



Unit 4 Waves and Communication

Grade 4 Science

Unit Description:

Students will expand on the descriptions of wave patterns from Unit 1 in terms of amplitude, wavelength, and how waves can cause objects to move. The argument constructed in Unit 3 will be used to further explain how plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. Students will continue to provide explanations that describe how animals receive different types of information through their senses, process the information in their brains, and respond to the information in different ways.

Science Standards:

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| 4-PS4-1 | Develop a model of waves to describe patterns in terms of amplitude and wavelength and to show that waves can cause objects to move. |
| 4-LS1-1 | Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. |
| 4-LS1-2 | Construct an explanation to describe how animals receive different types of information through their senses, process the information in their brains, and respond to the information in different ways. |

Enduring Understandings- Unit Anchor Phenomenon:

Birds can see in UV.

Essential Questions- Reflective Summaries:

- Create a model to explain how bats communicate with one another. Explain how other animals use communication similar to bats to prey on them.
- Construct an argument with supporting evidence that animals and plants have internal and external structures that function to support survival, growth, behavior, and reproduction.
- Compare how bats receive and process information.

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| | <ul style="list-style-type: none">• Compare how birds use UV to receive and process information.• Create a model to explain how bats, birds, or other animals communicate with one another.• Construct an argument with supporting evidence that animals and plants have internal and external structures that function to support survival, growth, behavior, and reproduction.• Conduct an investigation to collect observations and measurements that prove heat can be transferred from place to place.• What do these concepts have in common?<ul style="list-style-type: none">○ Birds can see in UV.○ Male and female birds have different color plumage.○ Different birds sing different songs. |
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