

**Indiana Academic Standards (IAS):  
Instructional and Assessment Guidance  
ISTEP+: Mathematics – Grades 3-8  
2017-18**

**Opportunity to Learn**

From an assessment perspective, preparing students to be college and career ready necessitates a focus on “Opportunity to Learn.” Opportunity to Learn (OTL) refers to equitable conditions or circumstances within the school or classroom that promote learning for all students. OTL includes curricula, learning materials and instructional experiences. In short, OTL supports student success by ensuring student access to both content and instruction.

Opportunity to Learn is both a moral imperative and an ethical responsibility on the part of educators. Indiana teachers have a two-fold obligation with regard to OTL. First, teachers must provide students with OTL for Indiana Academic Standards that are assessed in the classroom and on ISTEP+. Second, and more importantly, teachers must provide OTL in terms of the content that students must learn in preparation for college and careers.

**Prioritizing Instruction**

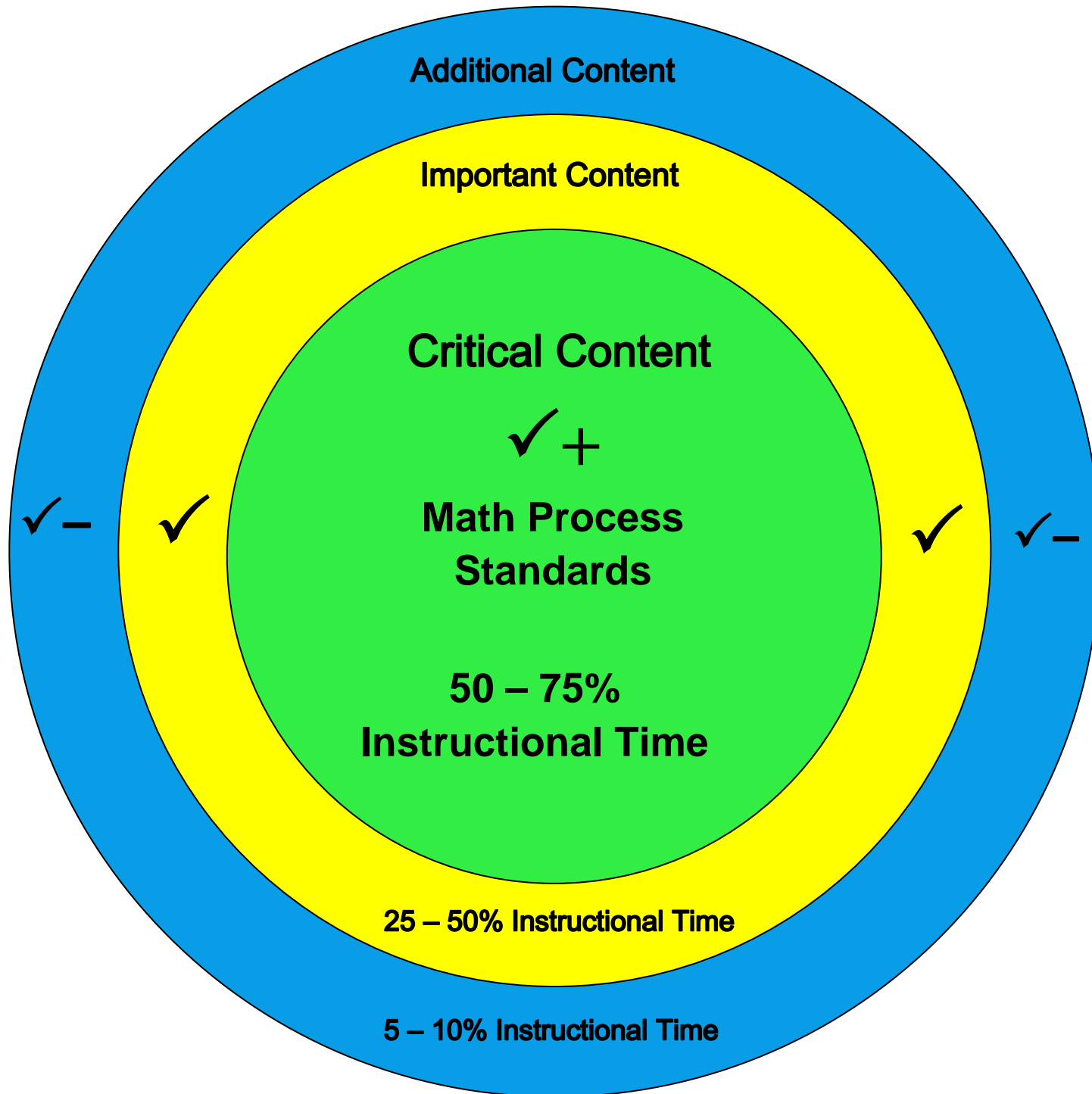
In an effort to empower teachers and focus on college and career readiness, the Office of Student Assessment has created Instructional and Assessment Guidance (“Guidance”) documents for grades 3-8. The *Content Priority* of each Standard is delineated in the Guidance as one of three designations:

- 1) Critical – identified as “✓+”
- 2) Important – identified as “✓”
- 3) Additional – identified as “✓–”

All of the Indiana Academic Standards represent valuable content, and the Guidance documents are designed to assist teachers in planning and prioritizing instructional time to ensure student success.

**A Final Note**

The Guidance documents, as well as the Standards themselves, are not meant to be used as a “checklist.” Rather, when teachers take into consideration the instructional priorities and deliver rich, meaningful lessons, the Standards come to life in the classroom.



**Instructional and Assessment Guidance**  
**ISTEP+: Mathematics – Grade 3**  
**2017-18**

Symbol	Content Priority	Approximate Instructional Time
✓+	Critical	50 – 75%
✓	Important	25 – 50%
✓–	Additional	5 – 10%

*\* Represents standards that may be assessed on ISTEP+ Part 1 and ISTEP+ Part 2. All standards may be assessed on ISTEP+ Part 2.*

Strand 1 Number Sense		Strand 2 Computation		Strand 3 Algebraic Thinking		Strand 4 Geometry		Strand 5 Measurement		Strand 6 Data Analysis		Strand 7 Mathematical Process	
3.NS.1	✓–	3.C.1	✓+	*3.AT.1	✓+	3.G.1	✓	*3.M.1	✓	*3.DA.1	✓	*PS.1	✓+
3.NS.2	✓–	3.C.2	✓+	*3.AT.2	✓+	3.G.2	✓	3.M.2	✓	3.DA.2	✓	*PS.2	✓+
3.NS.3	✓	3.C.3	✓	*3.AT.3	✓+	3.G.3	✓	*3.M.3	✓+			*PS.3	✓+
3.NS.4	✓	3.C.4	✓	3.AT.4	✓	3.G.4	✓	3.M.4	✓			*PS.4	✓+
3.NS.5	✓	3.C.5	✓+	3.AT.5	✓			*3.M.5	✓			*PS.5	✓+
3.NS.6	✓–	3.C.6	✓+	3.AT.6	✓–			*3.M.6	✓			*PS.6	✓+
3.NS.7	✓+							*3.M.7	✓			*PS.7	✓+
3.NS.8	✓											*PS.8	✓+
3.NS.9	✓–												

- *The Mathematical Process Standards should be taught on a regular basis in connection with the content standards. The Process Standards will be assessed in conjunction with content standards.*
- *When creating curriculum, consider content that may be taught after ISTEP+ Part 1 (Applied Skills; March), given the standards that may be assessed on ISTEP+ Part 1 and considering what makes sense instructionally. It is important not to leave too many standards to be taught after March. ISTEP+ Part 1 contributes approximately 30% to a student's scale score, and ISTEP+ Part 2 (Multiple-Choice and Technology-Enhanced Items; April/May) represents the remaining approximately 70%. As a starting point to creating curriculum, consider teaching some of the following standards after the ISTEP+ Part 1 Assessment: 3.NS.9, 3.C.(5-6), 3.G.4, 3.DA.2*

**Instructional and Assessment Guidance**  
**ISTEP+: Mathematics – Grade 4**  
**2017-18**

Symbol	Content Priority	Approximate Instructional Time
✓+	Critical	50 – 75%
✓	Important	25 – 50%
✓–	Additional	5 – 10%

*\* Represents standards that may be assessed on ISTEP+ Part 1 and ISTEP+ Part 2. All standards may be assessed on ISTEP+ Part 2.*

Strand 1 Number Sense		Strand 2 Computation		Strand 3 Algebraic Thinking		Strand 4 Geometry		Strand 5 Measurement		Strand 6 Data Analysis		Strand 7 Mathematical Process	
4.NS.1	✓	4.C.1	✓+	*4.AT.1	✓+	4.G.1	✓	4.M.1	✓	*4.DA.1	✓	*PS.1	✓+
4.NS.2	✓	*4.C.2	✓+	*4.AT.2	✓	4.G.2	✓	4.M.2	✓	4.DA.2	✓	*PS.2	✓+
4.NS.3	✓	*4.C.3	✓+	4.AT.3	✓	4.G.3	✓–	*4.M.3	✓	4.DA.3	✓–	*PS.3	✓+
*4.NS.4	✓	4.C.4	✓+	*4.AT.4	✓	4.G.4	✓	*4.M.4	✓+			*PS.4	✓+
*4.NS.5	✓	4.C.5	✓+	*4.AT.5	✓+	4.G.5	✓–	4.M.5	✓–			*PS.5	✓+
4.NS.6	✓	4.C.6	✓+	4.AT.6	✓–			4.M.6	✓			*PS.6	✓+
*4.NS.7	✓	4.C.7	✓–									*PS.7	✓+
4.NS.8	✓											*PS.8	✓+
4.NS.9	✓–												

- *The Mathematical Process Standards should be taught on a regular basis in connection with the content standards. The Process Standards will be assessed in conjunction with content standards.*
- *When creating curriculum, consider content that may be taught after ISTEP+ Part 1 (Applied Skills; March), given the standards that may be assessed on ISTEP+ Part 1 and considering what makes sense instructionally. It is important not to leave too many standards to be taught after March. ISTEP+ Part 1 contributes approximately 30% to a student’s scale score, and ISTEP+ Part 2 (Multiple-Choice and Technology-Enhanced Items; April/May) represents the remaining approximately 70%. As a starting point to creating curriculum, consider teaching some of the following standards after the ISTEP+ Part 1 Assessment: 4.NS.9, 4.C.7, 4.AT.6, 4.DA.3*

**Instructional and Assessment Guidance**  
**ISTEP+: Mathematics – Grade 5**  
**2017-18**

Symbol	Content Priority	Approximate Instructional Time
✓+	Critical	50 – 75%
✓	Important	25 – 50%
✓–	Additional	5 – 10%

*\* Represents standards that may be assessed on ISTEP+ Part 1 and ISTEP+ Part 2. All standards may be assessed on ISTEP+ Part 2.*

Strand 1 Number Sense		Strand 2 Computation		Strand 3 Algebraic Thinking		Strand 4 Geometry		Strand 5 Measurement		Strand 6 Data Analysis		Strand 7 Mathematical Process	
5.NS.1	✓	*5.C.1	✓+	*5.AT.1	✓+	5.G.1	✓	*5.M.1	✓+	*5.DS.1	✓	*PS.1	✓+
5.NS.2	✓	5.C.2	✓+	*5.AT.2	✓+	*5.G.2	✓	5.M.2	✓	5.DS.2	✓	*PS.2	✓+
5.NS.3	✓–	5.C.3	✓–	*5.AT.3	✓			*5.M.3	✓+			*PS.3	✓+
5.NS.4	✓–	5.C.4	✓+	*5.AT.4	✓			5.M.4	✓			*PS.4	✓+
5.NS.5	✓–	5.C.5	✓+	*5.AT.5	✓+			*5.M.5	✓+			*PS.5	✓+
5.NS.6	✓	5.C.6	✓–	5.AT.6	✓			*5.M.6	✓			*PS.6	✓+
		5.C.7	✓+	5.AT.7	✓							*PS.7	✓+
		*5.C.8	✓+	*5.AT.8	✓							*PS.8	✓+
		*5.C.9	✓+										

- *The Mathematical Process Standards should be taught on a regular basis in connection with the content standards. The Process Standards will be assessed in conjunction with content standards.*
- *When creating curriculum, consider content that may be taught after ISTEP+ Part 1 (Applied Skills; March), given the standards that may be assessed on ISTEP+ Part 1 and considering what makes sense instructionally. It is important not to leave too many standards to be taught after March. ISTEP+ Part 1 contributes approximately 30% to a student’s scale score, and ISTEP+ Part 2 (Multiple-Choice and Technology-Enhanced Items; April/May) represents the remaining approximately 70%. As a starting point to creating curriculum, consider teaching some of the following standards after the ISTEP+ Part 1 Assessment: 5.NS.(3-5), 5.C.6, 5.DS.2*

**Instructional and Assessment Guidance**  
**ISTEP+: Mathematics – Grade 6**  
**2017-18**

Symbol	Content Priority	Approximate Instructional Time
✓+	Critical	50 – 75%
✓	Important	25 – 50%
✓–	Additional	5 – 10%

*\* Represents standards that may be assessed on ISTEP+ Part 1 and ISTEP+ Part 2. All standards may be assessed on ISTEP+ Part 2.*

Strand 1 Number Sense		Strand 2 Computation		Strand 3 Algebra & Functions		Strand 4 Geometry & Measurement		Strand 5 Data Analysis & Statistics		Strand 6 Mathematical Process	
6.NS.1	✓	6.C.1	✓+	6.AF.1	✓+	6.GM.1	✓	6.DS.1	✓–	*PS.1	✓+
6.NS.2	✓–	6.C.2	✓+	6.AF.2	✓	6.GM.2	✓	6.DS.2	✓	*PS.2	✓+
6.NS.3	✓+	*6.C.3	✓+	*6.AF.3	✓	*6.GM.3	✓	6.DS.3	✓+	*PS.3	✓+
6.NS.4	✓	6.C.4	✓–	6.AF.4	✓–	*6.GM.4	✓	6.DS.4	✓	*PS.4	✓+
6.NS.5	✓+	6.C.5	✓	*6.AF.5	✓+	*6.GM.5	✓			*PS.5	✓+
6.NS.6	✓–	*6.C.6	✓+	6.AF.6	✓	6.GM.6	✓–			*PS.6	✓+
6.NS.7	✓			6.AF.7	✓					*PS.7	✓+
6.NS.8	✓			*6.AF.8	✓					*PS.8	✓+
6.NS.9	✓			6.AF.9	✓						
*6.NS.10	✓+			*6.AF.10	✓+						

- The Mathematical Process Standards should be taught on a regular basis in connection with the content standards. The Process Standards will be assessed in conjunction with content standards.*
- When creating curriculum, consider content that may be taught after ISTEP+ Part 1 (Applied Skills; March), given the standards that may be assessed on ISTEP+ Part 1 and considering what makes sense instructionally. It is important not to leave too many standards to be taught after March. ISTEP+ Part 1 contributes approximately 30% to a student's scale score, and ISTEP+ Part 2 (Multiple-Choice and Technology-Enhanced Items; April/May) represents the remaining approximately 70%. As a starting point to creating curriculum, consider teaching some of the following standards after the ISTEP+ Part 1 Assessment: 6.DS.(1-4), 6.GM.(1-2), 6.GM.6, 6.NS.6, 6.AF.6.*

**Instructional and Assessment Guidance**  
**ISTEP+: Mathematics – Grade 7**  
**2017-18**

Symbol	Content Priority	Approximate Instructional Time
✓+	Critical	50 – 75%
✓	Important	25 – 50%
✓–	Additional	5 – 10%

*\* Represents standards that may be assessed on ISTEP+ Part 1 and ISTEP+ Part 2. All standards may be assessed on ISTEP+ Part 2.*

Strand 1 Number Sense		Strand 2 Computation		Strand 3 Algebra & Functions		Strand 4 Geometry & Measurement		Strand 5 Data Analysis, Stats., & Prob.		Strand 6 Mathematical Process	
7.NS.1	✓–	7.C.1	✓–	*7.AF.1	✓	7.GM.1	✓–	7.DSP.1	✓–	*PS.1	✓+
7.NS.2	✓	7.C.2	✓–	*7.AF.2	✓+	7.GM.2	✓	7.DSP.2	✓–	*PS.2	✓+
7.NS.3	✓	7.C.3	✓–	7.AF.3	✓	7.GM.3	✓	7.DSP.3	✓	*PS.3	✓+
		7.C.4	✓–	7.AF.4	✓	7.GM.4	✓	7.DSP.4	✓	*PS.4	✓+
		7.C.5	✓	7.AF.5	✓	*7.GM.5	✓+	7.DSP.5	✓	*PS.5	✓+
		*7.C.6	✓+	7.AF.6	✓	*7.GM.6	✓+	7.DSP.6	✓	*PS.6	✓+
		7.C.7	✓+	7.AF.7	✓	*7.GM.7	✓	7.DSP.7	✓	*PS.7	✓+
		7.C.8	✓+	7.AF.8	✓					*PS.8	✓+
				*7.AF.9	✓						

- *The Mathematical Process Standards should be taught on a regular basis in connection with the content standards. The Process Standards will be assessed in conjunction with content standards.*
- *When creating curriculum, consider content that may be taught after ISTEP+ Part 1 (Applied Skills; March), given the standards that may be assessed on ISTEP+ Part 1 and considering what makes sense instructionally. It is important not to leave too many standards to be taught after March. ISTEP+ Part 1 contributes approximately 30% to a student's scale score, and ISTEP+ Part 2 (Multiple-Choice and Technology-Enhanced Items; April/May) represents the remaining approximately 70%. As a starting point to creating curriculum, consider teaching some of the following standards after the ISTEP+ Part 1 Assessment: 7.DSP.(1-7), 7.GM.(1-4), 7.NS.(1-3), 7.AF.3.*

**Instructional and Assessment Guidance**  
**ISTEP+: Mathematics – Grade 8**  
**2017-18**

Symbol	Content Priority	Approximate Instructional Time
✓+	Critical	50 – 75%
✓	Important	25 – 50%
✓–	Additional	5 – 10%

*\* Represents standards that may be assessed on ISTEP+ Part 1 and ISTEP+ Part 2. All standards may be assessed on ISTEP+ Part 2.*

Strand 1 Number Sense		Strand 2 Computation		Strand 3 Algebra & Functions		Strand 4 Geometry & Measurement		Strand 5 Data Analysis, Stats., & Prob.		Strand 6 Mathematical Process	
8.NS.1	✓	*8.C.1	✓+	*8.AF.1	✓+	8.GM.1	✓	*8.DSP.1	✓	*PS.1	✓+
8.NS.2	✓	8.C.2	✓	*8.AF.2	✓	8.GM.2	✓	*8.DSP.2	✓	*PS.2	✓+
8.NS.3	✓			8.AF.3	✓	8.GM.3	✓–	*8.DSP.3	✓	*PS.3	✓+
8.NS.4	✓			8.AF.4	✓	8.GM.4	✓	8.DSP.4	✓–	*PS.4	✓+
				8.AF.5	✓	8.GM.5	✓	8.DSP.5	✓	*PS.5	✓+
				*8.AF.6	✓+	8.GM.6	✓	8.DSP.6	✓–	*PS.6	✓+
				8.AF.7	✓	8.GM.7	✓–			*PS.7	✓+
				8.AF.8	✓	*8.GM.8	✓+			*PS.8	✓+
						8.GM.9	✓				

- *The Mathematical Process Standards should be taught on a regular basis in connection with the content standards. The Process Standards will be assessed in conjunction with content standards.*
- *When creating curriculum, consider content that may be taught after ISTEP+ Part 1 (Applied Skills; March), given the standards that may be assessed on ISTEP+ Part 1 and considering what makes sense instructionally. It is important not to leave too many standards to be taught after March. ISTEP+ Part 1 contributes approximately 30% to a student's scale score, and ISTEP+ Part 2 (Multiple-Choice and Technology-Enhanced Items; April/May) represents the remaining approximately 70%. As a starting point to creating curriculum, consider teaching some of the following standards after the ISTEP+ Part 1 Assessment: 8.DSP.(4-6), 8.GM.(1-7), 8.GM.9.*