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:

<table>
<thead>
<tr>
<th>Achievement Level</th>
<th>Meets On-Grade-Level Proficiency Standard</th>
<th>Meets Career-and-College Readiness Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 4</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Level 3</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Not Proficient</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

### NCEXTEND1 Science Achievement Level Ranges (Cut Scores)

<table>
<thead>
<tr>
<th>Test</th>
<th>Grade</th>
<th>Not Proficient</th>
<th>Level 3</th>
<th>Level 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCEXTEND1 Science</td>
<td>5</td>
<td>≤ 448</td>
<td>449–459</td>
<td>≥ 460</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>≤ 477</td>
<td>478–489</td>
<td>≥ 490</td>
</tr>
<tr>
<td>NCEXTEND1 Biology</td>
<td>10</td>
<td>≤ 488</td>
<td>489–501</td>
<td>≥ 502</td>
</tr>
</tbody>
</table>
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.