

Common Core Standards - Resource Page

The resources below have been created to assist teachers' understanding and to aid instruction of this standard.

Domain	<p>Standard: S.CP.4 - 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. 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. *(Modeling Standard)</p>
<p><u>Conditional Probability and the Rules of Probability</u> Understand independence and conditional probability and use them to interpret data</p>	<p><u>Questions to Focus Learning</u> How is categorical data organized to reveal patterns in the data? Categorical data may be organized into a table to find associations between variables.</p> <p><u>Student Friendly Objectives</u> <i>Reasoning Targets</i></p> <ul style="list-style-type: none"> I can organize categorical data in two-way frequency tables. I can interpret joint probability in the context of the data. I can interpret marginal probability in the context of the data. I can interpret conditional probability in the context of the data. I can determine if two events are independent. <p><i>Performance Targets</i></p> <ul style="list-style-type: none"> I can conduct a random sample and record data in a two-way frequency table.

	<p><u>Vocabulary</u></p> <ul style="list-style-type: none">associationcategorical variableconditional probabilitydependent eventsexperimental probabilityindependent eventsjoint probabilitymarginal probabilityquantitativerandom sampletheoretical probabilitytwo-way frequency table <p><u>Teacher Tips</u></p> <p>Build on work with two-way tables from S.ID.5 to develop understanding of conditional probability and independence.</p> <p><u>Vertical Progression</u></p> <p>S.CP.5 - Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. 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. *(Modeling Standard)</p>
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The above information and more can be accessed for free on the [Wiki-Teacher](#) website.

Direct link for this standard: [S.CP.4](#)