

Strand <b>8.2</b>	Standard <b>8.2.6</b>	Episode 3	<b>Big Idea:</b> Digital signals are a more reliable way to store or transmit information than analog signals.
-------------------	-----------------------	-----------	---

<b>Title:</b> Characteristics of Analog versus Digital Signals	Time: 35-45 mins	CCCs <u>Structure and Function</u>	Practices <b>Obtain, evaluate and communicate</b>
--	------------------	---------------------------------------	--

**Narrative of episode:** Students watch a video clip to obtain information about analog and digital signals. They compare and contrast the types of signal. Then they write and share statements about the structure and function of analog and/or digital signals.

#### *Gather*

First, students will watch the Analog vs. Digital as Fast as Possible video clip through 4:07 twice. During the first viewing, they will focus on obtaining and recording information about **analog** signals in a T-chart. During the second viewing, they will focus on obtaining and recording information about **digital** signals in a T-chart.

#### *Reason*

Students will then compare and contrast analog and digital signals and highlight the information in their T-charts to identify similarities and differences. Discuss these as a class.

#### *Communicate*

Students will write one true statement about the structure or function of analog or digital signals.

*Note: Students should do this in a public and collaborative space (e.g. Google/Excel Form, chart paper with Post-It notes, Padlet, OneNote Collaboration Space, etc.) so that they can draw from one another's statements to develop their understanding and later apply it in writing.*

<p><b>Assessment:</b> The class discussion will allow for formative assessment of student understanding. Students will have a completed Characteristics of Analog versus Digital Signals T-chart for assessment. Students will also have collaborated to develop a list of statements, which can be used to guide student learning in the following episodes..</p>	<p><b>Materials, resources, handouts, etc.:</b> <a href="#">Analog vs Digital as Fast as Possible video clip</a> (through 4:07) <a href="#">Characteristics of Analog versus Digital Signals</a> (T-chart)</p>
--	--