

Unit 5: Basic Needs of Humans

Content Area: **Science**
Course(s): **Science - Grade K**
Time Period: **5 weeks**
Length: **5 Weeks**
Status: **Published**

Unit Overview

In this unit of study, students develop an understanding of what humans need to survive and the relationship between their needs and where they live. The crosscutting concept of *cause and effect* is called out as the organizing concept for the disciplinary core ideas. Students demonstrate grade-appropriate proficiency in *asking questions* and *defining problems*, and *in obtaining, evaluating, and communicating information*. Students are also expected to use these practices to demonstrate understanding of the core ideas.

Transfer

Students will be able to independently use their learning to...
understand that humans need water, air and food to survive.

Meaning

Understandings

Students will understand that...

humans need air, water, food and shelter to survive.

humans live in area where they can get what they need to survive and thrive.

Essential Questions

How do people impact the environment as they gather and use what they need to live and grow?

How can humans reduce their impact on the land, water, air, and other living things in the local environment?

Application of Knowledge and Skill

Students will know...

- Events have causes that generate observable patterns.
- Things that people do to live comfortably can affect the world around them.
- People can make choices that reduce their impacts on the land, water, air, and other living things.
- Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people.
- A situation that people want to change or create can be approached as a problem to be solved through engineering.
- Asking questions, making observations, and gathering information are helpful in thinking about problems.

Students will be skilled at...

planning and carrying out investigations

obtaining, evaluating and communicating information

asking questions and defining problems

Academic Vocabulary

humans, air, water, food, shelter, survive, needs

Learning Goal 1

Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

- Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

SCI.K-ESS3-3

Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

Target 1

SWBAT understand the basic needs of humans.

- SWBAT understand the basic needs of humans.

Target 2

SWBAT decide on ways to reduce the impact of humans on the environment.

- SWBAT decide on ways to reduce the impact of humans on the environment.

Learning Goal 2

Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

- Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

SCI.K-ESS3-3

Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

Target 1

SWBAT understand the human impact on the land, water and air.

- SWBAT understand the human impact on the land, water and air.

Summative Assessment

Teacher will create a formal assessment.

21st Century Life and Careers

CAEP.9.2.4.A	Career Awareness
CAEP.9.2.4.A.1	Identify reasons why people work, different types of work, and how work can help a person achieve personal and professional goals.
CAEP.9.2.4.A.2	Identify various life roles and civic and work - related activities in the school, home, and community.
CAEP.9.2.4.A.3	Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes.
CAEP.9.2.4.A.4	Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Formative Assessment and Performance Opportunities

- Observe patterns in events generated due to cause-and-effect relationships.
- Communicate solutions with others in oral and/or written forms using models and/or drawings that provide detail about scientific ideas.
- Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.
- Ask questions based on observations to find more information about the natural and/or designed world.
- Define a simple problem that can be solved through the development of a new or improved object or tool.

Ask questions, make observations, and gather information about a situation that people want to change in order to define a simple problem that can be solved through the development of a new or improved object or tool.

Accommodations/Modifications

- Structure lessons around questions that are authentic, relate to students' interests, social/family background and knowledge of their community.
- Provide students with multiple choices for how they can represent their understandings (e.g. multisensory techniques-auditory/visual aids; pictures, illustrations, graphs, charts, data tables,

multimedia, modeling).

- Provide opportunities for students to connect with people of similar backgrounds (e.g. conversations via digital tool such as SKYPE, experts from the community helping with a project, journal articles, and biographies).
- Provide multiple grouping opportunities for students to share their ideas and to encourage work among various backgrounds and cultures (e.g. multiple representation and multimodal experiences).
- Engage students with a variety of Science and Engineering practices to provide students with multiple entry points and multiple ways to demonstrate their understandings.
- Use project-based science learning to connect science with observable phenomena.
- Structure the learning around explaining or solving a social or community-based issue.
- Provide ELL students with multiple literacy strategies.
- Collaborate with after-school programs or clubs to extend learning opportunities.

Unit Resources

<http://www.nj.gov/dep/seeds/sect5.htm>

Interdisciplinary Connections

LA.W.K.1	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is...).
LA.RI.K.1	With prompting and support, ask and answer questions about key details in a text.
LA.RI.K.3	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.