**Readings Written/ Related to the Nobel Speakers 2015-**

**A Quick Overview for Students**

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| *Document Overview* |
| Students having background information about a topic they are going to hear about allows a more in depth engagement. Each year as excitement builds for the Nobel conference teachers prepare the kids for what they will hear. These articles can be used as homework. They can be used for the students who are not attending to create a common experience with information. They can also be used to revisit the speakers work or before/ after watching the speaker online after the conference. There are writing prompts/ discussion questions included with each article to help students synthesize their thoughts after the reading. |
| *Standards* |
| *Minnesota State Academic Science Standards*   * + 8.1.3.3.3 Provide examples of how advances in technology have impacted how people live, work and interact.   + 9.1.1.2.4 Use primary sources or scientific writings to identify and explain how different types of questions and their associated methodologies are used by scientists for investigations in different disciplines.. |
| *Next Generation Science Standards*   * + SL.8.5 Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. (MS-LS1-2),(MS-LS1-7) |
| *Other MN Standards (ELA):*   * + 8.5.10.10 Read and comprehend literary nonfiction at the high end of the grades 6-8 text complexity band independently and proficiently: (a) Self-select texts for personal enjoyment, interest, and academic tasks.   + 9.5.10.10 By the end of grade 9, read and comprehend literary nonfiction in the grades 9-10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literary nonfiction at the high end of the grades 9-10 text complexity band independently and proficiently: (a) Self-select texts for personal enjoyment, interest, and academic tasks. |
| *Objective* |
| Students will read and analyze readings that emphasize the speaker’s research in order to more fully understand the presentation at the conference. Discussion/ writing prompts are provided to add more depth if desired. |
| *Type of Activity* |
| 1. Read Article as homework 2. Complete writing template 3. Use writing/ discussion prompts in class to engage learning from reading. This will allow students to ask questions they have over material and deepen their personal connection of what they read. |
| *Suggested Duration* |
| Five articles with one per week leading up to the conference or an article a day the week before the conference |
| *Connection to Nobel Speakers* |
| Background readings on each speaker's topic to prepare for speakers at the conference. Discussion questions are provided to guide teacher in a class discussion or to allow students to reflect on the article in a personal way. |
| *Concepts/Keywords/Appropriate Classes* |
| Concepts: Addiction and how it relates to you  Keywords: Addiction, Reward system, Gateway drug, Buddhism, Pregnancy and drug treatment  Appropriate Classes: Written with 7-8th graders in mind. Could be adapted for older students. This is an assignment that can be done quickly by high school students. Writing prompts are highly suggested if used in high school to give it depth. |
| *Description of Activity* |
| This is a series of articles that can be used as homework or classwork. Students will read the article and then fill out the template. The template (at bottom of the document) is designed so students guide their own learning from their reading. The articles can be read in any order. These articles are focused specifically on the speakers who will be at the Nobel Conference. |
| *Materials* |
| Articles - printed or electronic  Homework template for each article  Writing Prompts/ Discussion Questions |
| *Teacher Tips* |
| **Article Tips:****The Rational Choices of Crack Addicts-** There were a few areas of the article I cut out to shorten the article length. **Smoking stokes cocaine cravings: Molecular mechanism found for controversial 'gateway drug' hypothesis. -** Depending on the level of students a few areas of the article could be cut to simplify the idea of the gateway drug (specifically the section of “The chromatin connection”).  **Female drug users shun treatment for fear of losing children, UN says**- Sheigla Murphy’s work is mostly books and academic articles. This article will give students background information on pregnant women who have addictions.  [Overview of Flanagan’s Book](http://www.partiallyexaminedlife.com/wp-content/uploads/Alwan-Summary-of-Flanagan-The-Bodhisattvas-Brain1.pdf) “The Bodhisattva's Brain: Buddhism Naturalized”. This article is vocabulary rich with information for the teacher if needed. This is not recommended for students until they are reading at a 11th grade reading level or higher.  **Addiction is like Riding a Bike**  Students should see the video before reading the article or be prompted with the question “Can you ride a bike if the wheel goes the opposite way you think it should go?” |
| *Activity* |
| This is a series of articles that can be used as homework or classwork. Students will read the article and then fill out the template. The template (at bottom of the document) is designed so students guide their own learning from their reading. The articles can be read in any order. These articles are focused specifically on the speakers who will be at the Nobel Conference. There are discussion questions and writing prompts that can be used before students read the article to start them thinking or after as a writing prompt or a way to start a discussion in class. **Overview of Activity:**   1. Read Article as homework 2. Complete writing template 3. Use writing/ discussion prompts in class to engage learning from reading. This will allow students to ask questions they have over material and deepen their personal connection of what they read.   **Carl Hart** **The Rational Choices of Crack Addicts**  (9/16/2013 from NY Times) This article features the work of **Carl Hart**. It discusses the reward system of addiction and choices addicts make. Can addicts make good decisions when offered an alternative. [*Article: The Rational Choices of Crack Addicts Link*](http://www.nytimes.com/2013/09/17/science/the-rational-choices-of-crack-addicts.html?_r=0) Discussion questions/ writing prompts for in class or homework:   * Which offer do you think you would take if you were apart of the experiment: $5/ drugs or $20/ drugs? Why?   Or rephrase the question to entice student’s grades (or use both questions in any order):   * $5 to skip school and get a in trouble with your parents/ stay in school and you're not in trouble or $100 to skip school and get a in trouble with your parents/ stay in school and you're not in trouble?  **Eric Kandel** and **Denise Kandel****Smoking stokes cocaine cravings: Molecular mechanism found for controversial 'gateway drug' hypothesis.** Written by Virginia Gewin This article feature the work of **Eric Kandel** and **Denise Kandel**. The research includes taking mice that were given nicotine and mice that were not given nicotine. The mice were then offered cocaine. Mice that had the nicotine went to the cocaine and mice that did not have the nicotine did not go for the cocaine. Are there gateway drugs that lead to harder drugs?  [Article: Smoking Stokes cocaine cravings](http://www.nature.com/news/2011/111102/full/news.2011.627.html)  Discussion questions/ writing prompts for in class or homework:   * If you smoke cigarettes does this mean you will do other drugs? Why or why not? * Is there a gateway drug to other drugs? Why or why not?   **Sheigla Murphy** **Female drug users shun treatment for fear of losing children, UN says** in Women’s Health Section of Fox News This article focuses on information about women and drug use. It gives general information and comparisons between women and men and drug use. This article will give students a background information for the books of **Sheigla Murphy** who looks at women’s health and the effects of addiction on pregnancy. [Article: Female drug users shun treatment for fear of losing children, UN says](http://www.foxnews.com/health/2015/06/29/female-drug-users-shun-treatment-for-fear-losing-children-un-says/) Discussion questions/ writing prompts for in class or homework:   * How do drugs affect a child during pregnancy? * Are all drugs treated equally in pregnancy? * You are have a migraine and you are pregnant. The drug you need to take to help your migraine is not approved for pregnancy. There is a 0.1% chance it could affect your child. Should you take it?   Quick Link to [drugs safe and unsafe in pregnancy for discussion.](http://www.webmd.com/baby/guide/taking-medicine-during-pregnancy)  **Owen Flanagan** **Buddhism** This is an overview of the religion and its history. The history of Buddhism will help students understand the work of **Owen Flanagan**.  [Article: Buddhism](https://sites.google.com/site/worldreligionsforkids/buddhism) or Article: [Buddha and Buddhism for kids](http://ancienthistory.mrdonn.org/Buddhism.html)  Discussion questions/ writing prompts for in class or homework:   * What is nirvana? How is nirvana linked to the body?How could nirvana be linked to neuroscience? * Is it possible for the brain and body to reach nirvana?   **Mark Lewis**  **Addiction is like Riding a Bike**  There is a video that you show show kids to introduce this article before the article is sent home to read. The activities below can also be done to add interest to the article. This is a blog post which shares **Mark Lewis’s** thoughts on addiction and how we can train our brain to react in different ways.  [Blog Post: Addiction is like Riding a Bike](http://www.memoirsofanaddictedbrain.com/connect/addiction-is-like-riding-a-bike/)  Activities to supplement- Addiction is like riding a bike, can you:   * Juggling from right to left, then left to right, then right to left. * Can you hold scissors with your right hand? Switch to left hand? Can you cut paper? Is this something we learn? * Can you write with the opposite hand? * Can you balance the same on both legs the same? Is this something you can learn?   Discussion questions/ writing prompts for in class or homework:   * What could you reteach to your body? * What evidence did you see in video that we can relearn an old trick? * Design an experiment you and reteach your body an activity you do and do it differently. (Switch hands, switch feet, switch legs,switch arms, etc.) |
| *Extension and Follow-up Activity* |
| **Scholastic Teacher Resources**  <http://headsup.scholastic.com/teachers/collections/compilations-past-issues>  This is a site with multiple books you can download as a teacher edition and a student edition. There are mini quizzes as well as vocabulary words for each reading. The reading template in this lesson can be used on any of the sections. Many can be done in 10 minutes or less as a warm-up activity or an advisory lesson.  **“NEW! School Year 2013–2014 Compilation** — A collection of articles and teacher lesson plans designed to teach students about the extraordinary complexities of the brain, including such topics as how drugs overload the brain's reward system; how actions in youth impact the brain's efficiencies through synaptic pruning; and why teen brains are inclined toward impulsivity and the benefits of "pausing" before making decisions.” See web link for more descriptions of each year’s topic.  **Mindset and Addiction Article**  This article talks about how you can use your mindset to shift addiction of someone else or your own addiction. [**Article: Addiction: How Your Mindset Is Hindering Your Recovery**](http://www.geniusawakening.com/genius-self/your-mindset-is-hindering-your-recovery/) Discussion Questions/ Writing Prompts for in class or homework: What is the positive mindset of an addict? The negative mindset of an addict? Is this similar to how we should think about life? School? |
| *Sources/Bibliography* |
| **The Rational Choices of Crack Addicts**  (9/16/2013 from NY Times)<http://www.nytimes.com/2013/09/17/science/the-rational-choices-of-crack-addicts.html?_r=0>**Smoking stokes cocaine cravings: Molecular mechanism found for controversial 'gateway drug' hypothesis.** Written by Virginia Gewin <http://www.nature.com/news/2011/111102/full/news.2011.627.html> **Female drug users shun treatment for fear of losing children, UN says** in Women’s Health Section of Fox News[*http://www.foxnews.com/health/2015/06/29/female-drug-users-shun-treatment-for-fear-losing-children-un-says/*](http://www.foxnews.com/health/2015/06/29/female-drug-users-shun-treatment-for-fear-losing-children-un-says/) **Buddhism**  <https://sites.google.com/site/worldreligionsforkids/buddhism>  **The Buddha and Buddhism for Kids**  <http://ancienthistory.mrdonn.org/Buddhism.html>  **Addiction is like riding a bike**  <http://www.memoirsofanaddictedbrain.com/connect/addiction-is-like-riding-a-bike/>  **Scholastic Teacher Resources**  <http://headsup.scholastic.com/teachers/collections/compilations-past-issues> |

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Title of Article:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Speaker Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

List 5 **facts** you found interesting in the article:

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Find 4 **vocabulary** words you want to know more about. Define 2 by putting them in a sentence of your own or by using a dictionary.

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Write 3 **questions** you have after reading the article.

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**Main Idea** of Article:

For an A...**research** 2 of the questions from above. Cite your source. (Internet, person, book, magazine)

**Summary/ Picture** of what you learned. Must be 4 sentences if a summary. If a picture you must provide labels on the picture so it is clear what you are drawing.

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**Article: The Rational Choices of Crack Addicts**

**Speaker: Carl Hart**

**Writing/ Discussion Prompt:**

* Which offer do you think you would take if you were apart of the experiment: $5/ drugs or $20/ drugs? Why?
* $5 to skip school and get a in trouble with your parents/ stay in school and you're not in trouble or $100 to skip school and get a in trouble with your parents/ stay in school and you're not in trouble?

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Article: Smoking stokes cocaine cravings: Molecular mechanism found for controversial 'gateway drug' hypothesis**

**Speaker: Eric Kandel and Denise Kandel**

**Writing/ Discussion Prompt:**

* If you smoke cigarettes does this mean you will do other drugs? Why or why not?
* Is there a gateway drug to other drugs? Why or why not?

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**Article: Female drug users shun treatment for fear of losing children, UN says**

**Speaker: Sheigla Murphy**

**Writing/ Discussion Prompt:**

* How do drugs affect a child during pregnancy?
* Are all drugs treated equally in pregnancy?
* You are have a migraine and you are pregnant. The drug you need to take to help your migraine is not approved for pregnancy. There is a 0.1% chance it could affect your child. Should you take it?

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**Article: Buddhism**

**Speaker: Owen Flanagan**

**Writing/ Discussion Prompt:**

* What is nirvana? How is nirvana linked to the body? How could nirvana be linked to neuroscience?
* Is it possible for the brain and body to reach nirvana?

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Article: Addiction is like Riding a Bike**

**Speaker: Mark Lewis**

**Writing/ Discussion Prompt:**

* What could you reteach to your body?
* What evidence did you see in video that we can relearn an old trick?
* Design an experiment you and reteach your body an activity you do and do it differently. (Switch hands, switch feet, switch legs,switch arms, etc.)