

Encoding and Transmitting Analog Data

Encode: To convert information into a particular form.

Transmit: To send a signal.

Signal: A gesture, action, sound, or electrical pulse that conveys information.

1. Consider how you and your partner communicated. What information did you want to communicate? How could you encode it? How could you transmit it? Record your thoughts in the chart below.

Information (Message)	Encode	Transmit
<i>Analog Examples:</i> Color, Time, Weight, Temperature, Sound, Length	<i>Analog Examples:</i> Words, Microphone, AM/FM Radio Stations, Tape, Record	<i>Analog Examples:</i> Speech, PA System, Telephone, Radio, Hand Delivery

2. Choose something in the classroom to measure (e.g., shoe, temperature of the classroom, weight of a book, height of a desk or student). Without using a tool (e.g., measuring tape, thermometer, scale), how might you gather, encode, and transmit information?

- Describe the object you want to measure using an illustration and/or words.

- Encode your message using an analogy to convey your measurement (e.g., it is as long as a . . .).

- What tool would you use for this measurement?

- If you had to communicate this information to a friend who lives in another state, how would you transmit it?

3. How do you think digital signals or information compares to analog?
