

# Prime Video Sports: Behind the Streams

## Note Catcher




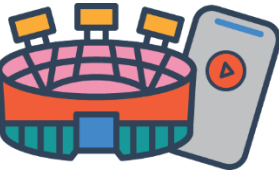
Name \_\_\_\_\_ Class \_\_\_\_\_

### The Big Questions:

- How do people, computer science, and artificial intelligence work together to bring reliable, high-quality sporting events to millions of people around the globe, in real-time?

**Directions:** At each stop on the tour, match the new vocabulary word with its definition using the word bank below. At the end of each stop, reflect on what you learned about our investigation question.

<b>infrastructure</b>	<b>encode</b>	<b>streaming</b>	<b>hardware</b>
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Stop	Vocabulary	Facts I learned at this stop/ Questions I still have
<p style="text-align: center;"><b>Introduction</b></p> 	<p><b>Streaming:</b> Delivering content, such as live sports, over the internet in real-time without having to download the entire file. (Video 2)</p>	
<p style="text-align: center;"><b>The Pathway of Data</b></p> 	<p><b>infrastructure</b> ▾ : Hardware, software, and people that work together to deliver a service. (Video 3)</p> <p><b>hardware</b> ▾ : The physical part of the infrastructure that makes up a computing system. (Video 3)</p> <p><b>encode</b> ▾ : The process of converting data into a digital format that can stream over the internet. (Video 3)</p>	



decode	computer vision	buffering	troubleshooting	artificial intelligence
latency	Content Delivery Network (CDN)	user stories	machine learning	redundancy

Stop	Vocabulary	Facts I learned at this stop/ Questions I still have
<p><b>The Pathway of Data (Continued)</b></p>	<p><b>Content Delivery Network (CDN)</b> : A system of computers and servers spread out around the world that deliver content to users in different locations. (Video 4)</p> <p><b>latency</b> : The delay between the live event happens and when an audience views it. (Video 4)</p> <p><b>decode</b> : Using a device or software to convert a digital format into video and audio in real-time. (Video 4)</p>	
<p><b>Troubleshooting</b></p>	<p><b>buffering</b> : Pre-loading bits of data to ensure a smooth video watching experience. (Video 5)</p> <p><b>troubleshooting</b> : A systematic approach to finding and resolving a problem. (Video 5)</p> <p><b>redundancy</b> : A system design in which a component is duplicated, so if it fails, there will be a backup. (Video 5)</p>	
<p><b>Building New Features &amp; Conclusion</b></p>	<p><b>user stories</b> : An explanation of a feature from the perspective of the customer. (Video 7)]</p> <p><b>artificial intelligence</b> : using algorithms and machine learning to perform tasks that typically require human intelligence (Video 8)</p> <p><b>machine learning</b> : The science of getting computers to perform or make predictions based on examples or past experiences. (Video 8)</p> <p><b>computer vision</b> : A type of machine learning that enables a computer to interpret and understand information from images and videos. (Video 8)</p>	

