

<p align="center">North Carolina NCEXTEND1 Alternate Assessments of Science Grades 5 and 8 and Biology (Edition 4)</p>

In July 2021, a committee of North Carolina educators participated in a multi-phase standard setting for the North Carolina NCEXTEND1 alternate assessments of science in grades 5 and 8 and Biology. The goal of the workshop was to identify cut scores that divide students into three achievement levels for NCEXTEND1 reading (*Not Proficient* through *Level 4*).

In August 2021, the State Board of Education (SBE) adopted college-and-career readiness Academic Achievement Standards and Academic Achievement Descriptors for the NCEXTEND1 science tests. Effective with the 2020–21 school year, the state will report three levels as follows:

Achievement Level	Meets On-Grade-Level Proficiency Standard	Meets Career-and-College Readiness Standard
Level 4	Yes	Yes
Level 3	Yes	No
Not Proficient	No	No

NCEXTEND1 Science Achievement Level Ranges (Cut Scores)

Test	Grade	Not Proficient	Level 3	Level 5
NCEXTEND1 Science	5	≤ 448	449–459	≥ 460
	8	≤ 477	478–489	≥ 490
NCEXTEND1 Biology	10	≤ 488	489–501	≥ 502

NCEXTEND1 Science Achievement Level Descriptors—Grade 5

Achievement Level 4

*Students at Level 4 demonstrate a **thorough** understanding of the North Carolina Extended Content Standards and are on track for competitive employment and post-secondary education.*

Level 4 Students can:

- Compare and understand changes in motion, understand that a push/pull can move an object, and be able to describe factors that impact motion.
- Understand, identify, compare, and classify changes in matter.
- Understand possible dangers related to different types of weather and identify reasons for staying inside during severe weather.
- Identify and understand basic structures of the human body that are essential for life, and their functions.
- Identify common ecosystems and plants and animals found in those ecosystems.
- Identify and differentiate living and non-living things in a given ecosystem.

Achievement Level 3

*Students at Level 3 demonstrate **sufficient** understanding of the North Carolina Extended Content Standards though some support may be needed to engage with content at the next grade/course.*

Level 3 Students can:

- Identify changes in motion, recognize that a push/pull can move an object, and identify factors that impact motion.
- Recognize changes in matter.
- Identify possible dangers related to different types of weather and recognize reasons for staying inside during severe weather.
- Recognize basic structures of the human body that are essential for life, and their functions.
- Recognize plants and animals found in common ecosystems.
- Identify living and non-living things in a given ecosystem.

Not Proficient

*Students who are not proficient demonstrate **inconsistent** understanding of the North Carolina Extended Content Standards and will need significant support at the next grade/course.*

Not Proficient Students can:

- Recognize changes in motion.
- Observe changes in matter.
- Recognize there are different types of weather and/or recognize possible dangers related to different types of weather.
- Recognize basic structures of the human body.
- Recognize common ecosystems.
- Recognize a living or a non-living thing in a given ecosystem.

NCEXTEND1 Science Achievement Level Descriptors—Grade 8

Achievement Level 4

*Students at Level 4 demonstrate a **thorough** understanding of the North Carolina Extended Content Standards and are on track for competitive employment and post-secondary education.*

Level 4 Students can:

- Identify the different forms and results of applying light, heat, electrical, and energy of motion.
- Identify if an object will be hot or cold to the touch and understand the result of the transfer of heat.
- Identify that an object weighs the same as the sum of its parts.
- Identify and compare the many water features on Earth's surface (salt and fresh).
- Understand the importance of drinking water for humans.
- Identify illnesses caused by germs, that germs cause illness, and that hygienic practices reduce the presence of germs.
- Identify within a simple food chain the transfer of energy from the Sun to plants, to animals, to organisms that cause decay.
- Understand and can identify the relationship between the environment and living things.

Achievement Level 3

*Students at Level 3 demonstrate **sufficient** understanding of the North Carolina Extended Content Standards though some support may be needed to engage with content at the next grade/course.*

Level 3 Students can:

- Identify the different forms of energy such as light, heat, electrical, and energy of motion.
- Identify ways that an object can become hot or cold.
- Recognize that an object weighs the same as the sum of its parts.
- Identify water features on Earth's surface (salt and fresh).
- Identify the importance of drinking water for humans.
- Identify examples of hygienic practices that reduce the presence of germs that cause illness.
- Recognize a transfer of energy within a simple food chain.
- Identify examples of living things depending on their environment.

Not Proficient

*Students who are not proficient demonstrate **inconsistent** understanding of the North Carolina Extended Content Standards and will need significant support at the next grade/course.*

Not Proficient Students can:

- Recognize the different forms of energy such as light, heat, electrical, and energy of motion.
- Recognize that an object can become hot or cold.
- Recognize that an object has weight.

- Recognize water features on Earth's surface (salt and fresh).
- Recognize that humans need drinking water.
- Recognize that germs cause illness.
- Recognize parts of a simple food chain.
- Recognize that living things depend on their environment.

NCEXTEND1 Biology Achievement Level Descriptors

Achievement Level 4

*Students at Level 4 demonstrate a **thorough** understanding of the North Carolina Extended Content Standards and are on track for competitive employment and post-secondary education.*

Level 4 Students can:

- Explain the function of major external and internal body parts.
- Identify and understand that most living things are made up of cells, and that the cell is the smallest unit of life.
- Identify and understand that plants and animals get energy from food, what those food sources are, and that plants use photosynthesis to make their own food.
- Identify that humans eat foods such as fruits, vegetables, and meats.
- Understand simple food chains, and how living things compete with each other in order to live within their environment.
- Identify and understand how pollution, recycling, conservation, and human activity impact natural resources.

Achievement Level 3

*Students at Level 3 demonstrate **sufficient** understanding of the North Carolina Extended Content Standards though some support may be needed to engage with content at the next grade/course.*

Level 3 Students can:

- Identify the function of major external and internal body parts.
- Identify that most living things are made up of cells, and that the cell is the smallest unit of life.
- Recognize that animals get energy from food, examples of food sources, and that most plants use photosynthesis to make their own food.
- Recognize that humans eat foods such as fruits, vegetables, and meats.
- Identify simple food chains, and examples of living things competing with each other in their environment.
- Identify that pollution, recycling, conservation, and human activity impact natural resources.

Not Proficient

*Students who are not proficient demonstrate **inconsistent** understanding of the North Carolina Extended Content Standards and will need significant support at the next grade/course.*

Not Proficient Students can:

- Recognize the function of major external or internal body parts.
- Recognize that most living things are made up of cells.
- Recognize that animals get energy from food and most plants make their own food.
- Recognize a fruit, vegetable, or meat that humans eat.
- Recognize simple food chains.

- Recognize a human activity that impacts the natural world.