



West Virginia DEPARTMENT OF
EDUCATION

Remote Learning with Science Articles

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June 15, 2020

Beyond the Classroom



- Science articles
- Science content
- Current information
- Relevant

ScienceNews*for* Students

ScienceNews

MAGAZINE OF THE SOCIETY FOR SCIENCE & THE PUBLIC



Science Article Review

Name _____ Period _____

Title of Article: _____

Does the article appear interesting from the title? Why?:

Preview: The first few paragraphs usually tell you who, what, when, where, how, and why.

Who Wrote <u>It</u>	When Was it <u>Written</u>	What Is <u>The Topic About</u>

Key Details About The Article:

<u>Detail 1</u>	<u>Detail 2</u>	<u>Detail 3</u>



Title of Article:		
Give the summary of the article in 20 words.	What new information did you learn?	Name a real-life application of the lesson.
	Evidence from the text.	
5 new words and its meaning from the article:		Personal comments/suggestion about the article:



Science News *for* Students

- Stories about recent research and current events
- Many additional resources accompany stories
- <https://www.sciencenewsforstudents.org/>

Science News *for* Students

Search Results for: ecosystems

TOPIC

NGSS

READABILITY

DATE RANGE

SORT BY



DATA

Nuggets

- Activities that bring real scientific data into the classroom, guiding students through the entire process of science while building their quantitative abilities.
- Teacher's Guides
- <http://datanuggets.org/>




DATA Nuggets

Level 1	<ul style="list-style-type: none">• Elementary and above
Level 2	<ul style="list-style-type: none">• Middle School and above
Level 3	<ul style="list-style-type: none">• High School and above
Level 4	<ul style="list-style-type: none">• Advanced High School students• College undergraduates

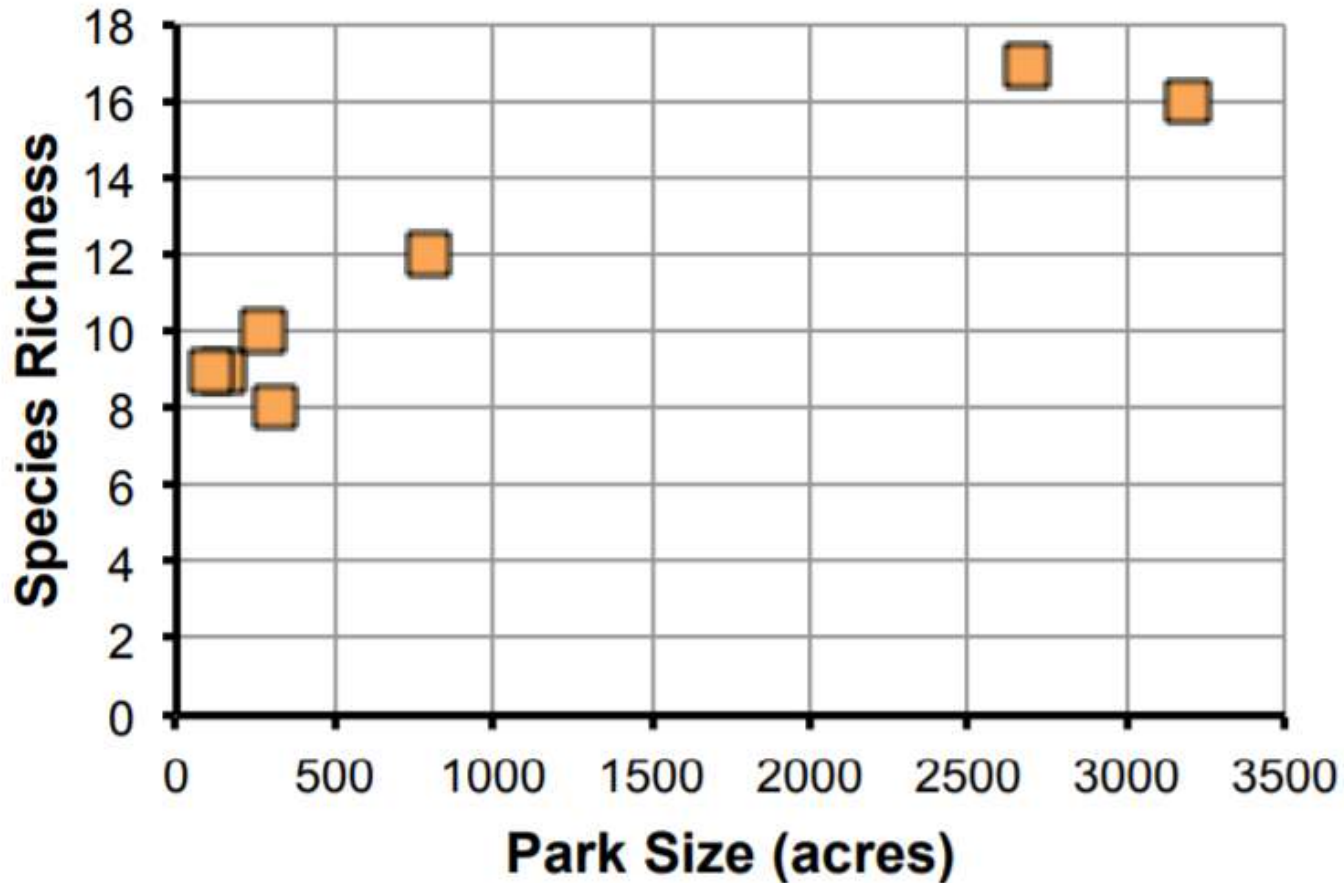


DATA *Nuggets*

Type A graph provided	<ul style="list-style-type: none">• Data: displayed on graph• Axis labels and scale provided
Type B	<ul style="list-style-type: none">• Data: student graphs data• Axis labels and scale provided
Type C student creates graph	<ul style="list-style-type: none">• Data: student graphs data• Axis labels and scale not provided

Title	Keywords	Summary	Content Level	Study Location
 <p>Won't you be my urchin?</p>	<p>coral reef, herbivory, marine, sea urchin, water, animals, competition</p>	<p>Corals are the most important reef animals since they build the reef for all of the other animals to live in. But corals only like to live in certain places. In particular they hate living near algae because the algae and coral compete for the space they both need to grow. Perhaps if there are more vegetarians, like urchins, eating algae on the reef then corals would have less competition and more space to grow.</p>	<p>1</p>	<p>Flower Garden Banks National Marine Sanctuary, Texas</p>
 <p>Coral bleaching and climate change</p>	<p>climate change, coral reef, marine, mutualism, temperature, animals, algae, adaptation, evolution</p>	<p>Corals are animals that build coral reefs. They look brown and green because they have small plants, called algae, that live inside them. The coral animal and the algae work together to produce food so that corals can grow big. When the water gets too warm, sometimes the coral and algae can no longer work together. The algae leave and the corals turn white, called coral bleaching. Scientists want to study coral bleaching so they can protect corals and the reefs that provide a home for so many different species.</p>	<p>1</p>	<p>Florida Keys, Florida</p>
 <p>Raising Nemo: Parental care in the clown anemonefish</p>	<p>adaptation, animals, behavior, coral reef, ecology, fish, marine, mating, tradeoff</p>	<p>Offspring in many animal species rely on parental care; the more time and energy parents invest in their young, the more likely it is that their offspring will survive. However, parental care is costly for the parents. The more time spent on care, the less time they have to find food or care for themselves. In the clown anemonefish, the amount of food available may impact parental care behaviors. When</p>	<p>3</p>	<p>Boston University, Massachusetts</p>

Below are graphs of the data: Identify any changes, trends, or differences you see in the graphs. Draw arrows pointing out what you see, and write one sentence describing what you see next to each arrow.



Questions?

Comments?

Suggestions?

ReadWorks®

- FREE content, curriculum, and tools to power teaching and learning from Kindergarten to 12th Grade
- Students can highlight, annotate, and complete assignments
- Easily printable
- <https://www.readworks.org/>



American Literature

Explore plot lines, authors' lives, and the historical context surrounding commonly read stories in high school American literature classes.

[View collection](#)



Earth Science

This collection teaches map-based concepts from middle/high school earth science: topography, earthquakes, volcanoes, oceans, weather, climate.

[View collection](#)



Environmental Science

This collection supports the map-based concepts in high school environmental science like speciation, pollution, population ecology, and energy.

[View collection](#)



Government

This collection includes a range of topics such as elections, Federalism, rights, and comparative government.

[View collection](#)



Human Geography



Mathematics



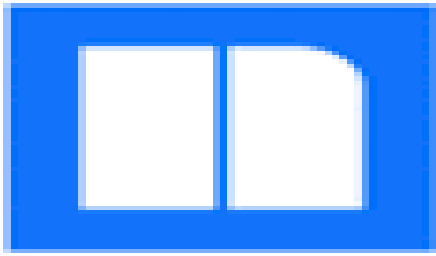
Upper Elementary



US History

- designed to be 15 minute "lecture replacements."
- real-world data provides a geographic component
- Easily printable student worksheets
- <http://esri.com/geoinquiries>





newsela

- High-interest news and nonfiction articles
- Each article can be available for different grade levels/lexile levels.
- a free version is available
- <https://newsela.com/>

Questions?

Comments?

Suggestions?

Questions to consider...



- How to keep science students motivated to complete the lab assignment?
- How will you provide feedback?
- Creative “proof” that students completed the assignment?

Name: _____ **Date:** _____

Reading Guide for Sahara Dust Storms article

- * The teacher creates a Reading Guide...
- * Questions should focus on key concepts and content specific words.
- * Students pre-read the questions *before* reading the article.
- * Students complete the Reading Guide and submit it for credit.

Name: _____ **Date:** _____

Three things you learned from the lesson.

Two things that you found interesting and that they'd like to learn more about.

One question you still have about the material.

Name: _____ **Date:** _____

Define 3 new vocabulary terms

- * keystone species
- * tide pools
- * gastropods

List 2 examples of filter feeders.

Use complete sentences to:

Describe 1 **similarity** that tidepools have to a river or stream in WV.

Describe 1 **difference** that tidepools have to a WV river or river or stream.

Incorporation of NGSS Cross Cutting Concepts

Frame your article analysis questions around:

Patterns

Similarity and diversity

Cause and effect

Systems and system models

Structure and function

Stability and change

Start Small **but THINK BIG!**



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Jennifer Schwertfeger, Presenter
Cameron High School
Marshall County

Survey link:

[Instructional Support Professional Learning Forum
Session Survey/Evaluation](https://bit.ly/survPL83720)

<https://bit.ly/survPL83720>



IMPORTANT:

You must complete the survey and hit “submit” to be counted as present for this session.