

THE JUNIOR SECTION OF THE PROPERTY OF THE PROP	Page	Title	Summary and Discussion Points	Content Area
	2	World hits clean energy high	More clean energy is being used around the world than ever before. What is clean energy? Why is clean energy on the rise?	Science
	4	Version of extinct species revived	Ancient DNA was used to create three wolf pups that resemble dire wolves. How did scientists obtain this ancient DNA? What other species does this company want to bring back?	Science
	7	Machine measures fish fattiness	A new machine can measure how fatty a piece of tuna is. How does fat content influence taste? How does this machine work? Who could find this machine useful?	Health
	10	A playful use for narwhals' tusks	Narwhals have a single tusk that sticks out of their head. What did a new study reveal that these tusks might be used for in the wild?	Science
	15	A device that keeps workers cool	A new helmet has been designed to keep workers safe and cool in hot weather. How does this innovation work?	Engineering

FEATURE OF THE WEEK JUNIOR: Animal of the week (page 11)					
Invite students to look at this week's feature and answer the questions.	1. Before reading the article, ask students what they know and what they wonder about the emu. Challenge them to predict the emu's life span, habitat, size, and diet. 2. Invite them to read the article and compare their predictions to the information presented. 3. Why do they think the emu was selected as "animal of the week"? What surprised them about what they learned? 4. Invite them to select a new animal of the week, conduct research to complete the same information, and challenge a partner to guess the answers.				

	DEBATE	CREATE
ARTICLE	"Should schools require climate lessons?" (page 8)	"The greatest trophy in ice hockey" (pages 12-13)
VOCABULARY	habits, worry, climate, climate education	hypothesis, trial, average, test
ACTIVITY	Some people think climate lessons should be taught in schools; others believe kids can learn about that independently. Ask students to draw five speech bubbles on a piece of paper. In the first speech bubble, provide a few minutes for students to record their reactions to the question, "Should schools require climate lessons?" Encourage students also to use evidence from the article. Collect papers and redistribute them. Students should now respond to the previous student's ideas, in writing, and add their own. Repeat this process until all speech bubbles are completed. Finally, ask students to summarize their table texting conversation. What was their final decision?	Did you know the National Hockey League (NHL) freezes its pucks before games? Invite students to investigate to find out why. First, use a large sheet pan and fill it with water. Place it in the freezer to freeze into a sheet of ice. Next, ask students to design an experiment to determine the temperature at which the puck slides the fastest on an icy surface. They should test a cold puck, a room temperature puck, and a warm puck by sliding it across their pan and timing it. Have them conduct three trials and find the average. Guide students to create a hypothesis by forming a statement: If Then Because Provide time for students to conduct their experiment and see if they proved their hypothesis.
EXTEND	<u>Discover</u> your climate superpower.	Find out which winter sport is the slipperiest.

	ACT	CONNECT
ARTICLE	"Take action for Earth Day" (page 24)	"Inside the world of penguins" (page 20)
VOCABULARY	awareness, impact, encouragement, meaningful	poles, mammals, birds, polar ocean
ACTIVITY	April 22 is an opportunity to celebrate our appreciation for the natural world by celebrating Earth Day. Introduce five ideas for how students can celebrate. 1) Use an acrostic poem and the word "Earth". Invite students to use the first letter of each line to spell out a word or message showing support for our planet. 2) Use a concrete poem format in the shape of Earth. Ask students to arrange words and phrases to create the outline and details of Earth. 3) Help remove trash from a local park or waterway. 4) Take a virtual walk or tour of a US National Park. 5) Create an upcycled suncatcher to display around your school.	Antarctica is the southernmost place on Earth, but is often mistaken for being similar to the Arctic, our North Pole. Ask students what they already know about the Arctic and Antarctic poles by asking if they agree or disagree with the following three statements: Polar bears and penguins live on both poles. Both the Arctic and Antarctic are solid ice. Polar oceans are too cold for living organisms. Then, guide students to draw a Venn diagram to research and compare the similarities and differences of the Arctic and Antarctic. Tell students to focus on discovering what lives there, and if both places are made only from solid ice. Summarize by asking students to revisit the three statements to see if their ideas have changed.
EXTEND	Find Earth Day events near you.	Meet someone who worked in Antarctica.

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