

Build Your Brain: Reading & Writing Module

Developed by Amy Conley

Reading Selections for this Project

“Brain, Brain Information, Facts, News, Photos – National Geographic.” *National Geographic*.

NIMHgov. “Development of the Young Brain.” *YouTube*. YouTube, 29 Apr. 2011. Web. 13 June 2016.

Teen Mental Health. “Teen Brain HD.” *YouTube*. Teen Mental Health, 22 Feb. 2012. Web.

“You Can Grow Your Intelligence.” (n.d.): n. pag. *Brainology*. 2014. Web.

Recommended 3-Week Pacing:

Week 1: Activities 1 – 10

Week 2: Activities 11 – 23

Week 3: Activities 24 – 26

Activity 2: Considering the Writing Task

Read the writing task below. This is a preview so that you know in advance what you will be doing with the reading information that is coming up. Individually or as a group, review the prompt and answer RAFT questions that follow.

Writing Task:

Synthesize what you learned about the brain and growing your intellect into a pamphlet for 3rd graders titled “What is your brain and how do you grow it?” Use accurate information drawn from your readings and present it in a way that will interest and inform a third grader, using information and pictures. You will be learning that a pamphlet uses text features, ethos (credibility), and logos (logical understandability) to inform and sometimes to persuade an audience. In this case, your audience is 8-9 year olds, and you are informing them about the brain.

RAFT Questions:

What is your Role? _____

Who is your Audience? _____

What is the Format? _____

What is the Topic? _____

Activity 3: Exploring Key Concepts

Using reliable Internet sources, create Vocabulary Trees that show the roots of these important concepts:

First Tree: **cerebro-/cerebr-**

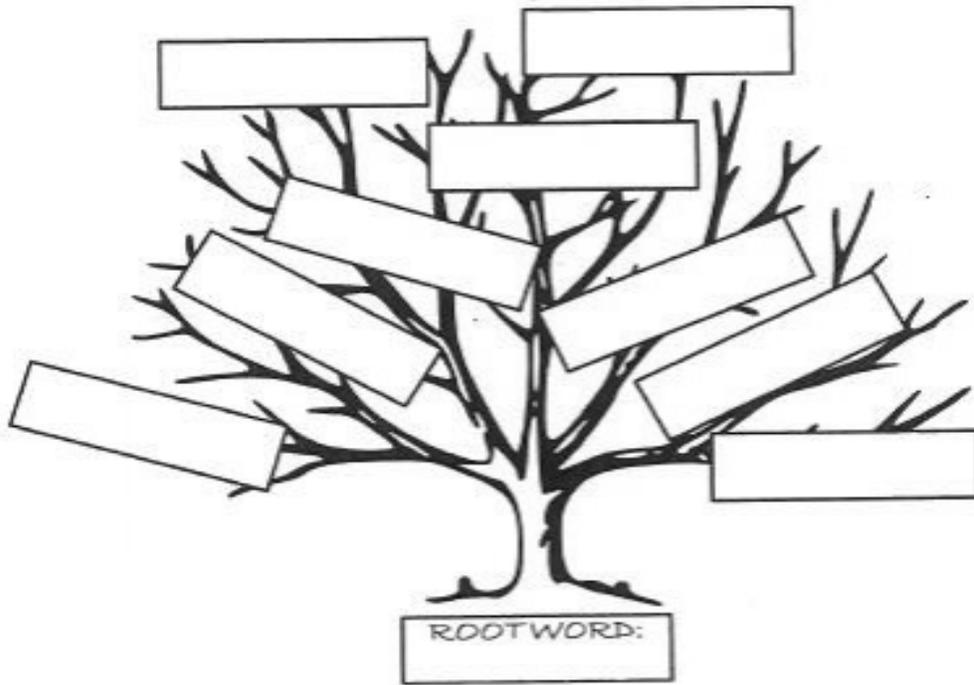
Second Tree: **cogn-**

1. Write the root word along with its meaning at the bottom of the tree.
2. Fill in the branches with related words & expressions. Draw arrows from the boxes on the branches and use the white space surrounding the tree provide explanations of the word and/or clear examples.
3. The whole page will be full of concept related vocabulary and notes when you are done. Feel free to use colored pencils to enhance this activity.

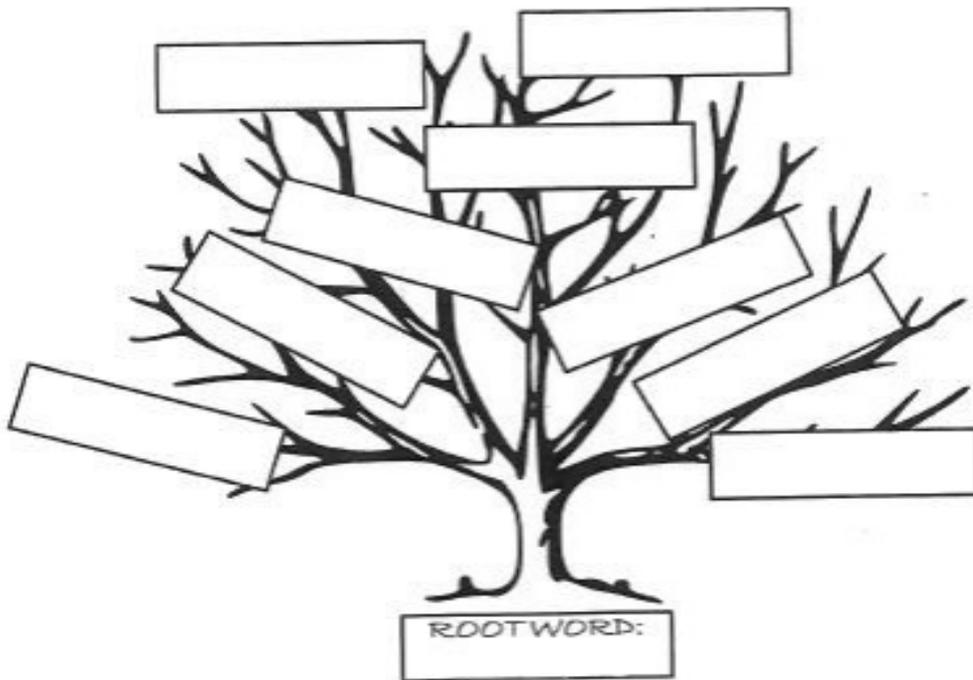
=====

EXAMPLE: **neur** = nerve. Related words and expressions for branches: *nerves*, *nervy* (being brave enough to do something), *neurologist* (doctor who treats diseases of the nervous system), *unnerved* (“I was unnerved by the test and quit.”), *nerve-wracking* (causing fear), etc.

VOCABULARY TREE



VOCABULARY TREE



Activity 4: Surveying the Text—and Making Predictions

Survey the reading by locating the text online at:

<http://science.nationalgeographic.com/science/health-and-human-body/human-body/brain-article/>

If you do not have Internet access, survey the printed text and answer only questions 1 & 2.

1. Is National Geographic a credible source? How do you know?
2. What is the purpose of the bold printed words in the paragraphs?
3. In the graphic titled “Command Central” at the top of the page, what subjects are covered on the blue tags? How would you find out more about these subjects?
4. Try clicking on the Brain Anatomy and Stimulate the Brain tabs, and take a quick survey of what you find there. What do you think this site hopes to teach?

Reading

Activity 5: Reading for Understanding

Read “Brain, Brain Information, Fact. New, Photos – National Geographic.” One time through. With a partner (of possible) take notes in row one of the **Content Notetaking Graphic Organizer** included at the end of this packet.

Activity 6: Annotating and Questioning the Text

Re-read “Brain, Brain Information, Fact. New, Photos – National Geographic.” This time, take notes in Row One of the **Rhetorical Notetaking Graphic Organizer** included at the end of this packet. Your teacher will model for you how to focus on genre, text features, and credibility, the key elements of rhetorical reading.

Activity 7: Surveying the Text

Watch Text 2, the video “Development of the Young Brain” developed by the National Institute of Mental Health: <https://www.youtube.com/watch?v=Xelvtx6HHLg>

Take notes in Row Two of the **Rhetorical Notetaking Graphic Organizer**, focusing on strategies that the video producers used such as changing visuals to match information, labels, graphics, and key ideas on the front of your note-taking chart.

Activity 8: Reading for Understanding

Watch the video a second time, taking notes on the **Content Notetaking Graphic Organizer**.

Activity 9: Noticing Language

Discuss the answers to these questions with a partner or small group. If you are working independently, write the answers to the questions.

1. How do children’s brains grow?
2. Dr. Jay Giedd says teen brains develop in the frontal cortex responsible for long- range planning, impulse control, and judgment. Do you think that fact, and the way it is worded, would be more interesting to you or a third grader? Why?
3. If you were to share the information from Dr. Giedd with a third grader, how could you rewrite the information so that a 9 or 10 year old could understand it? Which words or phrases would you change? How would you change them?

Activity 10: Summarizing and Responding

Videos online often have a two-sentence summary so that viewers can preview the information in the video and decide whether to watch. Write a two-sentence summary for this video.

Activity 11: Surveying the Text

Survey (look over) Text #3, “You Can Grow Your Intelligence: New Research Shows the Brain Can Be Developed Like a Muscle” before reading it. Complete the following steps:

- Highlight the title and all the subheads and captions.
- What does the title suggest this article will be about?
- What is the purpose of the text features?
- How do the graphics compare to your last reading (Text #1)?
- Who is the author? Can you research and find out who makes Brainology and if they’re credible?
- What’s your prediction about this article?

Activity 12: Thinking Critically

The following vocabulary words will be important to your understanding of the text. Skim Text #3 and find each of the words listed. Read the sentence that contains the word as well as the surrounding sentences. Then complete that chart that follows.

Word	My Idea of the Meaning	Can Use It in a Sentence +	Sort of Understand It	Don't Get It At All ?
permanent				
enriched				
cerebral cortex				
neurons				
environment				

Activity 13: Reading for Understanding

Read Text #3 (“You Can Grow Your Intelligence”). The best way is to have your teacher, parent, or tutor read the article out loud slowly while you follow along. As you read, annotate the text (mark it up). Write what you understand about the text and whether you agree or disagree with the ideas being presented. Also write down any questions that you have.

Now read the text again a second time. This time, try to connect it to your personal experience. Mark additional comments in the margins of the text that you agree with or that connect to your personal experience.

Now go to the **Content Notetaking Graphic Organizer** and take notes in Row 3 on important information that you want to remember from this article.

Read the text a third time, this time playing the doubting game. Question the author’s evidence. Where does the author’s claim not apply? What do you disagree with? Add these annotations to the margins of the article.

Activity 14: Thinking Critically

Answer the following questions about the article you have just read (Text #3).

Questions about Logic (Logos)

1. What did you think the author was trying to persuade you to think or believe (this is called the main claim). Find a sentence or two that you think captures what the author is trying to say?

3. Who do you feel the publisher wrote this piece for? Why do you think this? For example, what does the style and language tell the reader?

Activity 15: Summarizing and Responding

Take notes in Row Three of the **Rhetorical Notetaking Graphic Organizer**, focusing on the rhetorical strategies that the author uses to present his information.

Activity 16: Summarizing and Responding

Please write a short letter to your teacher explaining how you agree or disagree with this article, what you would add, and questions you have about the author's idea. The letter should quote (use the author's words) to show what you think.

Template for quickwrite:

Dear _____, (Teacher's name)

After reading "You Can Grow Your Intelligence," I think that _____

_____. When the author wrote _____

(copy sentence from the article, place quotation marks at the beginning and end, and replace the period with a comma) I thought _____

_____. Also, when the author wrote _____

(copy sentence from the article, place quotation marks at the beginning and end, and replace the period with a comma) I thought _____

_____. I think the author should have also written
about _____

_____.

I wish I knew more about _____
_____.

I look forward to learning more about the brain! _____

Sincerely, (Your Name)

Activity 17: Surveying the Text

Text #4, the video “Teen Brain,” was created by the Teen Mental Health Organization:
<https://www.youtube.com/watch?v=EGdIpaWi3rc>

- What’s your prediction about this article?

Watch the video “Teen Brain” for the first time, trying to absorb the information and the rhetorical strategies. After the first viewing, answer these questions:

- In what format is the information presented?

- How does the comparison of a teen brain to a technology upgrade persuade, inform, or entertain you the viewer?

- Do you think the video was made for teens or for adults? What features make you think so?

Activity 18: Reading for Understanding

Rewatch the video, looking for usable information. Take notes in Row 4 of your **Content Notetaking Graphic Organizer**. The transcript below of the words spoken in the video may help you follow along:

Welcome to brain upgrade 12-20. Thank you for upgrading to teenage brain. Your upgrade is now under way. The Brain Corporation is pleased to remind you that every advance in human history science discovery and civilization was achieved with brains like the one you are using now. Your brain controls everything. The rest of you works under it; click agree to continue. Never mind, your brain just clicked it for you. This upgrade takes approximately eight years to complete. It is recommended that you keep your brain on during this entire time. Removing your brain from its original container may void the license agreement: exciting new features, more processing power, better connectivity, and improved speed and stability.

Your brain is now loading new modules and disposing obsolete resources. To test the effectiveness of this upgrade please stare at this screen and run the following information through your brain. Your brain tripled in size by age one and is fully grown at eighteen. It weighs close to three pounds; that is 1.36 kilograms. That is half the weight of all your skin. Your brain is $\frac{3}{4}$ water. It contains about one hundred billion neurons that is a million times a thousand times a hundred. There are from one thousand to ten thousand synapses for each neuron. All that brain power has enabled us to explore our planet, the solar system and the universe beyond.

Your brain can feel no pain, the rain in Spain stays mainly in the plain. Thinking makes your brain bigger. While awake your brain can generate enough energy to power a light bulb. Yawning wakes up your brain; you're probably yawning now. Eating fish is good for your brain, eating fish is bad for the fish.

Men change their minds more often than women do; no women change their minds more; no men do.

Sleeping helps your brain remember things. Everyone dreams. If you think you don't dream, you're dreaming,

Learning new things changes your brain. Laughing uses five parts of your brain. Music lessons help organize your brain. Your brain performs seventy thousands thoughts a day. Memorization grows your brain.

Calculating ... congratulations, your upgrade to teenage brain, version 12-20 is proceeding as scheduled. New upgrades will automatically download as they become available. Your brain is guaranteed for life and will not need replacement with normal wear. Brain is self-cleaning. Brainwashing not recommended. Avoid prolonged exposure to direct sunlight or harsh chemicals. Always operate brain in a well-ventilated area. Never attempt to service the brain yourself. For tech support and maintenance, consult an authorized service provider this concludes this brain upgrade tutorial. Thank you for your purchase.

Activity 19: Analyzing Stylistic Choices

Part of the appeal of the “Teen Brain” video is the how the words work to explain both software upgrades and the growth your brain goes through as a teenager. Tell what each sentence means as it relates to both software and the brain.

Sentence	About Software	About the Brain
<p>Welcome to brain upgrade 12-20. Thank you for upgrading to teenage brain.</p>		
<p>This upgrade takes approximately eight years to complete. It is recommended that you keep your brain on during this entire time.</p>		
<p>Removing your brain from its original container may void the license agreement: exciting new features, more processing power, better connectivity, and improved speed and stability.</p>		
<p>Your brain is guaranteed for life and will not need replacement with normal wear. Brain is self-cleaning. Brainwashing not recommended.</p>		

Activity 20: Summarizing and Responding

Which parts of your brain help you do your favorite activities? How could you grow those parts of your brain and your skills in your favorite activities? List some ways you could achieve your goals.

Connecting Reading to Writing

Activity 21: Getting Ready to Write

Let's revisit the writing prompt that was presented at the beginning of this module.

Writing Task:

Synthesize what you learned about the brain and growing your intellect into a pamphlet for 3rd graders titled "What is your brain and how do you grow it?" Use accurate information drawn from your readings and present it in a way that will interest and inform a third grader, using information and pictures. You will be learning that a pamphlet uses text features, ethos (credibility), and logos (logical understandability) to inform and sometimes to persuade an audience. In this case, your audience is 8-9 year olds, and you are informing them about the brain.

Brainstorm information that will help you clarify your audience and their needs.

- What kinds of things do 3rd graders like to read?

- What might 3rd graders already know about the brain?

Grade 6 Expository Reading and Writing Project

- What might they need to know?

- What can you do to keep their graders interested in your writing?

- What is your goal for this assignment? What do you want the reader of your pamphlet to know or do?

Writing Rhetorically

Entering the Conversation

Activity 22: Composing a Draft

Use both of your Notetaking Charts as well as any responses to activities in this packet to get down your initial ideas to answer the prompt.

What is the brain?	What does the brain do?	How can kids make their brains work better?

Activity 23: Considering Structure

Find some sample pamphlets to look at and make some observations about them. Here are some excellent online samples: <http://www.toucaned.com/pamphlets/>

- What do you notice about the front cover? Pay attention to color, text, size, and information.

- What is the pamphlet about? What grabs your attention first and why?

- What information is on the back cover? Why is this here and not on the front?

- What is in the middle pages of the pamphlet? How is the information separated? Why is it separated this way?

Once you feel comfortable with the form you're going to use, it is time to take your draft and decide how you'll separate it into a pamphlet. Use a blank piece of paper folded into thirds. Then use a ruler to divide the columns into sections as you wish. Because this is a draft that you will be revising, don't spend a lot of time coloring in pictures. Just provide a rough sketch of any images.

Revising and Editing

Activity 24: Considering Stylistic Choices

Find a partner. You will present your rough pamphlets to a partner, who will try to think like an 8-year-old reader.

As you present your pamphlet to your partner, he or she should ask questions an 8-year-old might have or mention places where they might want more information. Be sure to write down this feedback to improve your draft and choose where to add information from the three sources and their note-taking chart.

If applicable, reverse roles and you pretend to be an 8-year-old while your partner presents their rough pamphlet. Try to ask helpful questions and help your partner think of information to use from the note-taking chart.

Activity 25: Revising the Draft

You are now ready to revise your pamphlet draft based on the feedback that you have received and the decisions that you have made. In addition, consider the revision checklist below and jot down notes that will help you make your pamphlet even better:

- Have I responded to the assignment?
- What is my purpose for this pamphlet?
- What should I keep? What is most effective?
- What should I add? Where do I need more details, examples, and other evidence to support my point? Where could I add titles to help my reader focus on my ideas in each section?
- What could I omit (leave out)? Have I used irrelevant details? Have I been repetitive?

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- What should I change? Are parts of my pamphlet confusing or contradictory? Do I need to explain my ideas more fully? Are there words that are not appropriate for my audience?

- What should I rethink? Is my position clear? Have I provided enough analysis to convince my readers?

- Am I too overbearing or too firm? Do I need qualifiers like “could be” or “possibly”?

- Have I addressed differing points of view?

- What pictures or illustrations would add to my ideas and catch my readers’ attention?

At this time, type your work into a blank pamphlet template (available on Google Docs & Microsoft Word as brochures, and more). Alternatively, you may write and decorate your pamphlet by hand. Neatness and correctness count! You will be evaluated on:

- Using text features effectively (images, titles/headers, key words, etc.)
- Having credible (error-free) language
- Using words third graders understand and/or explaining more difficult words
- Including graphics to explain more difficult ideas

If possible, present your pamphlet to actual third graders. Let them read it and ask questions! Help them understand the structure and information. Answer their questions and explain more about the topic.

Activity 26: Reflecting on Writing

Think back on your learning during this module and answer the following questions:

1. What did you learn about the brain by doing this project?
2. How did the four texts change your thinking?
3. What did you learn about how to make your ideas more understandable?
4. What do you hope third graders can learn from your pamphlet?
5. How will this project influence other writing tasks you do in the future?
6. How much does your audience affect how you write? Did this surprise you? Why or why not?

Content Notetaking Graphic Organizer

	New Vocabulary and Defintions	What sections of the brain are discussed? What do they do?	What do 3rd graders need to know from this text?	Three most important details you learned from this text	One quote showing the author's point of view
Row 1					
Row 2					
Row 3					
Row 4					

Rhetorical Notetaking Graphic Organizer

	Title of Work?	Who created this work?	Genre?	How is it organized?	Purpose: to inform, persuade, or entertain?	Intended audience?	What text features make it credible ?	What text features make it more understandable ?
Row 1								
Row 2								
Row 3								
Row 4								

