



The Sutton Academy

Knowledge Rich Curriculum Plan

A level maths/ statistics/ Conditional probability.

Lesson/Learning Sequence	Intended Knowledge: <i>Students will know that...</i>	Tiered Vocabulary	Prior Knowledge: <i>In order to know this students, need to already know that...</i>	Assessment
To learn how to use set notation	<ul style="list-style-type: none"> Students will know that the \cap means intersection. Students will know that \cup means union Students will know that A' means not A (compliment of A) 		students will need to know how to find probability Students will need to know basic set notation.	
To learn how to use conditional probability	<ul style="list-style-type: none"> Students will know that $P(B A)$ is the probability that B occurs given that A has already occurred. Students will know that for independent events $P(A B) = P(A B') = P(A)$ and $P(B A) = P(B A') = P(B)$ and this can be used to determine independence. Students will be able to solve conditional probability from a sample space. 		Students will need to have knowledge of set notation. Students will need to be able to find probability Students will draw sample spaces and bipartite tables.	
To learn how to calculate conditional probability from a Venn diagram.	<ul style="list-style-type: none"> Students will know how to calculate conditional probability from a Venn diagram Students will be able to draw a Venn diagram, given information about probability. 		Students will need to have knowledge of set notation. Students will need to be able to find probability Students will need to know how to construct probability from a venn diagram.	
To learn how to use the probability formulae to find conditional probability.	<ul style="list-style-type: none"> Students will need to that the addition formula for conditional probability is $P(A \cup B) = P(A) + P(B) - P(A \cap B)$ Students will know that the multiplication formula is $P(B A) = \frac{P(B \cap A)}{P(A)}$ so $P(B \cap A) = P(B A) \times P(A)$ Students will need to use the formula to find missing values 		Students will need to have knowledge of set notation. Students will need to be able to find probability Students will need to know how to construct probability from a venn diagram.	
To learn how to use conditional probability from tree diagrams.	<ul style="list-style-type: none"> Students will need to know how to use conditional probability with tree diagrams 		Students will need to know the conditional probability formula.	

