



# An At-Home Guide for Families

First Grade Science in North Carolina Public Schools

## Content Outline

**At the end of this course the learner will:**

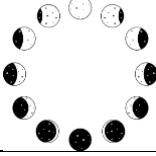
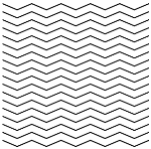
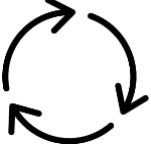

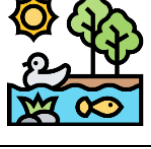



- **Unit 1 Force and Motion**
  - be able to provide examples of a push and pull force in the environment.
  - be able to determine if an object is magnetic.
  - demonstrate the forces of a magnet.
  - understand the concept of lone and balanced forces.
  - be able to demonstrate how motion is based on the amount of applied force.
- **Unit 2 Earth in the Universe**
  - be able to demonstrate how the sun, moon, and stars move across the sky in a pattern.
  - understand that a pattern exists for the moon's shapes.
- **Unit 3 Earth Systems, Structures and Processes**
  - understand that solids and liquids are earth materials.
  - be able to describe the properties of earth materials.
  - be able to describe the types and properties of soil.
  - be able to describe how earth materials help plants, animals, and humans.
- **Unit 4 Ecosystems**
  - understand that plants and animals need air, water, shelter, and food.
  - describe the different types of ecosystems in North Carolina.
  - be able to describe some of the negative impacts humans have on the planet.
  - be able to demonstrate the positive impact humans can have on the planet.
- **Unit 5 Molecular Biology**
  - understand that plants and animals are living things.
  - plants and animals have needs for energy, growth, and survival.

### **Curious what the specific standards are for First Grade Science in North Carolina?**




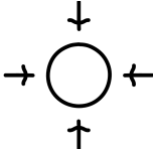



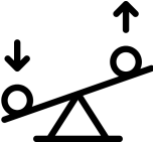

Check out the [North Carolina Standard Course of Study](#) to learn more. Looking for additional explanations about what students should be able to do at the end of this course? Check out [NC DPI's unpacked contents document](#) aligned to the course standards.







## Key Vocabulary

Visual	Term	Definition
	<b>Moon Phases</b>	The amount of the moon that we can see from earth at night.
	<b>Pattern</b>	An arrangement of shapes that can be used again and again.
	<b>Rotate</b>	To change in an order.
	<b>Position</b>	The place where something is located.
	<b>Ecosystem</b>	A community of plants, animals, and their environment.
	<b>Environment</b>	Everything living and nonliving in an area.
	<b>Climate</b>	Climate is weather but over a long period of time.
	<b>Ecosystem</b>	A community of plants, animals, and their environment.



Visual	Term	Definition
	<b>Shelter</b>	Something that covers or protects.
	<b>Pollution</b>	Any item that makes the earth dirty or not healthy.
	<b>Recycle</b>	Making trash into something new.
	<b>Force</b>	Happens when two objects meet.
	<b>Motion</b>	When an object changes position.
	<b>Magnet</b>	An object that can move certain types of metal without touching it.
	<b>Magnetic field</b>	The area around a magnet that can move objects.
	<b>Applied Force</b>	A force put on an object by a person or other object.
	<b>Living</b>	A thing that is alive, or uses energy and grows



Visual	Term	Definition
	<b>Energy</b>	To have strength or power
	<b>Solid</b>	A firm object that does not change its shape
	<b>Liquid</b>	A flowing substance that changes its shape to fit the container it is in
	<b>Nutrients</b>	substances that provide what is needed for growth

## Learning in Action: Grade Level Skills

### Examples of Grade Level Skills

- Represent a push or pull in real life
- Observe the moon and describe how it changes over time
- Grow a plant by giving it proper access to its needs for survival and growth
- Participate in recycling in the home or community
- Sort living and nonliving things in your environment
- Identify various ecosystem, including the plants and animals that would be found within those ecosystems
- Label the parts of a plant
- Describe the needs for animal survival
- Observe different types of soil and describes its properties
- Identify solids and liquids.

## Resources

Links and online resources to allow you to support your child's learning.

- [Generation Genius](#)
- [National Geographic Kids](#)
- [Helping Your Child Learn Science](#)



- [Crash Course Kids YouTube Videos](#)

## At-Home Connections

- Prompts for connected unit conversations with your child:
  - How do the sun, moon, and stars move across the sky?
  - Why does the moon appear to change shape?
  - What moon phase do you see in the sky tonight?
  - Why is the moon important to our environment?
  - What kind of career studies the moon?
  - What are the parts of a plant?
  - What do plants need for growth and survival?
  - What do animals need for growth and survival?
  - What are some examples of the properties of soil?
  - How do earth materials help humans?

## Challenges to Anticipate

Challenges can arise for students completing an online course. Some students may need extra support with:

- Organization
- Time Management
- Creating or uploading assignments
- Navigating through the Unit Lessons

These struggles are normal, acceptable, and developmentally appropriate. Within these Science units, your child may be challenged with:

- Vocabulary words
- Critical Thinking
- Making Connections

## Communicating with Your Child's Teacher

Still feeling stuck? Reach out to your child's teacher to discuss what you can do further your child's learning. Some questions that might guide your discussion:

- What resources would you suggest I use to support my child?
- Where do you see my child struggling? What can we do together to help?



- What should my child practice at home?
- What collective message can we send together to help my child learn?

### **Need Technical Help?**

Reach out to your student's home school for technical assistance. Include the type of device (PC, Mac, Chromebook, etc.) and browser (Chrome, Firefox, Safari, etc.).

### **Citations**

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