

Skinner Middle School

Science Summer Homework Plan – For All 8th Grade Scholars



STEP 1- READ

Find and read a science related article about a topic that interests you from a newspaper, magazine or one of the following websites.

Popular Science, NOVA, New York Times, Time for Kids, National Geographic, Earth and Sky Kids or Earth and Sky, NPR, Nature, Sciencenews.org, Sciencedaily.com

STEP 2- WRITE 3 paragraphs answering the following

- Summarize the article making sure to include the main points and scientific vocabulary
- Personal Response to the following questions:
 - Can this apply to your daily life? Use Claim, Evidence and Reasoning/CER
 - Explain whether you agree or disagree with the scientists' claim.
 - What background knowledge did you use to help you understand and/or infer the meaning of the article?
 - Skinner Scholar work must be typed with the article attached or include the link to the article
 - Due date--it is due before the 1st day of school

All work needs to be submitted through Google Classroom. Alternately if you are without access to a computer you may also complete this work on paper and submit to your science teacher on the first day of school.

Submitting finished work-

1. Submit to google classroom with class access code- **z8n828**

log on to your DPS google account:

Username: student id (this is your lunch number) @dps12.net

Password: 8 digit birthday

Difficulty logging on to Google Classroom? Search the web for tons of helpful tutorials or use the link below. <https://www.youtube.com/watch?v=qgtDtid2yuQ>

Teacher contact Information: amy_winter@dpsk12.net or kyrna_harmon@dpsk12.net

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Science Summer Writing Rubric

	0	15	20	25
Claim	Students make an inaccurate claim or make a claim that does not address the text	Students create an accurate but incomplete claim that partially addresses the text.	Students create an accurate and complete claim based on the text.	Students create an accurate and complete claim that synthesizes multiple sources of information or cites outside sources.
Evidence	Students do not provide evidence to support claim.	Students do provide evidence, but it is lacking in its support of the claim. One or two pieces of evidence.	Students use multiple and appropriate sources of evidence to support their claim. Three or more.	Students demonstrate a strong command of use of evidence and are able to organize their evidence strategically, emphasizing the most impactful piece of evidence.
Reasoning	Students are not yet able to provide reasoning or provide reasoning that is not yet appropriate to the claim.	Student attempts to provide reasoning, but it does not connect the claim to the evidence included.	Students provide sufficient and appropriate reasoning that connects the evidence to the claim. Students explain why the evidence supports the claim.	Students demonstrate strong command and are able to critique the strength of their own reasoning or others' reasoning.
Academic Language	Students writing piece is difficult to understand due to poor use of grammar. Student does not include scientific language from the text.	Students writing piece is generally easy to understand, but contains some errors. Student uses some scientific language from the text, but may not use it correctly.	Students writing piece is easy to understand, and contains few errors. Student uses scientific language from the text correctly.	Students writing piece is easy to understand, and contains few errors. Student uses scientific language from the text correctly with precision and nuance.

8th Grade Science Summer Homework Example:

Article Number 1(June)

Title:Scientists Design Solar Cell that Captures Nearly all Energy of Solar Spectrum

Website(Source):<https://www.sciencedaily.com/releases/2017/07/170711220514.htm>

Summary: In the article “Scientists Design Solar Cell that Captures Nearly all Energy of Solar Spectrum,” By George Washington University scientist have created a new type of solar panel this is currently the most efficient solar panel. “The solar panel can capture nearly 50% of the sun's energy whereas other solar panels capture roughly 25%,”stated George Washington University. This is a big achievement for solar energy and can relate to me because my family uses solar so we can get more energy now if we get these new solar panels. I agree with this scientists claim because the scientist is claiming that, “these solar panels are better and can capture more energy,” and the data shows exactly that. He is saying that a breakthrough in solar panels just happened and that they are more efficient because of new technology. The background knowledge is used was all stuff that I had learned previously about how solar panels aren't currently that efficient and that scientist have been working on new solar panels for years. This has helped me understand more about this article because I can understand the increase in efficiency and how it could help the human race use less non renewable resources.

Article Number 2 (July)

Title:Engineers Investigate a Simple, no-bake Recipe to make Bricks from Martian soil

Website(Source):<https://www.sciencedaily.com/releases/2017/04/170427091723.htm>

Summary: In the article “Engineers investigate a simple, no-bake recipe to make bricks from Martian soil,” from Science Daily, the author explains how scientists have found a way to make bricks using only the soil found on mars. This could relate to my life because if I have to go live on mars there will be an easy solution to making buildings or structures. “You just need to apply pressure to the soil to create the bricks,” stated Science Daily. Now that we know how to make bricks on mars easily it can solve issues that we previously had like building materials and how to transport that material to mars. I agree with this idea because the brick made of soil could be strong and easy to make. This is also confirmed because scientist have tested it and the creation of bricks with only pressure works. Also Science Daily is a reliable source and from background knowledge I knew that martian soil could be compacted with pressure. I was able to infer what the article was talking about because trying to live on mars has been a dream for years.

Article Number 3(August)

Title:Fleet of Drones Could pollinate Future Crops

Website(Source):<https://www.sciencenews.org/article/fleets-drones-could-pollinate-future-crops>

Summary: In the Article “Fleet of Drones Could pollinate Future Crops,” by Science News, the author explains how Eijiro Miyako came upon the idea of drones pollinating flowers for humans. So many people use honey now days and “the population of bees is declining” which mean the amount of flowers and honey is declining. This relates to my life because I use honey and it is in a lot of food products so “without honey food options could be different”. I agree that this idea is good and would work because it was tested by Eijiro Miyako, the person who discovered this idea, and the idea he came up with is proven to work. Some background knowledge I used to infer the meaning of the article was that drones can be programmed to do tasks for you and that bees pollinate flowers using their legs and hairs.