

Rockingham County Public Schools
Kindergarten Science Benchmarks
A Guide for Parent Involvement

1st Nine Weeks

- Scientific investigation, reasoning, & logic; K.1
- Identify basic properties of objects by direct observation
 - Make observations from multiple positions to achieve different perspectives
 - Describe objects pictorially and verbally
 - Sequence set of objects by size
 - Separate set of objects into two groups based on a single physical attribute
 - Measure common objects using nonstandard units
 - Develop a question from one or more observations
 - Construct picture graphs using 10 or fewer units
 - Predict unseen member in a sequence
 - Recognize unusual or unexpected results in an activity

- Investigation of human senses; K.2
- Five senses and corresponding sensing organs (taste-tongue, touch-skin, smell-nose, hearing-ears, and sight-eyes)
 - Sensory descriptors (sweet, sour, bitter, salty, rough/smooth, hard/soft, cold, warm, hot, loud/soft, high/low, bright/dull)

- Matter, position, motion & physical properties; K.4
- Colors (red, orange, yellow, green, blue, purple), white, & black
 - Shapes (circle, triangle, square, and rectangle) and forms (flexible/stiff, straight/curved)
 - Textures (rough/smooth) and feel (hard/soft)
 - Relative size and weight (big/little, large/small, heavy/light, wide/thin, long/short)
 - Position (over/under, in/out, above/below,) and speed (fast/slow)

- Properties of water; K.5
- Natural flow of water is downhill
 - Some materials float while other materials sink

- Life processes of plants and animals; K.6
- Living things change as they grow and need food, water, and air to survive
 - Life cycle of plants and animals

- Earth patterns, cycles, and change; K.8
- Weather observations
 - Shapes and forms of common natural objects including seeds, cones, and leaves
 - Animal and plant growth
 - Home and school routines

- Change over time; K.9
- Rates; fast or slow
 - Natural & human-made things may change over time
 - Noting and measuring changes

- Reuse, recycling, and conservation of materials; K.10
- Materials and objects that can be used over and over again
 - Everyday materials can be recycled
 - Water and energy conservation at home and in school helps preserve resources for future use

2nd Nine Weeks

- Scientific investigation, reasoning, & logic; K.1
- Identify basic properties of objects by direct observation
 - Make observations from multiple positions to achieve different perspectives
 - Describe objects pictorially and verbally
 - Sequence set of objects by size
 - Separate set of objects into two groups based on a single physical attribute
 - Measure common objects using nonstandard units
 - Develop a question from one or more observations
 - Construct picture graphs using 10 or fewer units
 - Predict unseen member in a sequence
 - Recognize unusual or unexpected results in an activity

- Investigation of human senses; K.2
- Five senses and corresponding sensing organs (taste-tongue, touch-skin, smell-nose, hearing-ears, and sight-eyes)
 - Sensory descriptors (sweet, sour, bitter, salty, rough/smooth, hard/soft, cold, warm, hot, loud/soft, high/low, bright/dull)

- Matter, position, motion & physical properties; K.4
- Colors (red, orange, yellow, green, blue, purple), white, & black
 - Shapes (circle, triangle, square, and rectangle) and forms (flexible/stiff, straight/curved)
 - Textures (rough/smooth) and feel (hard/soft)
 - Relative size and weight (big/little, large/small, heavy/light, wide/thin, long/short)
 - Position (over/under, in/out, above/below,) and speed (fast/slow)

- Properties of water; K.5
- Natural flow of water is downhill
 - Some materials float while other materials sink

- Life processes of plants and animals; K.6
- Change in living things as they grow and need food, water, and air to survive
 - Life cycle of plants and animals

- Earth patterns, cycles, and change; K.8
- Weather observations
 - Shapes and forms of common natural objects including seeds, cones, and leaves
 - Animal and plant growth
 - Home and school routines

- Change over time; K.9
- Change rates; fast or slow
 - Natural & human-made things may change over time
 - Noting and measuring changes

- Reuse, recycling, and conservation of materials; K.10
- Materials and objects that can be used over and over again
 - Everyday materials can be recycled
 - Water and energy conservation at home and in school helps preserve resources for future use

3rd Nine Weeks

Scientific investigation, reasoning, & logic; K.1

- Identify basic properties of objects by direct observation
- Make observations from multiple positions to achieve different perspectives
- Describe objects pictorially and verbally
- Sequence set of objects by size
- Separate set of objects into two groups based on a single physical attribute
- Measure common objects using nonstandard units
- Develop a question from one or more observations
- Construct picture graphs using 10 or fewer units
- Predict unseen member in a sequence
- Recognize unusual or unexpected results in an activity

Investigation of human senses; K.2

- Five senses and corresponding sensing organs (taste-tongue, touch-skin, smell-nose, hearing-ears, and sight-eyes)
- Sensory descriptors (sweet, sour, bitter, salty, rough/smooth, hard/soft, cold, warm, hot, loud/soft, high/low, bright/dull)

Magnet and their effects on materials; K.3

- Attraction/non attraction, push/pull, attract/repel, and metal/nonmetal
- Useful applications (refrigerator magnet, can opener, magnetized screwdriver, magnetic games)

Matter, position, motion & physical properties; K.4

- Colors (red, orange, yellow, green, blue, purple), white, & black
- Shapes (circle, triangle, square, and rectangle) and forms (flexible/stiff, straight/curved)
- Textures (rough/smooth) and feel (hard/soft)
- Relative size and weight (big/little, large/small, heavy/light, wide/thin, long/short)
- Position (over/under, in/out, above/below,) and speed (fast/slow)

Properties of water; K.5

- Different states of water (solid, liquid, gas)
- Natural flow of water is downhill
- Some materials float while other materials sink

Life processes of plants and animals; K.6

- Living things change as they grow and need food, water, and air to survive
- Life cycle of plants and animals

Light and shadow: interrelationships in earth/space systems; K.7

- Shadows occur in nature when an object blocks sunlight
- Shadows can be produced by blocking artificial light sources

Earth patterns, cycles, and change; K.8

- Weather observations
- Shapes and forms of common natural objects including seeds, cones, and leaves
- Animal and plant growth
- Home and school routines

Change over time; K.9

- Change rates; fast or slow
- Natural & human-made things may change over time
- Noting and measuring changes

Reuse, recycling, and conservation of materials; K.10

- Materials and objects that can be used over and over again
- Everyday materials can be recycled
- Water and energy conservation at home and in school helps preserve resources for future use

4th Nine Weeks

Scientific investigation, reasoning, & logic; K.1

- Identify basic properties of objects by direct observation
- Make observations from multiple positions to achieve different perspectives
- Describe objects pictorially and verbally
- Sequence set of objects by size
- Separate set of objects into two groups based on a single physical attribute
- Measure common objects using nonstandard units
- Develop a question from one or more observations
- Construct picture graphs using 10 or fewer units
- Predict unseen member in a sequence
- Recognize unusual or unexpected results in an activity

Investigation of human senses; K.2

- Five senses and corresponding sensing organs (taste-tongue, touch-skin, smell-nose, hearing-ears, and sight-eyes)
- Sensory descriptors (sweet, sour, bitter, salty, rough/smooth, hard/soft, cold, warm, hot, loud/soft, high/low, bright/dull)

Magnet and their effects on materials; K.3

- Attraction/non attraction, push/pull, attract/repel, and metal/nonmetal
- Useful applications (refrigerator magnet, can opener, magnetized screwdriver, magnetic games)

Matter, position, motion & physical properties; K.4

- Colors (red, orange, yellow, green, blue, purple), white, & black
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- Textures (rough/smooth) and feel (hard/soft)
- Relative size and weight (big/little, large/small, heavy/light, wide/thin, long/short)
- Position (over/under, in/out, above/below,) and speed (fast/slow)

Properties of water; K.5

- Different states of water (solid, liquid, gas)
- Natural flow of water is downhill
- Some materials float while other materials sink

Life processes of plants and animals; K.6

- Living things change as they grow and need food, water, and air to survive
- Life cycle of plants and animals
- Offspring of plants and animals are similar but not identical to their parents and one another

Light and shadow: interrelationships in earth/space systems; K.7

- Shadows occur in nature when an object blocks sunlight
- Shadows can be produced by blocking artificial light sources

Earth patterns, cycles, and change; K.8

- Weather observations
- Shapes and forms of common natural objects including seeds, cones, and leaves
- Animal and plant growth
- Home and school routines

Change over time; K.9

- Change rates; fast or slow
- Natural & human-made things may change over time
- Noting and measuring changes

Reuse, recycling, and conservation of materials; K.10

- Materials and objects that can be used over and over again
- Everyday materials can be recycled
- Water and energy conservation at home and in school helps preserve resources for future use