Indiana Early Learning Standards

Science: Preschool

Physical Science

1 Demonstrate ability to explore objects in the physical world SC1.1

Younger Preschool

- a Use senses to learn about concepts of weight, motion, and force SC1.1.Y.A
- b Handle and explore objects in different ways depending on perceptual information such as fragile, messy, or sticky SC1.1.Y.B
- c Ask questions about physical properties and changes in the physical world SC1.1.Y.C
- d Begin to use scientific vocabulary words (e.g., observe, predict, hypothesis, experiment) SC1.1.Y.D

Older Preschool

- a Use senses to observe and describe concepts of weight, motion, and force SC1.1.O.A
- b Ask questions and draw conclusions about physical properties and the physical world SC1.1.O.B
- c Use a greater number of scientific vocabulary words related to classroom investigations SC1.1.O.C

2 Demonstrate awareness of the physical properties of objects SC1.2

Younger and Older Preschool

- a Identify materials that make up objects SC1.2.YO.A

Younger Preschool

- a Investigate and describe observable properties of objects SC1.2.Y.A
- b Match objects by physical attributes SC1.2.Y.B

Older Preschool

- a Use evidence from investigations to describe observable properties of objects SC1.2.O.A
- b Sort objects into categories based on physical attributes and explain reasoning SC1.2.O.B

Earth and Space Science

1 Recognize seasonal and weather related changes SC2.1

Younger and Older Preschool

- a Communicate awareness of seasonal changes SC2.1.YO.A

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Younger Preschool

a Describe weather conditions using correct terminology SC2.1.Y.A

Older Preschool

a Describe how weather changes SC2.1.O.A

Life Science

1 Demonstrate awareness of life SC3.1

Younger Preschool

a Identify the correct names for adult and baby animals SC3.1.Y.A

b Compare attributes of living organisms SC3.1.Y.B

Younger and Older Preschool

a Identify and describe the function of body parts SC3.1.YO.A

Older Preschool

a Differentiate animals from plants SC3.1.O.A

b Discriminate between living organisms and non-living objects SC3.1.O.B

c Ask questions and conduct investigations to understand life science SC3.1.O.C

2 Demonstrate awareness of the preservation, protection, and care of living creatures and plants SC3.2

Younger Preschool

a Begin to recognize that plants and animals need food, water, air, and sun to survive SC3.2.Y.A

b Begin to explore concepts and information related to ways to take care of our environment and begin to recognize that everyday decisions have an impact on the environment SC3.2.Y.B

c Recognize things that do not belong in the environment (e. g., litter) SC3.2.Y.C

d Begin to care for living things (feeding fish, watering plants, helping weed garden) SC3.2.Y.D

Older Preschool

a Participate in discussions about simple ways to take care of the environment (e. g., throwing away trash in containers, turning off lights and water faucets, and putting out bird feeders) SC3.2.O.A

b Participate in reusing and recycling materials SC3.2.O.B

c Describe basic things plants and animals need to live and grow (sunlight, water, food) SC3.2.O.C

d Take responsibility for the care of living things (feeding fish, watering plants, helping weed garden) SC3.2.O.D

 Demonstrate engineering design skills SC4.1

Younger Preschool

a Identify a problem or need and create a plan to solve SC4.1.Y.A

b Use nearby objects that function as simple machines to enhance play SC4.1.Y.B

Older Preschool

a Select materials and implement a designated plan SC4.1.O.A

b Evaluate and communicate solution outcomes SC4.1.O.B

c Use nearby objects to create simple machines to enhance play SC4.1.O.C

Scientific Inquiry and Method

1 Demonstrate scientific curiosity SC5.1

Younger Preschool

a Observe with focus on details SC5.1.Y.A

c Identify themselves or their actions as scientific SC5.1.Y.C

b Use simple tools to extend investigations SC5.1.Y.B

Older Preschool

a Discuss ways that people can affect the environment in positive and negative ways SC5.1.O.A

b Independently use simple tools to conduct an investigation to increase understanding SC5.1.O.B

c Engage in a scientific experiment with peers SC5.1.O.C

d Communicate results of an investigation SC5.1.O.D

Computational Thinking

1 Demonstrate decomposition of larger tasks into smaller steps SC6.1

Younger Preschool

a Identify 2-3 steps in common routines with adult support SC6.1.Y.A

Older Preschool

a Identify 3-5 steps in common routines SC6.1.O.A

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2 Demonstrate algorithmic thinking and debugging SC6.2

Younger Preschool

a Demonstrate knowledge of when a set of steps is ordered or unordered SC6.2.Y.A

Older Preschool

a Demonstrate an understanding of when a task requires a set of ordered steps SC6.2.O.A

b With adult support, create an algorithm (set of ordered steps) to accomplish a two-step task SC6.2.O.B

c With adult support, demonstrate the process of troubleshooting why a solution or step didn't work, and revising their solution SC6.2.O.C