ● Be completed by a third party (external rather than internal); ● Provide evidence of the degree to which the assessments measure the breadth and depth of Indiana Academic Standards. The third-party alignment study must include data revealing the levels of rigor assessed across each content area and grade level.	A third party must complete the study. A panel of experts is expected to review item alignment across grade levels/content areas. While current educators are not required for inclusion in the panel of experts, it is preferred. The alignment study must show that a minimum of 85% of Indiana Academic Standards are assessed at each grade level for each content area. For example, grade four mathematics assessments must assess a minimum of 85% of all of the grade four mathematics standards. Sets of standards cannot be excluded, with the one exception of speaking and listening standards for English/language arts. For fixed-form assessments, alignment should be verified from test forms. Independent assignment of metadata must be completed and compared to internal metadata. Independent metadata assignments must confirm internal metadata at a reasonably high rate. For computer-adaptive tests (CATs), alignment should be verified from a representative sample of test events. Independent assignment of metadata must be completed and compared to internal metadata. Independent metadata assignments must confirm internal metadata at a reasonably high rate. For item bank approvals (where districts and schools create their own interim assessments using quality items and systems purchased from a vendor), alignment should be verified from a representative sample of the item bank. The vendor must also provide instructions for schools which support creation of

| | | test blueprints which measure the breadth and depth of Indiana Academic Standards to the required 85%. Independent assignment of metadata must be completed and compared to internal metadata. Independent metadata assignments must confirm internal metadata at a reasonably high rate.

For interim, benchmark, or similar assessments, measurement of 85% (or more) of Indiana Academic Standards (alignment) can be demonstrated by combining test events across administrations if students are intended to participate in multiple test events over the course of the school year. If this method is utilized, it must be stated within the submitted documentation, and details regarding the number of administrations required to reach alignment expectations must be included.

A correlation guide or crosswalk does not provide the same level of information that an alignment study provides and therefore will not be accepted.

Varying levels of rigor should be measured across each test form, in accordance with the requirements of Indiana Academic Standards. Assessments which do not measure beyond Depth of Knowledge (DoK) 2 (or similar indicator on a different rigor matrix) will not be accepted. |
|---|---|---|

Adequacy of Evidence: ☐Pass   ☐Fail   ☐Option Not Selected

Committee Comments:

Alignment Option 2		
Research Questions	**Evidence Required**	**Expectations for Acceptability**
Alignment Option: Literacy/Numeracy (Grades K-2)*

Does the assessment measure the breadth and depth of Indiana Academic Standards related to numeracy | The requestor must provide a formal alignment study verifying the degree of the assessment's alignment to Indiana Academic Standards for literacy and numeracy, as defined in Appendix A (literacy) and Appendix B (numeracy). The alignment study must:

- Use a research-based process; | A third party must complete the study. A panel of experts is expected to review item alignment across grade levels/content areas. While current educators are not required for inclusion in the panel of experts, it is preferred.

The alignment study must show that a minimum of 85% of Indiana Academic Standards as listed in Appendix A (for literacy assessments) and Appendix B (for numeracy assessments) are measured. No listed standard may be excluded from the study. |

and/or literacy in grades K-2? What evidence shows that the assessment is sufficiently rigorous?	- Be completed by a third party (external rather than internal); - Provide evidence of the degree to which the assessments measure the breadth and depth of the identified Indiana Academic Standards. The third-party alignment study must include data revealing the levels of rigor assessed across each content area and grade level.	For fixed-form assessments, alignment should be verified from test forms. Independent assignment of metadata must be completed and compared to internal metadata. Independent metadata assignments must confirm internal metadata at a reasonably high rate. For computer adaptive tests (CATs), alignment should be verified from a representative sample of test events. Independent assignment of metadata must be completed and compared to internal metadata. Independent metadata assignments must confirm internal metadata at a reasonably high rate. For interim, benchmark, or similar assessments, measurement of 85% (or more) of Indiana Academic Standards (alignment) can be demonstrated by combining test events across administrations if students are intended to participate in multiple test events over the course of the school year. If this method is utilized, it must be stated within the submitted documentation, and details regarding the number of administrations required to reach alignment expectations must be included. For item bank approvals (where districts and schools create their own interim assessments using quality items and systems purchased from a vendor), alignment should be verified from a representative sample of the item bank. The vendor must also provide instructions for schools which support creation of test blueprints which measure the breadth and depth of the identified Indiana Academic Standards to the required 85%. Independent assignment of metadata must be completed and compared to internal metadata. Independent metadata assignments must confirm internal metadata at a reasonably high rate. A correlation guide or crosswalk does not provide the same level of information that an alignment study provides and therefore will not be accepted. Varying levels of rigor should be measured across each test form, in accordance with the requirements of Indiana Academic Standards.
	The requestor must provide access to documentation (e.g., a link to or screenshot of the public-facing website) that the assessment receives a "convincing" or "partially convincing" rating for accuracy, reliability, and validity by the National Center on Intensive Intervention.	The committee will review the live National Center on Intensive Intervention portal to confirm ratings. If ratings are new and not published, documentation from the National Center on Intensive Intervention which confirms final ratings can be accepted. Documentation may not be more than three years old.

| | For assessments which measure literacy, the requestor must submit documentation that the assessment screens for phonological and phonetic awareness, sound symbol recognition, alphabet knowledge, decoding skills, rapid naming skills, and encoding skills. | Evidence may include test blueprints or test design documents which convey portions of tests dedicated to these concepts. Evidence may be provided through the third-party alignment study or as an internal confirmation (third-party confirmation is not required for this research question). |

Adequacy of Evidence: ☐Pass ☐Fail ☐Option Not Selected

Committee Comments:

Alignment Option 3

Research Questions	Evidence Required	Expectations for Acceptability
Alignment Option: College Entrance Exam (Grades 8-10)* Does the assessment measure the breadth and depth of Indiana Academic Standards as assessed on Indiana's college entrance exam? What evidence shows that the assessment is sufficiently rigorous?	The requestor must provide a formal alignment study verifying the degree of the assessment's alignment to Indiana's selected nationally recognized college entrance exam for high school accountability. The alignment study must: ● Use a research-based process; ● Be completed by a third party (external rather than internal); ● Provide evidence of the degree to which the assessments measure the breadth and depth of standards measured on the college entrance exam (based on the published test blueprint provided in Appendix C) are sufficiently measured.	A third party must complete the study. A panel of experts is expected to review item alignment across grade levels/content areas. While current educators are not required for inclusion in the panel of experts, it is preferred. The alignment study must show that a minimum of 85% of Indiana Academic Standards are assessed at each grade level for each content area. For example, grade four mathematics assessments must assess a minimum of 85% of all of the grade four mathematics standards. Sets of standards cannot be excluded, with the one exception of speaking and listening standards for English/language arts. For fixed-form assessments, alignment should be verified from test forms. Independent assignment of metadata must be completed and compared to internal metadata. Independent metadata assignments must confirm internal metadata at a reasonably high rate. For computer adaptive tests (CATs), alignment should be verified from a representative sample of test events. Independent assignment of metadata must be completed and compared to internal metadata. Independent metadata assignments must confirm internal metadata at a reasonably high rate.

	The third-party alignment study must include data revealing the levels of rigor assessed.	For interim, benchmark, or similar assessments, measurement of 85% (or more) of Indiana Academic Standards (alignment) can be demonstrated by combining test events across administrations if students are intended to participate in multiple test events over the course of the school year. If this method is utilized, it must be stated within the submitted documentation, and details regarding the number of administrations required to reach alignment expectations must be included.
		For item bank approvals (where districts and schools create their own interim assessments using quality items and systems purchased from a vendor), alignment should be verified from a representative sample of the item bank.
		The vendor must also provide instructions for schools which support creation of test blueprints which measure the breadth and depth of standards measured on the college entrance exam to the required 85%. Independent assignment of metadata must be completed and compared to internal metadata. Independent metadata assignments must confirm internal metadata at a reasonably high rate.
		A correlation guide or crosswalk does not provide the same level of information that an alignment study provides and therefore will not be accepted.
		Varying levels of rigor should be measured across each test form, in accordance with the requirements of Indiana Academic Standards.

Adequacy of Evidence: ☐Pass ☐Fail ☐Option Not Selected

Committee Comments:

(Criterion 2 Continued) Test Development Requirement Instructions: All assessment programs must address the research questions related to test development regardless of their selected alignment type.

Test Development		
Research Questions	**Evidence Required**	**Expectations for Acceptability**
What is the overall process used for test development?	The requestor must provide a technical report detailing the test development process.	The assessment should be constructed using a research-based method that focuses on the measurement of the intended construct.
Who was involved in the test development process (e.g., roles, expertise, geographic location)?	The requestor must provide evidence of stakeholder involvement in test development. Examples may include narrative briefs on the creation of test design documents (such as blueprints and item specifications) and inclusion of stakeholders in item development and/or item review.	Appropriate stakeholders (including content experts, psychometricians, assessment experts, and educators) were involved in the test development process.
What criteria are used to create/accept items for use on the assessment, and what quality controls are in place to ensure only high-quality items are administered?	The requestor must provide documentation detailing the item development process. Documentation should provide an overview of any steps related to item development, item review, and item field test/data review.	Appropriate stakeholders who provide a wide variety of perspective and expertise are included in the item development process. Accessibility and linguistic complexity (as related to universal design) are considered during the item development process. Criteria are in place to ensure only high-quality items are utilized on the assessment. Examples may include quality control checklists utilized during item development or item specifications. Processes (including content and fairness reviews for test items and field test/data review for all items) are in place to ensure only high-quality items are administered on operational test forms.
Adequacy of Evidence: ☐Adequate ☐Incomplete ☐Lacking Committee Comments:		

(Criterion 2 Continued) Scoring Requirement Instructions: All assessment programs must address the research questions related to scoring regardless of their selected alignment type.

Scoring		
Research Questions	**Evidence Required**	**Expectations for Acceptability**
How are scores for individual test items combined for a total score?	The requestor must provide a technical report detailing the method for providing total test scores. The technical report should provide arguments related to the degree to which total scores are a valid reflection of content knowledge and skill.	A research-based scoring method must be applied to the assessment to return a valid "total score." This total score should be meaningfully connected to the content standards. Total scores provided should be scaled. Additional scores related to student proficiency may be provided in different ways. The total score must be a valid reflection of student knowledge and skills.
Are quality controls in place to verify that scoring specifications are applied correctly to items and test events?	The requestor must provide documentation showing any quality controls in place that ensure automated scoring of items and calculation of total scores are correct and reliable. If the assessment includes hand-scored items, the requestor must provide evidence of training provided to handscorers and documentation of any systems which ensure scores for these items are reliable.	Quality controls should exist to confirm that machine scoring occurs accurately and total scores are correctly calculated and reported. A variety of systems are acceptable. Examples may include system checks or internal replications of data sets. If the assessment includes items hand scored by the assessment vendor, scorers must be qualified and must receive training which supports accurate, reliable scoring. Quality-control measures must be in place to monitor reliability of hand scores (for example, validity papers embedded in hand scoring sets or percent of items which are second-scored). If the assessment includes items hand scored by classroom teachers, teachers must receive training which supports accurate, reliable scoring. Quality-control measures are recommended to monitor the reliability of handscores by educators (e.g., score audits).
How were item rubrics created? What differences in student responses do the rubrics account for?	If there are open-ended items on the assessment, the requestor must provide documentation on the method of scoring (automated or hand scored) as well as how rubrics were originally defined. If no open-ended items occur, the requestor should state this in the application.	Scoring rubrics must be used for the scoring of open-ended items to ensure objectivity. Training materials must accompany the rubrics (e.g., annotated examples of scored responses, practice responses, validity papers). An overview of the rubrics and training materials should be presented (specific examples are not required).
Adequacy of Evidence: ☐Adequate ☐Incomplete ☐Lacking Committee Comments:		

Criterion 3: Comparability and Reliability

The assessment provides a reliable measure across forms and administrations.

Research Questions	Evidence Required	Expectations for Acceptability
Does the assessment support reliable scores over time and across forms? Is the assessment administered in a standardized format to ensure comparability across different testing sites? Does the assessment administration protect against various types of cheating to ensure scores accurately reflect student knowledge and skills?	The requestor must provide evidence showing the degree to which scoring is comparable and reliable across various forms and administrations as applicable. For assessments in grades kindergarten through two which measure foundational literacy or numeracy and are seeking approval through Alignment Option 2, the requestor must provide documentation that the assessment receives a "convincing" or "partially convincing" rating for accuracy, reliability, and validity by the National Center on Intensive Intervention. The requestor must provide documentation showing the degree to which the assessment is secure and any protections in place to prevent cheating.	Processes must be in place that ensure the consistency of score results across different forms and over time (if applicable). Examples include the use of stable test blueprints, computer-adaptive algorithms, and test specifications. Protocols and processes must be in place that address standardization of test administration. Examples may include defined test windows, test administration manuals, instructions for test administrators or school administrators regarding administration of assessments, and/or test security information. For item bank approvals (where districts and schools create their own interim assessments using quality items and systems purchased from a vendor), the evidence must include guidance provided to schools which supports their understanding of comparability as they create their own forms. Strong responses will discuss use of test blueprints and stable design across forms and administrations so that scores can be meaningfully compared. For assessments in grades kindergarten through two submitting reliability documentation from the National Center on Intensive Intervention, the committee will review the live National Center on Intensive Intervention portal to confirm ratings. If ratings are new and not published, documentation from the National Center on Intensive Intervention which confirms final ratings can be accepted. Documentation may not be more than three years old.

Adequacy of Evidence: ☐Adequate   ☐Incomplete   ☐Lacking

Committee Comments:

Criterion 4: Fairness and Accessibility

The assessment provides a fair and accessible measure for all students.

Research Questions	Evidence Required	Expectations for Acceptability
What procedures ensure items were created without bias and are fair for all students?	The requestor must provide a narrative describing the item development and data review processes.	Items must be developed with processes to ensure fairness and accessibility. Strong processes include stakeholder review, use of universal design (especially in graphics), review of linguistic complexity, and avoidance of multi-meaning words in item stems. Data reviews should be used to check differential item functioning and exclude any items which are inherently biased against a specific student population.
Can all students (including students with disabilities and English learners) access the assessment and show what they know? What accommodations and/or supports are offered during testing?	The requestor must provide evidence that all students can access the test content. The requestor must provide a list of any tools or supports available to all students during the assessment. The requestor must provide a list of accommodations and supports for students with disabilities and English learners.	Appropriate accommodations and supports must be available for a variety of student populations. Student accommodations must be provided during testing either by the assessment program or by the local school. Strong responses explain how necessary accommodations and universally provided tools and supports are accessed during test administration. Providers should address any access for specific subpopulations (including students with significant cognitive disabilities, students in Spanish immersion programs, and students who are blind or visually impaired) within this section as applicable.
Adequacy of Evidence: ☐Adequate ☐Incomplete ☐Lacking Committee Comments:		

Criterion 5: Consequences and Uses

The assessment provides data to differentiate instruction based on performance on Indiana Academic Standards and to inform educational decision-making.

Research Questions	Evidence Required	Expectations for Acceptability
How are the scores from the assessment intended to be used?	The requestor should articulate the intended purpose(s) and uses(s) of the assessment scores.	Intended purposes and uses of scores should match test design.
Are scores and reports useful for educators and parents to inform educational decision-making?	The requestor must provide evidence of reports generated through the delivery of the assessment. The requestor must provide examples of training/resources that support educators in connecting provided data with educational action. The requestor must provide any interpretive guides (or similar materials) for educators and parents. The requestor may provide examples of instructional resources or other tools that support differentiated instruction, if available.	Reports must provide data regarding student achievement (proficiency) of Indiana Academic Standards following each administration. Reports may provide data regarding student growth following each administration. The assessment must provide a timely analysis of student performance. Reports must be available at the student level, class level, and school level at a minimum. Strong responses support aggregation of data for subpopulations of students.

Adequacy of Evidence: ☐Pass   ☐Fail

Committee Comments:

Criterion 6: Predictive Measure

The assessment provides data to predict student performance on Indiana's statewide accountability assessment. This criterion is applicable for grades 3-8 assessments only.

Note for schools: If interim assessment data is used by educators to inform instruction and remediation, interim assessments as a predictive measure should more consistently under-predict student performance. Predictive measures are highly impacted by the way that data is used in a school or corporation. Interim/formative assessment information should decrease the relationship between formative performance and summative performance because this information should be used to remediate.

Research Questions	Evidence Required	Expectations for Acceptability
Can test scores/results provide predictive measures for student performance on Indiana's ILEARN assessment for students in grades 3-8?	The requestor must provide a formal predictive study showing how the assessment predicts student performance on ILEARN, Indiana's statewide summative assessment for grades 3-8. Predictive study results should be available to Indiana schools upon request.	The predictive study may be completed internally but must be confirmed by a third party. The study must clearly describe the intervals considered. The predictive study may indicate predictive measures for assessments taken at different times (e.g., first quarter versus third quarter). Sample size (n) must be greater than or equal to 1500 and should closely represent student characteristics and distribution of characteristics across Indiana. **Preferred**: The predictive study should indicate the probability of students achieving different proficiency levels on ILEARN based on their interim assessment score. For example, students scoring 250-275 are 80% likely to achieve At Proficiency and 20% likely to achieve Approaching Proficiency on ILEARN. **Alternative:** Other research-based predictive models may be used. Assessment products without data from Indiana may use models that link available data but may NOT simply provide a linking study.

Adequacy of Evidence: ☐Pass ☐Fail

Committee Comments:

Appendix A

Indiana Academic Standards Required for Alignment of Grades Kindergarten through Two Assessments Measuring Numeracy

Grade	Standard 2020 Indicator	Standard 2023 Indicator	Language
Indiana's Formative Assessment Grant Standards required for alignment to receive approval for a kindergarten through grade two assessment focusing on numeracy.			
K	K.NS.1	K.NS.1	Count to at least 100 by ones and tens and count on by one from any number. (E)
K	K.NS.2	K.NS.2	Write whole numbers from zero to 20 and recognize number words from zero to 10. Represent a number of objects with a written numeral zero to 20 (with zero representing a count of no objects) (E)
K	K.NS.3		
K	K.NS.4	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	K.NS.5		
K	K.NS.6	K.NS.4	Identify sets of 1 to 10 objects in patterned arrangements and tell how many without counting. (E)
K	K.NS.7	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	K.NS.8	K.NS.6	Compare the values of two numbers from 1 to 20 presented as written numerals.
K	K.NS.9		
K	K.NS.10		
K	K.NS.11	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	K.CA.1		
K	K.CA.2	K.CA.1	Solve real-world problems that involve addition and subtraction within 10 using modeling with objects or drawings. (E)

K	K.CA.3	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	K.CA.4	K.CA.3	Find the number that makes 10 when added to the given number for any number from one to nine (e.g., by using objects or drawings), and record the answer with a drawing or an equation.
K	K.CA.5	K.CA.4	Create, extend, and give an appropriate rule for simple repeating and growing patterns with numbers and shapes.
K	K.M.1	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	K.M.2	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.
Grade	**Standard**		**Language**
1	1.NS.1	1.NS.1	Count to at least 120 by ones, fives, and tens from any given number. In this range, read and write numerals and represent a number of objects with a written numeral. (E)
1	1.NS.2	1.NS.2	Model place value concepts of two-digit numbers, multiples of 10, and equivalent forms of whole numbers using objects and drawings. (E)
1	1.NS.3	1.NS.3	Match the ordinal numbers (e.g., first, second, third) with an ordered set of up to 20 items.
1	1.NS.4	1.NS.4	Use place value understanding to compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols > , = , and <. (E)
1	1.NS.5		
1	1.NS.6		
1	1.CA.1	1.CA.1	Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a 10 (e.g., 13 − 4 = 13 − 3 − 1 = 10 − 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 − 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). Model the role of 0 and the equal sign in addition and subtraction using objects or drawings. (E)
1	1.CA.2	1.CA.2	Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem). (E)

Grade	Standard		Language
1	1.CA.3		
1	1.CA.4		
1	1.CA.5	1.CA.3	Using number sense and place value strategies, add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10. Use models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. (E)
1	1.CA.6		
1	1.CA.7	1.CA.4	Create, extend, and give an appropriate rule for number patterns using addition within 100.
1	1.M.1	1.M.1	Use direct comparison or a nonstandard unit to compare and order objects according to length, area, capacity, weight, and temperature. (E)
1	1.M.2	1.M.2	Tell and write time to the nearest half-hour and relate time to events (before/after, shorter/longer) using analog clocks. Explain how to read hours and minutes using digital clocks. (E)
1	1.M.3	1.M.3	Identify the value of a penny, nickel, dime, and a collection of pennies, nickels, and dimes.
Grade	**Standard**		**Language**
2	2.NS.1	2.NS.1	Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number. (E)
2	2.NS.2	2.NS.2	Read and write whole numbers up to 1,000. Use words, models, standard form, and expanded form to represent and show equivalent forms of whole numbers up to 1,000. (E)
2	2.NS.3		
2	2.NS.4		
2	2.NS.5	2.NS.3	Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by placing that number of objects in two groups of the same size and recognizing that for even numbers no object will be left over and for odd numbers one object will be left over, or by pairing objects or counting them by twos).
2	2.NS.6	2.NS.4	Define and model a "hundred" as a group of ten tens. Model place value concepts of three-digit numbers, multiples of 100, and equivalent forms of whole numbers using objects and drawings. (E)
2	2.NS.7	2.NS.5	Use place value understanding to compare two three-digit numbers based on meanings of

			the hundreds, tens, and ones digits, using > , = , and < symbols to record the results of comparisons. (E)
2	2.CA.1		
2	2.CA.2	2.CA.1	Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems. (E)
2	2.CA.3		
2	2.CA.4	2.CA.2	Using number sense and place value strategies, add and subtract within 1,000, including composing and decomposing tens and hundreds. Use models, drawings, and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used.
2	2.CA.5		
2	2.CA.6	2.CA.3	Show that the order in which two numbers are added (commutative property) and how the numbers are grouped in addition (associative property) will not change the sum. These properties can be used to show that numbers can be added in any order. (E)
2	2.CA.7	2.CA.4	Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000.
2	2.M.1	2.M.1	Describe the relationships among inch, foot, and yard. Describe the relationship between centimeter and meter
2	2.M.2	2.M.2	Estimate and measure the length of an object by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter.
2	2.M.3		
2	2.M.4	2.M.3	Estimate and measure volume (capacity) using cups and pints. Add and subtract to solve real-world problems involving capacities that are given in the same units or obtained through investigations. (E)
2	2.M.5	2.M.4	Tell and write time to the nearest five minutes from analog clocks, using a.m. and p.m. Solve real-world problems involving addition and subtraction of time intervals on the hour or half hour. (E)
2	2.M.6	2.M.5	Describe relationships of time, including: seconds in a minute; minutes in an hour; hours in a day; days in a week; and days, weeks, and months in a year.

2	2.M.7	2.M.	Find the value of a collection of pennies, nickels, dimes, quarters and dollars. (E)

Appendix C

Indiana's selected college entrance exam test blueprints, excerpted from the full blueprints and specifications published by the test vendor at this link:

https://satsuite.collegeboard.org/media/pdf/digital-sat-test-spec-overview.pdf.

Indiana does not administer the optional essay component; therefore, alignment studies are not required to include the optional essay within the results.