

# NAEYC STANDARDS

## POD PALS CRUISE THE GALAXY™

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### KEY CONCEPTS

Did you know that . . .

- Our weight on Earth is caused by the force of gravity acting between our bodies and Earth. We are pretending that Planet P has so little gravity that our bodies would tend to float rather than be attracted to the planet.
- All living things need energy. Plants and animals get energy from the food they eat. As a part of our story, we are pretending that Pod Pals also need energy from food.
- As children are cutting and manipulating objects, they are not only exercising their fine motor skills, but they also gaining tools necessary to be an inventor! Inventors use common objects in uncommon ways to create new innovations!
- Combining ideas or even materials in new ways can lead to all new innovations.
- Combining primary colors is an example of how a combination can result in the creation of a color that looks nothing like its original parts.
- Orbiting is when an object moves in a circular path around another object. The Earth orbits or goes around the sun while it is rotating.
- Cutting, tearing, and combining materials that would otherwise be discarded and making them into something new is an activity that many inventors do as they are prototyping. It is not important what the final product looks like, rather it is important to have the experience manipulating materials and making decisions.
- Brainstorming is a creativity tool that helps children think of solutions to a challenge Brainstorming is intended to generate as many ideas as possible, and even the wild and crazy ideas should be accepted.
- Gravity pulls objects toward the center of the earth.
- Exploring angles helps children better understand basic principles of geometry.
- Clouds are made of water vapor and gas.
- There are many different types of clouds that are a result of conditions in the atmosphere.
- Parachutes can be used to slow down objects as they fall from the sky. They trap air, and the air provides enough resistance to slow the object down.
- The more experiences children have with building, the more they will discover about physics.
- Isaac Newton discovered that there is a fundamental force called gravity operating between all objects and making them move. Newton never explained the definition of gravity, believing it was the scientist's job to capture observations in precise, mathematical equations and explain the how, not the why. Simply put, gravity is the force that keeps everything "down."
- Every object has a center of gravity, or the point where it can be balanced.
- Engineering buildings requires an understanding of physics.
- Wide foundations support tall structures.
- The greater an object's mass, the stronger the pull.
- Flight is created when wings redirect flowing air downward. This helps to lift the object up. The air needs to be pushed downward with enough force to generate force in the opposite direction that can lift the object.

# NAEYC ACCREDITATION CRITERIA FOR CURRICULUM

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2.A.01

U I T P K

The program has a written statement of philosophy and uses one or more written curricula or curriculum frameworks consistent with its philosophy that address central aspects of child development.

2.A.02

U I T P K

A clearly stated curriculum or curriculum framework provides a coherent focus for planning children's experiences. It allows for adaptations and modifications to ensure access to the curriculum for all children.

2.A.03

U I T P K

The curriculum guides teachers' development and intentional implementation of learning opportunities consistent with the program's goals and objectives.

2.A.04

U I T P K

The curriculum can be implemented in a manner that reflects responsiveness to family home values, beliefs, experiences, and language.

2.A.05

U I T P K

Curriculum goals and objectives guide teachers' ongoing assessment of children's progress.

2.A.06

U I T P K

The curriculum guides teachers to integrate assessment information with curriculum goals to support individualized learning.

2.A.07

U I T P K

The curriculum guides the development of a daily schedule that is predictable yet flexible and responsive to individual needs of the children. The schedule provides time and support for transitions, includes both indoor and outdoor experiences, and is responsive to a child's need to rest or be active.

2.A.08

U I T P K

Materials and equipment used to implement the curriculum:

- Reflect the lives of the children and families.
- Reflect the diversity found in society, including gender, age, language and abilities.
- Provide for children's safety while being appropriately challenging.
- Encourage exploration, experimentation, and discovery.
- Promote action and interaction.
- Are organized to support independent use.
- Are rotated to reflect changing curriculum and accommodate new interests and skill levels.
- Are rich in variety.
- Accommodate children's special needs.

2.A.10

T P K

The curriculum guides teachers to incorporate content, concepts, and activities that foster social, emotional, physical, language, and cognitive development and that integrate key areas of content including literacy, mathematics, science, technology, creative expression and the arts, health and safety, and social studies.

2.A.11

T P K

The schedule provides children learning opportunities, experiences, and projects that extend over the course of several days and incorporates time for: play, self-initiated learning, creative expression, large-group, small-group, and child-initiated activity.

2.A.12

P K

The curriculum guides teachers to plan for children's engagement in play (including dramatic play and blocks) that is integrated into classroom topics of study.

2.E.03

T P K

Children have opportunities to become familiar with print. They are actively involved in making sense of print, and they have opportunities to become familiar with, recognize, and use print that is accessible throughout the classroom:

- Items belonging to a child are labeled with his or her name.
- Materials are labeled.
- Print is used to describe some rules and routines.
- Teaching staff help children recognize print and connect it to spoken words.

2.E.05

P K

Children have multiple and varied opportunities to write:

- Writing materials and activities are readily available in art, dramatic play, and other learning centers.
- Various types of writing are supported including scribbling, letter-like marks, and developmental spelling.
- Children have daily opportunities to write or dictate their ideas.
- Children are provided needed assistance in writing the words and messages they are trying to communicate.
- Children see teaching staff model functional use of writing and are helped to discuss the many ways writing is used in daily life.

2.F.02

T P K

Children are provided varied opportunities and materials to build understanding of numbers, number names, and their relationship to object quantities and to symbols.

2.F.03

T P K

Children are provided varied opportunities and materials to categorize by one or two attributes such as shape, size, and color.

2.F.04

T P K

Children are provided varied opportunities and materials that encourage them to integrate mathematical terms into everyday conversation.

2.F.05

P

Children are provided varied opportunities and materials that help them understand the concept of measurement by using standard and non-standard units of measurement.

2.F.06

P K

Children are provided varied opportunities and materials to understand basic concepts of geometry by, for example, naming and recognizing two- and three-dimensional shapes and recognizing how figures are composed of different shapes.

2.G.02

P K

Children are provided varied opportunities and materials to learn key content and principles of science such as the difference between living and nonliving things (e.g., plants versus rocks) and life cycles of various organisms (e.g., plants, butterflies, humans). Earth and sky (e.g., seasons; weather; geologic features; light and shadow; sun, moon, and stars). Structure and property of matter (e.g., characteristics that include concepts such as hard and soft, floating and sinking) and behavior of materials (e.g., transformation of liquids and solids by dissolving or melting).

2.G.03

P K

Children are provided varied opportunities and materials that encourage them to use the five senses to observe, explore, and experiment with scientific phenomena.

2.G.04

P K

Children are provided varied opportunities to use simple tools to observe objects and scientific phenomena.

2.G.05

P K

Children are provided varied opportunities and materials to collect data and to represent and document their findings (e.g., through drawing or graphing).

2.G.06

P K

Children are provided varied opportunities and materials that encourage them to think, question, and reason about observed and inferred phenomena.

2.G.07

P K

Children are provided varied opportunities and materials that encourage them to discuss scientific concepts in everyday conversation.

2.G.08

P K

Children are provided varied opportunities and materials that help them learn and use scientific terminology and vocabulary associated with the content areas.