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Primary Type: Student Tutorial

Lesson 21 Video: MEA Entertaining Animals

In this video, SaM-1 introduces a Model Eliciting Activity (MEA) challenge for the students. This video provides background information on why and how animals need to be entertained. Students will have the opportunity to apply what they learned about physical properties and measuring linear lengths as they are asked to design a prototype toy for Florida panthers housed at the CPALMS Rehabilitation and Conservation Center.

In the optional twist, students will need to design a prototype toy suitable for a Florida panther with an injured leg. The optional twist also has a SaM-1 video to introduce the twist challenge.

Attachments

[Accessible Version](#): Accessible version of the video content in PDF format.

General Information

Subject(s): Science, Mathematics, English Language Arts

Grade Level(s): 3

Intended Audience: [Students](#)

Keywords: length, MEA, SaM-1, sam, conservation center, properties, animals, animal toys, toys, enrichment, animal enrichment, engineering design process, model, model eliciting activity, Florida panther, big cats, , behavioral, sensory, cognitive

Instructional Component Type(s): [Original Student Tutorial](#)

Resource Collection: [CPALMS Physical Science with SaM-1 Videos](#)

Source and Access Information

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Aligned Standards

Name	Description
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LAFS.3.L.3.4:	<p>Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.</p> <ol style="list-style-type: none"> Use sentence-level context as a clue to the meaning of a word or phrase. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat). Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.
SC.3.N.3.2:	<p>Recognize that scientists use models to help understand and explain how things work.</p> <p>Clarifications: ** Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.</p>
SC.3.P.8.3:	<p>Compare materials and objects according to properties such as size, shape, color, texture, and hardness.</p> <p>Clarifications: ** Florida Standards Connections: MAFS.3.MD.2.4; MAFS.K12.MP.5: Use appropriate tools strategically; and, MAFS.K12.MP.6: Attend to precision.</p>
LAFS.3.SL.1.1:	<p>Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.</p> <ol style="list-style-type: none"> Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. Explain their own ideas and understanding in light of the discussion.
LAFS.3.W.1.2:	<p>Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p> <ol style="list-style-type: none"> Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. Develop the topic with facts, definitions, and details. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information. Provide a concluding statement or section.
LAFS.3.W.3.8:	<p>Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.</p>
SC.35.CS-CS.1.2:	<p>Describe how models and simulations can be used to solve real-world issues in science and engineering.</p>
SC.35.CS-CS.1.4:	<p>Create a simple model of a system (e.g., flower or solar system) and explain what the model shows and does not show.</p>
MAFS.3.MD.2.4:	<p>Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.</p>

Suggested Tutorials

Name	Description
Breanna's Bracelet Business:	Join us as Breanna learns to use a line plot to examine measurement data she needs to create bracelets for her friends, in this interactive tutorial.
Lesson 23 Video: MEA Researching Sea Turtle Nesting Temperatures :	<p>In this video Sam-1 introduces a Model Eliciting Activity (MEA) challenge. Students will take their prior experiences from the properties unit and apply their knowledge of investigating sea turtle nesting temperatures.</p> <p>Students will develop a hypothesis, design an experiment, and support their reasoning to determine how to best study different methods for cooling sea turtle nesting areas.</p>
Lesson 22 Video: MEA Animal Meal Planning Part 2:	In this video, SaM-1 introduces a part 2 twist to the Model Eliciting Activity (MEA). In the optional twist, students will need to modify their original diet for a senior chimpanzee. The first video provided meal planning information to add to the knowledge students gained throughout the unit to start the challenge.
Lesson 22 Video: MEA Animal Meal Planning:	<p>In this video, SaM-1 introduces a Model Eliciting Activity (MEA) challenge for the students. This video provides meal planning information to add to the knowledge students gained throughout the unit. Students will be asked to develop a varied diet for a chimpanzee at the CPALMS Rehabilitation and Conservation Center based on the color, shape, texture, and hardness of the food.</p> <p>In the optional twist, students will need to modify their original diet for a senior chimpanzee. The optional twist also has a SaM-1 video to introduce the twist challenge.</p>
Lesson 21 Video: MEA Entertaining Animals Part 2:	In this video, SaM-1 introduces a part 2 twist to the Model Eliciting Activity (MEA) challenge. In the optional twist, students will need to design a prototype toy suitable for a Florida panther with an injured leg. This first video provides background information on why and how animals need to be entertained.
	In this video, SaM-1 introduces a part 2 twist to the Model Eliciting Activity (MEA) challenge. In the first video,

Lesson 20 Video MEA Animal Habitats Part 2:	students were asked to design a habitat for an elephant or gorilla that will be housed at the CPALMS Rehabilitation and Conservation Center. In this twist, students will need to modify their design to accommodate a senior elephant or gorilla.
Lesson 20 Video: MEA Animal Habitats:	<p>In this video, SaM-1 introduces a Model Eliciting Activity (MEA) challenge for the students. This video provides habitat information to help the students use the knowledge they gained throughout the unit. Students are asked to design a habitat for an elephant or gorilla that will be housed at the CPALMS Rehabilitation and Conservation Center. Students will need to describe the physical properties (color, shape, texture, hardness) of the features they selected for the habitat while explaining the rationale behind their design choices.</p> <p>In the optional twist, students will need to modify their design to accommodate a senior elephant or gorilla. The optional twist also has a SaM-1 video to introduce the twist challenge.</p>
Lesson 17 Video: Sea Turtle Expert Interview :	In this SaM-1 video, students will use their listening and writing skills to watch a video to learn about the affects temperature has on sea turtles' nests, preparing them for an investigation in subsequent lessons within the unit.
Lesson 16 Video: Reading & Recording Temperature :	In this SaM-1 video, students will learn how to make observations based on the property of temperature using thermometers, while representing the data in line graphs.
Lesson 15 Video: Observing Sea Turtles:	In this SaM-1 video, students will use their listening and writing skills to learn about sea turtles, preparing them for subsequent lessons in the unit.
Lesson 13 Video: Introduction to Displacement :	In this SaM-1 Video, students will learn how to find the volume of irregular objects using a graduated cylinder and the displacement method.
Lesson 11 Video: Introduction to Volume:	In this SaM-1 video, students will learn how to use a graduated cylinder to make observations based on the volume of liquids.
Lessons 7-9 Video: Measuring Mass with Solids and Liquids:	Help SaM-1 make observations and sort items based on the mass of materials using an equal-arm balance. In this video, you will also become familiar with metric units for measuring mass: gram and kilogram.
Lesson 3 Video: Introduction to Length :	In this video, students will make observations based on the property of size, specifically length. Students will learn about the metric and customary measurement systems and use line plots to organize and sort data.
Lesson 1 Video: Observations:	This SaM-1 video begins the Grade 3 Animals: Rehabilitation and Conservation Center Unit on Physical Properties. Students learn that making observations is an important aspect of scientific study. Students will observe different properties and use these properties throughout the unit.
Electrical To Thermal Energy:	Learn how electrical energy is produced from earth's natural resources. In this interactive tutorial, explore the process to power buildings and other electronic devices.
Diving into Informative Writing:	Learn how to write a topic sentence to introduce a topic, group related information together, develop a topic by adding details, and add an image to support the text.