

# Networks & the Internet: Network Communication & Organization Grade: 1

Standard:1.NI.NCO.01

Recognize that **computing devices** can be connected through physical or **wireless** pathways.

Essential Skills

Describe or show how **computing components**, such as monitors and keyboards are connected via physical or **wireless** pathways,

Essential Questions

How does a **network** allow us to exchange information and ideas with others?

What tasks does a network allow us to perform?

Explanation

Students will demonstrate an understanding that **computing devices** can transmit information and cause other devices to produce outputs (such as displays and printouts) if connected by wired or **wireless** connections. Computers are linked by **networks** that allow communication, exchange of ideas, and access to information locally, nationally and around the world.

Think of this as similar to....

You can talk to people who are far away on a telephone

## Implementation Examples—What would this look like in the classroom?

Title	Description	Link	Content Connection & Notes
<b>Communicating</b>	<p><b>Grade K</b>--Students send messages using light or sound (blinking light, paper cup and string telephone, pattern of drumbeats). They compare those methods to sending messages over the internet.</p> <p><b>Grade 1</b>--Students note that some of the messages (blinking light, drumbeats) are sent through the air, while others (paper cup and string telephone) are physically connected. Have students think of other examples and arrive at wired and wireless connections (such as keyboards, mice, headphones, etc.)</p> <p><b>Grade 2</b>--Create a network combining the light and sound devices to transmit a message and describe how the network could be used to build connections and aid communication across distances.</p>		<p>This lesson could align with <b>Social Studies</b> standards and the activity requires various supplies such as flashlights, paper clips, etc.</p>
<b>Computer Maps</b>	<p><b>Grade 1</b>--Students make a "map" of how what they type on a keyboard moves through the CPU, arrives at the monitor, and then possibly at a printer, projector or other device. This should be relevant to the students' own classroom and/or home and try to find both wired and wireless connections. Students can take a "field trip" to the office or other areas where connections may be different from what is in their classrooms.</p>		

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These annotations are a collaboration between [Maryland Center for Computing Education](#) and the [Maryland State Department of Education](#).