What are the New York State P-12 Science Learning Standards?

The NYS P-12 Science Learning Standards are the educational goals for all of New York State’s students from prekindergarten through Grade 12 in Science.

What is Science and why is it important for my child?

Science is the scientific approach to understanding the natural world. Among these are a demand for explanations supported by claims and evidence that are testable. Branches of P-12 science education include: life science, physical science, as well as Earth and space sciences.

Over the past several decades, streams of research studies, reports, policies, and publications have documented the benefits of students’ science education to better prepare them for the workforce and college pathways. Careers in Science, Technology, Engineering, and Mathematics (STEM) will only grow in the next decade, making it essential for accessibility to equitable learning opportunities for all students to excel.

When will the NYS P-12 Science Learning Standards be implemented?

The implementation timeline can be found on the Science Curriculum and Instruction website.

How can I learn more?

You can learn more about the NYS P-12 Science Learning Standards by talking to your child’s teacher or visiting our NYSED web site.
### The Standards and My Child’s Classroom Learning

Student learning is best supported when goals are well defined. The model below shows how key parts of learning work together. The central focus, student learning, depends on curriculum, instruction, and assessment. The learning standards represent the overall knowledge and skills students need to learn by the end of each school year.

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#### Standards

**“What do we need to learn?”**

Standards are:
- goals for New York State students.
- organized by subjects and grade levels.
- the learning intended to be accomplished by the end of a specific school year.
- approved by the New York State Board of Regents.

*Example of a Kindergarten Science Standard: Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.*

#### Curriculum

**“What are we learning?”**

Curriculum is:
- the content, concepts, and skills students will learn to enable them to meet the standards determined by individual school districts.

*Example: Locally developed units of study, such as a middle school unit on forces and interactions.*

#### Instruction

**“How are we learning?”**

Instruction is:
- the approaches and strategies an educator chooses to teach the curriculum based on the needs of students determined by classroom teachers and districts.

*Example: Small group instruction or cooperative learning during a laboratory activity.*

#### Assessment

**“What have we learned?”**

**“What should we do next?”**

Assessments:
- are processes used to learn about student progress.
- guide and inform teaching.
- are determined by local districts and/or teachers, as well as New York State.

* New York State administers:
  - ELA and Mathematics Assessments in Grades 3-8
  - Science Assessments in Grade 4 (moving to Grade 5 in 2024) & Grade 8
  - Regents Examinations
  - English as a Second Language Achievement Test (NYSESLAT)
  - Alternate Assessment (NYSAA)

*Example: Classroom observation of a student’s investigation of an ecosystem or analyzing a student’s science notebook based on laboratory experiences.*