

# Introduction to Data Science - North Salem High School

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Unit	Modeling in Data Science
Lesson	<b>Topic:</b> KNN Regression <b>Content:</b> Introduction to KNN Regression
Learning Target(s)	I know and understand what KNN is and how it can be used.
Standard(s)	9-12.CT.1 Computational Thinking, Modeling and Simulation 9-12.CT.2 Computational Thinking, Data Analysis and Visualization 9-12.CT.3 Computational Thinking, Data Analysis and Visualization
Accompanying Documents	<a href="#">Lesson Slides</a>
Homework	<a href="#">KNN Video Homework</a>

Lesson Plan	
Warm Up	5 mins
Can you think of any other ways (other than linear regression) to predict a new value based on previously collected data?	
Lesson Body	30 mins
<b>Notes:</b> The teacher will explain what KNN regression is and how it works. The teacher will explain that KNN is a method in which new data points are predicted based on the values of their most similar data points. The teacher will explain that in order to do this, the algorithm needs to know both how many neighbors to base the decisions on and how to calculate the distance between two points.  The teacher will finish the notes section by showing <a href="#">this video</a> .	

Exit Ticket	5 mins
Why might you want to use KNN regression instead of linear regression?	