



New Mexico Instructional Scope Geometry Conditional Probability and the Rules of Probability Guide

The purpose of this tool is to help educators understand each of the grade level standards and how those standards connect to the students' overall preparation for college and career readiness.

The NMIS is a teacher-influenced tool, designed to provide instructional planning support at the programmatic level for districts and instructional level for teachers. Its foundation stems from the vision and mission of the PED and came into existence to assure that students in NM will be engaged in a culturally and linguistically responsive educational system that meets the social, emotional, and academic needs of ALL students. This is also rooted in the belief that all students must have access to on-grade-level standards, focusing on acceleration. The purpose of this tool is to help educators understand each of the grade level standards and how those standards connect to the students' overall preparation for college and career readiness.

Standards are defined as the most critical prerequisite skills and knowledge. This document is color-coded to reflect both anchor and priority standards. Though previous emphasis was placed on priority standards to address lost learning due to COVID-19, New Mexico teachers should note that moving forward, while priority standards allow for acceleration of learning, **all** standards should be addressed in instruction throughout the school year.

In this guide you will find:

- A [breakdown](#) of each of the grade level standards within the cluster, including:
 - Standards of Mathematical Practice
 - Common Misconceptions
 - Identification of Priority Standards, as identified by NMPED.
 - Level of Rigor Identification
- Sample aligned [assessment](#) items
- Suggested Student Discourse Guide
- A [multilayered system of supports \(MLSS\) and culturally and linguistically responsive instruction \(CLR\) guide](#)

Key		
	<i>Priority Standard</i>	Priority standards, as identified by NMPED, are denoted with red highlighting. Priority standards are the most critical prerequisite skills and knowledge a student needs. This does not mean that these are only standards required to be taught, just these are the standards that will allow for the acceleration the students of New Mexico need during this time.
	<i>Conceptual Understanding</i>	Conceptual Understanding standards help students build a deep understanding of the how and why of mathematics.
	<i>Application</i>	Application standards help students identify the appropriate concepts and skills to tackle novel real-world problems .
	<i>Procedural Skill and Fluency</i>	Procedural standards help students develop efficiency and accuracy in computations.

Standards Breakdown

- Understand independence and conditional probability and use them to interpret data
 - [HSS.CP.A.1](#)
 - [HSS.CP.A.2](#)
 - [HSS.CP.A.3](#)
 - [HSS.CP.A.4](#)
 - [HSS.CP.A.5](#)
- Use the rules of probability to compute probabilities of compound events.
 - [HSS.CP.B.6](#)
 - [HSS.CP.B.7](#)

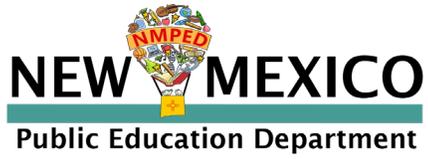
Grade	CCSS Domain	CCSS Cluster
G	Conditional Probability & The Rules of Probability	Understand independence and conditional probability and use them to interpret data
Cluster Standard: HSS.CP.A.1		
Standard		Standards for Mathematical Practice
Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not").		<ul style="list-style-type: none"> ● SMP2: Reason abstractly and quantitatively. ● SMP6: Attend to precision.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● A probability model may consist of a list or description of possible outcomes (the sample space) each of which is assigned a certain probability. Probability rules can be developed and understood through the use of the sample space. When events are independent, the outcome of the first event does not change the sample space for subsequent events. Independent events, knowing one event has occurred affects the likelihood of another event occurring. Use of two-way frequency tables helps learners develop conceptual understanding of conditional probability. The use of tables, symbols, and real-world scenarios are emphasized. Learners consider the context of situations as they build mathematical models, interpret events, and explain results in terms of a probability model. 		<ul style="list-style-type: none"> ● Analyze a sample space to describe an event, union of events, intersection of events and complement of event ● Use tree diagrams, organized lists, tables, and/or Venn diagrams to represent sample spaces. ● Determine unions of sample spaces. ● Determine intersections of sample spaces ● Determine complements of sample sets. ● Represent unions, intersections, and complements using set notation.
DOK		Blooms

2-3	Apply, Analyze
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Grade	CCSS Domain	CCSS Cluster
G	Conditional Probability & The Rules of Probability	Understand independence and conditional probability and use them to interpret data
Cluster Standard: HSS.CP.A.2		
Standard		Standards for Mathematical Practice
Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.		<ul style="list-style-type: none"> ● SMP2: Reason abstractly and quantitatively. ● SMP3: Construct viable arguments and critique the reasoning of others.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● A probability model may consist of a list or description of possible outcomes (the sample space) each of which is assigned a certain probability. Probability rules can be developed and understood through the use of the sample space. When events are independent, the outcome of the first event does not change the sample space for subsequent events. Independent events, knowing one event has occurred affects the likelihood of another event occurring. Use of two-way frequency tables helps learners develop conceptual understanding of conditional probability. The use of tables, symbols, and real-world scenarios are emphasized. Learners consider the context of situations as they build mathematical models, 		<ul style="list-style-type: none"> ● Explain and apply the formula to determine if two events are independent. ● Test for independence using the definition of independent events. ● State problems' independence and dependence contextually.

interpret events, and explain results in terms of a probability model.	
DOK	Blooms
1-3	Understand, Apply, Analyze

Grade	CCSS Domain	CCSS Cluster
G	Conditional Probability & The Rules of Probability	Understand independence and conditional probability and use them to interpret data
Cluster Standard: HSS.CP.A.3		
Standard		Standards for Mathematical Practice
<p>Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.</p>		<ul style="list-style-type: none"> ● SMP2: Reason abstractly and quantitatively. ● SMP3: Construct viable arguments and critique the reasoning of others. ● SMP6: Attend to precision.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● A probability model may consist of a list or description of possible outcomes (the sample space) each of which is assigned a certain probability. Probability rules can be developed and understood through the use of the sample space. When events are independent, the outcome of the first event does not change the sample space for subsequent events. Independent events, knowing one event has occurred affects the likelihood of another event occurring. Use of two-way frequency tables helps learners develop conceptual understanding of conditional probability. The use of tables, symbols, and real-world scenarios are emphasized. Learners consider the context of situations as they build mathematical models, interpret events, and explain results in terms of a probability model. 		<ul style="list-style-type: none"> ● Read and state conditional probabilities of two events and explain how they are different. ● Apply conditional probability to argue if two events are independent. ● Calculate conditional probabilities. ● Relate conditional probability to relative frequency tables and/or tree diagrams. ● Use conditional probabilities to determine whether events are independent.



New Mexico Instructional Scope
**Geometry Conditional Probability and the
Rules of Probability Guide**

DOK	Blooms
1-2	Understand, Apply

Grade	CCSS Domain	CCSS Cluster
G	Conditional Probability & The Rules of Probability	Understand independence and conditional probability and use them to interpret data
Cluster Standard: HSS.CP.A.4		
Standard		Standards for Mathematical Practice
<p>Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. <i>For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.</i></p>		<ul style="list-style-type: none"> ● SMP2: Reason abstractly and quantitatively. ● SMP3: Construct viable arguments and critique the reasoning of others. ● SMP4: Model with mathematics.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● A probability model may consist of a list or description of possible outcomes (the sample space) each of which is assigned a certain probability. Probability rules can be developed and understood through the use of the sample space. When events are independent, the outcome of the first event does not change the sample space for subsequent events. Independent events, knowing one event has occurred affects the likelihood of another event occurring. Use of two-way frequency tables helps learners develop conceptual understanding of conditional probability. The use of tables, symbols, and real-world scenarios are emphasized. Learners consider the context of situations as they build mathematical models, 		<ul style="list-style-type: none"> ● Interpret and organize data to describe events and independence of events using 2-way frequency tables ● Collect sample data from a real-world situation in order to examine conditional probabilities and independence of events. ● Interpret and make sense of these in context of the situation.

interpret events, and explain results in terms of a probability model.	
DOK	Blooms
2-3	Apply, Analyze

Grade	CCSS Domain	CCSS Cluster
G	Conditional Probability & The Rules of Probability	Understand independence and conditional probability and use them to interpret data
Cluster Standard: HSS.CP.A.5		
Standard		Standards for Mathematical Practice
<p>Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. <i>For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.</i></p>		<ul style="list-style-type: none"> ● SMP1: Make sense of problems and persevere in solving them. ● SMP4: Model with mathematics.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● A probability model may consist of a list or description of possible outcomes (the sample space) each of which is assigned a certain probability. Probability rules can be developed and understood through the use of the sample space. When events are independent, the outcome of the first event does not change the sample space for subsequent events. Independent events, knowing one event has occurred affects the likelihood of another event occurring. Use of two-way frequency tables helps learners develop conceptual understanding of conditional probability. The use of tables, symbols, and real-world scenarios are emphasized. Learners consider the context of situations as they build mathematical models, interpret events, and explain results in terms of a probability model. 		<ul style="list-style-type: none"> ● Analyze a scenario to describe conditional probability in terms of a real-life context ● Use conditional probability to make decisions and justify claims of relationships to contextual situations. ● Interpret conditional probability and independence across a variety of situations. ● Distinguish between association and causality.
DOK		Blooms
2-3		Apply, Analyze

Common Misconceptions

- Students may think that two events occurring is as simple as adding their probabilities.
- Students may fail to check both parts of the algorithm. Students may also assume if $p(a)=p(a|b)$ then $p(b)$ must equal $p(b|a)$.
- Students may also have an incomplete understanding of conditional probability.

Grade	CCSS Domain	CCSS Cluster
G	Conditional Probability & The Rules of Probability	Use the rules of probability to compute probabilities of compound events
Cluster Standard: HSS.CP.B.6		
Standard		Standards for Mathematical Practice
Find the conditional probability of A given B as the fraction of B 's outcomes that also belong to A , and interpret the answer in terms of the model.		<ul style="list-style-type: none"> ● SMP1: Make sense of problems and persevere in solving them. ● SMP2: Reason abstractly and quantitatively. ● SMP4: Model with mathematics. ● SMP6: Attend to precision.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● The development and uses of algorithms are built on conceptual understanding as concepts of sample spaces are explored and deepened. Probabilities are described in terms of the intersections and unions of events. Venn diagrams and two-way frequency tables will be generalized to discover patterns and create algorithms and formulas that can be used in routine fashion. Although learners will use these formulas strategically to determine different values, the use of tree diagrams, organized lists, and other tools will help make sense of these abstractions. 		<ul style="list-style-type: none"> ● Describe how to find conditional probabilities ● Calculate conditional probabilities ● Explain conditional probability in context of a scenario ● Interpret a given scenario and relate context to conditional probability, both abstractly and mathematically ● Justify reasoning in making conditional probability arguments
DOK		Blooms
1-3		Understand, Apply, Evaluate

Grade	CCSS Domain	CCSS Cluster
G	Conditional Probability & The Rules of Probability	Use the rules of probability to compute probabilities of compound events
Cluster Standard: HSS.CP.B.7		
Standard		Standards for Mathematical Practice
Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model.		<ul style="list-style-type: none"> ● SMP2: Reason abstractly and quantitatively. ● SMP3: Construct viable arguments and critique the reasoning of others. ● SMP4: Model with mathematics. ● SMP6: Attend to precision.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● The development and uses of algorithms are built on conceptual understanding as concepts of sample spaces are explored and deepened. Probabilities are described in terms of the intersections and unions of events. Venn diagrams and two-way frequency tables will be generalized to discover patterns and create algorithms and formulas that can be used in routine fashion. Although learners will use these formulas strategically to determine different values, the use of tree diagrams, organized lists, and other tools will help make sense of these abstractions. 		<ul style="list-style-type: none"> ● Calculate the union of two events ● Explain the union of two events in terms of the context of the problem ● Given a scenario, interpret what the union of two events represents and calculate the probability
DOK		Blooms
1-2		Understand, Apply

Common Misconceptions

- Students may struggle with determining the correct denominator. They may use the total rather than the specified event.
- Students may struggle to understand the “overlap” in compound events.

ASSESSMENT GUIDE

- [Understand independence and conditional probability and use them to interpret data](#)
- [Use the rules of probability to compute probabilities of compound events](#)

<i>Grade</i>	<i>CCSS Domain</i>	<i>CCSS Strand</i>
G	Conditional Probability & The Rules of Probability	Understand independence and conditional probability and use them to interpret data
	Sample Task #1 (Constructed Response)	

Standards Aligned Instructionally Embedded Formative Assessment Resources:

SAT Item #: 1474700 The linked assessment question addresses S-CPA.A, specifically the question requires students to read a two-way frequency table and state conditional probability in context.

CollegeBoard		Question ID 1474700					
Assessment SAT	Test Math	Cross-Test and Subscore Problem Solving and Data Analysis	Difficulty Medium	Primary Dimension Problem Solving and Data Analysis	Secondary Dimension Probability and conditional probability	Tertiary Dimension 1. Compute and interpret probability and conditional probability in simple contexts.	Calculator Calculator

Number of Adults Contracting Colds

	Cold	No cold	Total
Vitamin C	33	129	150
Sugar pill	33	117	150
Total	66	246	300

The table shows the results of a research study that investigated the therapeutic value of vitamin C in preventing colds. A random sample of 300 adults received either a vitamin C pill or a sugar pill each day during a 2-week period, and the adults reported whether they contracted a cold during that time period. What proportion of adults who received a sugar pill reported contracting a cold?

Question Difficulty: Medium

- A. $\frac{11}{18}$
- B. $\frac{11}{50}$
- C. $\frac{9}{50}$
- D. $\frac{11}{100}$

Choice B is correct. A total of 150 adults received the sugar pill. Of those, 33 reported contracting a cold. Therefore, $\frac{33}{150}$, or the equivalent $\frac{11}{50}$, is the proportion of adults receiving a sugar pill who reported contracting a cold.

Choice A is incorrect. This is the proportion of adults receiving a sugar pill and contracting a cold to all adults contracting a cold ($\frac{33}{54}$). Choice C is incorrect. This is the proportion of adults who reported contracting a cold to all the participants in the study ($\frac{66}{300} = \frac{9}{50}$). Choice D is incorrect. This is the proportion of adults who received a sugar pill and reported contracting a cold to all the participants in the study ($\frac{33}{300} = \frac{11}{100}$).

Grade	CCSS Domain	CCSS Strand
G	Conditional Probability & The Rules of Probability	Use the rules of probability to compute probabilities of compound events
	Sample Task #1 (Constructed Response)	

Standards Aligned Instructionally Embedded Formative Assessment Resources:

SAT Item #: 4168721 The linked assessment question addresses S-SCPA.A, specifically the question requires students to read a two-way frequency table and state compound probability in context.

CollegeBoard		Question ID 4168721					
Assessment SAT	Test Math	Cross-Test and Subscore Problem Solving and Data Analysis	Difficulty Medium	Primary Dimension Problem Solving and Data Analysis	Secondary Dimension Probability and conditional probability	Tertiary Dimension 1. Compute and interpret probability and conditional probability in simple contexts.	Calculator Calculator

Observed Mating among Fruit Flies

		Female fruit fly group		Total
		Female raised on starch	Female raised on maltose	
Male fruit fly group	Male raised on starch	22	9	31
	Male raised on maltose	9	20	29
Total		30	29	59

The table above shows the observed mating frequencies among a group of fruit flies raised on either a starch medium or a maltose medium. What fraction of the observed matings were between fruit flies that were raised on the same medium?

Question Difficulty: Medium

- A. $\frac{9}{31}$
- B. $\frac{17}{59}$
- C. $\frac{31}{59}$
- D. $\frac{42}{59}$

MLSS AND CLR GUIDE

- [Understand independence and conditional probability and use them to interpret data](#)
- [Use the rules of probability to compute probabilities of compound events](#)

CCSS Domain		CCSS Cluster	
CONDITIONAL PROBABILITY & THE RULES OF PROBABILITY		Understand independence and conditional probability and use them to interpret data	
Culturally and Linguistically Responsive Instruction			
Relevance to Families and Communities	During a unit focused on independence and conditional probability, use them to interpret data, consider options for learning from your families and communities the cultural and linguistic ways mathematics exists outside of school to create stronger home to school connections for students. For students, consider what types of conditional probability occur in the students' lives outside of school.		
Cross-Curricular Connections	Social Studies: Connect to census data, voter demographics Forensic Science: Connect to crime scene analysis given suspect characteristics		
Validate/Affirm/Build/Bridge	<ul style="list-style-type: none"> • <i>How can you design your mathematics classroom to intentionally and purposefully legitimize the home culture and languages of students and reverse the negative stereotypes regarding the mathematical abilities of students of marginalized cultures and languages?</i> • <i>How can you create connections between the cultural and linguistic behaviors of your students' home culture and language, the culture and language of school mathematics to support students in creating mathematical</i> 	<ul style="list-style-type: none"> • Tasks: The type of mathematical tasks and instruction students receive provides the foundation for students' mathematical learning and their mathematical identity. Tasks and instruction that provide greater access to mathematics and convey the creativity of mathematics by allowing for multiple solution strategies and development of the standards for mathematical practice leads to more students viewing themselves as capable mathematicians. The types of mathematical tasks are critical because the problems presented to students would need to reflect a relevance to the students' life experiences. This would offer a meaning to the student that the math can go beyond the classroom. 	

	<i>identities as capable mathematicians that can use mathematics within school and society?</i>	
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Planning for Multi-Layered System of Supports

Vertical Alignment

<i>Previous Learning</i>	<i>Current Learning</i>	<i>Future Learning</i>
<ul style="list-style-type: none"> In previous years, learners used sample spaces to represent compound events in organized lists, tables, and tree diagrams. Learners are initially introduced to probability in 7th grade. They have investigated chance processes and developed probability models using experimental and theoretical probability. 	<ul style="list-style-type: none"> Learners will use their knowledge of conditional probability and their skills of determining conditional probability to make decisions for real world situations. They will also expand the knowledge of this cluster to learn specific rules such as the Addition Rule. This knowledge will lead into permutations and combinations. 	<ul style="list-style-type: none"> Learners will extend their learning to develop and make sense of the Multiplication Rule and Addition Rule. Future learning such as binomial distribution and statistical significance build upon conditional probability. Other applications are found in calculus, statistics, engineering, and the sciences.

Suggested Instructional Strategies

Pre-Teach

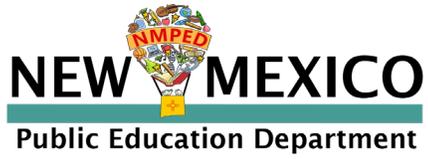
<i>Level of Intensity</i>	<i>Essential Question</i>	<i>Examples</i>
Targeted	<i>What pre-teaching will prepare students to productively struggle with the mathematics for this cluster within your HQIM?</i>	Some learners may benefit from targeted pre-teaching that focuses on independence and conditional probability and use them to interpret data because students will need to develop an appropriate vocabulary usage for new subjects as well as tying it to previously learned material
Intensive	<i>What critical understandings will</i>	7.SPC.7: This standard provides a foundation for work with independence and conditional probability and use

	<i>prepare students to access the mathematics for this cluster?</i>	them to interpret data because this previously learned standard forms the foundation of understanding probability and probability models. If students have unfinished learning within this standard, based on assessment data, consider ways to provide intensive pre-teaching support prior to the start of the unit to ensure students are ready to access grade level instruction and assignments.
Re-Teach		
<i>Level of Intensity</i>	<i>Essential Question</i>	<i>Examples</i>
Targeted	What formative assessment data (e.g., tasks, exit tickets, observations) will help identify content needing to be revisited during a unit?	For example, students may benefit from re-engaging with content during a unit on independent events and conditional probability and use them to interpret data by clarifying mathematical ideas and/or concepts through a short mini-lesson because precise usage of terms in this cluster is the key to future understanding.
Intensive	What assessment data will help identify content needing to be revisited for intensive interventions?	For example, some students may benefit from intensive extra time during and after a unit independent events and conditional probability and use them to interpret data by confronting student misconceptions because there will be much confusion of terminology here and that will lead to errors in calculations later.
Extension		
<i>Essential Question</i>		<i>Examples</i>
What type of extension will offer additional challenges to 'broaden' your student's knowledge of the mathematics developed within your HQIM?		Some learners may benefit from an extension such as in-depth, self-directed exploration of self-selected topics to interpret data because students will be able to analyze experiments and studies of their own choosing to further their understanding of independence and conditional probability.

CCSS Domain		CCSS Cluster
CONDITIONAL PROBABILITY & THE RULES OF PROBABILITY		Use the rules of probability to compute probabilities of compound events
Culturally and Linguistically Responsive Instruction		
Relevance to Families and Communities	During a unit focused on the rules of probability to compute probabilities of compound events., consider options for learning from your families and communities the cultural and linguistic ways mathematics exists outside of school to create stronger home to school connections for students. For example, consider what types of compound probability a student will experience on a daily basis to form a foundation for this concept.	
Cross-Curricular Connections	Social Studies: Connect to voter demographics Science: Connect to crime science investigation/analysis	
Validate/Affirm/Build/Bridge	<ul style="list-style-type: none"> • <i>How can you design your mathematics classroom to intentionally and purposefully legitimize the home culture and languages of students and reverse the negative stereotypes regarding the mathematical abilities of students of marginalized cultures and languages?</i> • <i>How can you create connections between the cultural and linguistic behaviors of your students' home culture and language, the culture and language of school</i> 	<ul style="list-style-type: none"> • Goal Setting: Setting challenging but attainable goals with students can communicate the belief and expectation that all students can engage with interesting and rigorous mathematical content and achieve in mathematics. Unfortunately, the reverse is also true, when students encounter low expectations through their interactions with adults and the media, they may see little reason to persist in mathematics, which can create a vicious cycle of low expectations and low achievement. For example, when studying the rules of probability to compute probabilities of compound events, goal setting is critical because in this cluster of Statistics and Probability its necessary to be organized and complete in which procedure must be used at a given time. Helping a student set a piecewise organizational goal will assist. This can be organized linearly, as a graphic organizer, or any method of the students choosing.

	<p><i>mathematics to support students in creating mathematical identities as capable mathematicians that can use mathematics within school and society?</i></p>	
<p>Planning for Multi-Layered System of Supports</p>		
<p>Vertical Alignment</p>		
<p><i>Previous Learning</i></p>	<p><i>Current Learning</i></p>	<p><i>Future Learning</i></p>
<ul style="list-style-type: none"> In grade 7, learners have investigated chance processes, and developed, used, and evaluated probability models. They have learned that probability of a chance event is a number between 0 and 1 (7.SP.5) and found probabilities of compound events (7.SP.8). 	<ul style="list-style-type: none"> Learners are expanding their understanding and skills explored and learned in the G.SP.A cluster. They are discovering that conditional probability can be found from a narrowed subset of the original sample space. 	<ul style="list-style-type: none"> Future learning such as binomial distribution and statistical significance build upon conditional probability. Other applications are found in calculus, statistics, engineering, and the sciences.
<p>Suggested Instructional Strategies</p>		
<p>Pre-Teach</p>		
<p><i>Level of Intensity</i></p>	<p><i>Essential Question</i></p>	<p><i>Examples</i></p>
<p>Targeted</p>	<p><i>What pre-teaching will prepare students to productively struggle with the mathematics for this cluster within your HQIM?</i></p>	<p>Some learners may benefit from targeted pre-teaching that provides additional time for confusion to happen with new mathematical ideas when studying the rules of probability to compute probabilities of compound events because this cluster focuses on compound probability with the introduction of combinations and permutations which take practice and perseverance to master</p>
<p>Intensive</p>	<p><i>What critical</i></p>	<p>7.SPC.8: This standard provides a foundation for work</p>

	<i>understandings will prepare students to access the mathematics for this cluster?</i>	with the rules of probability to compute probabilities of compound events because this older standard introduces the formal definitions of compound events and calls for modeling of the standard to represent its situations. If students have unfinished learning within this standard, based on assessment data, consider ways to provide intensive pre-teaching support prior to the start of the unit to ensure students are ready to access grade level instruction and assignments.
Re-Teach		
<i>Level of Intensity</i>	<i>Essential Question</i>	<i>Examples</i>
Targeted	What formative assessment data (e.g., tasks, exit tickets, observations) will help identify content needing to be revisited during a unit?	For example, students may benefit from re-engaging with content during a unit on computing probabilities of compound events by providing specific feedback to students on their work through a short mini-lesson because by pinpointing minor errors in a multistep process we can perfect our processes.
Intensive	What assessment data will help identify content needing to be revisited for intensive interventions?	For example, some students may benefit from intensive extra time during and after a unit on computing probabilities of compound events by addressing conceptual understanding because by sitting down and helping a student analyze their process, we can bring them to a deeper level of understanding of their errors as well as the content.
Extension		
<i>Essential Question</i>		<i>Examples</i>
What type of extension will offer additional challenges to 'broaden' your student's knowledge of the mathematics developed within your HQIM?		Some learners may benefit from an extension such as the opportunity to understand concepts more quickly and explore them in greater depth than other students. When studying the rules of probability to compute probabilities of compound events students working together opens up new paths of thinking and reasoning for them.



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