

## **EC3 SCIENCE FRAMEWORK**

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### **THEMES AND CONTENT**

- Physical Science: Energy, Colors and Matter
- Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environment
- Weather and Climate
- Earth and Science: Sun and Moon

### **SCIENCE AND ENGINEERING PRACTICES (DEVELOPED IN CONJUNCTION WITH THE PERFORMANCE INDICATORS)**

- Demonstrate curiosity and raise simple questions about objects and events in their environment. Observe objects and events in the environment and describe them.
- Begin to identify and use, with adult support, some observation and measurement tools.
- Compare and contrast objects and events and begin to describe similarities and differences.
- Make predictions and check them, with adult support, through concrete experiences.
- Make inferences and form generalizations based on evidence.

- Record observations or findings in various ways, with adult assistance, including pictures, words (dictated to adults), charts, journals, models, and photos.
- Share findings and explanations, which may be correct or incorrect, with or without adult prompting.

### **SCIENCE NOTEBOOK EXPECTATIONS**

Students reflect on their findings through discussions, stories, constructions and PowerPoints.

### **SCIENTIFIC WRITING EXPECTATIONS**

Students document their work by taking pictures, creating classroom books about specific themes and drawing their discoveries.

### **SCIENCE LABORATORY SAFETY EXPECTATIONS**

Students will be expected to learn and to follow the expectations for safe and appropriate practices during laboratory activity, as shown on the “Science Laboratory Safety” document.

See link below:

[https://www.caislisbon.org/uploaded/Curriculum\\_links/Science/Science\\_lab\\_safety\\_EC3to5th.pdf](https://www.caislisbon.org/uploaded/Curriculum_links/Science/Science_lab_safety_EC3to5th.pdf)

### **INFORMATION TECHNOLOGY EXPECTATIONS**

Students will be expected to use a variety of digital tools according to grade level expectations stated in CAISL’s Research and Information Technology Integration Scope and Sequence.

See link below:

[https://www.caislisbon.org/uploaded/Curriculum\\_links/2019-2020/IT\\_Skills\\_Scope\\_and\\_Sequence\\_by\\_Grade.pdf](https://www.caislisbon.org/uploaded/Curriculum_links/2019-2020/IT_Skills_Scope_and_Sequence_by_Grade.pdf)

### **PERFORMANCE INDICATORS (ASSESSED ON REPORT CARDS)**

#### **PHYSICAL SCIENCE**

Energy: Use models and carry out investigations to show that the sun produces light. DOK 2

Colors: Make observations to show that there are different colors. DOK 2 E

Colors: that mixing colors makes a new color. DOK 1

Matter: Make observations of the different states of water. DOK 2

#### **LIFE SCIENCE**

Plants and Animals: Make observations of living things. DOK 2

Plants and Animals: Develop a model of a living thing (plants / animals). DOK 3

**EARTH AND SPACE SCIENCE**

Solar System: Use a model to show that the sun is a feature in the sky. DOK 2

Seasons: Observe data which shows that nature changes seasonally. DOK 1

Weather: Analyze and interpret local weather conditions. DOK 2 E

**ENGINEERING, TECHNOLOGY, AND APPLICATIONS OF SCIENCE**

Engineering Design: Make observations and gather information using our senses. DOK 2 E

Engineering Design: Develop a model using blocks or Legos. DOK 3