



BRAIN-POWER!

NIDA Junior Scientists

4 - 5

NEVADA STANDARDS ALIGNMENT





About the *Brain Power!* Nevada Standards Alignment Project

The Nevada Prevention Resource Center (NPRC) recently received funding to reach out to Nevada elementary and middle schools to support substance abuse prevention. We have chosen to use an existing free prevention curriculum from the National Institute on Drug Abuse (NIDA) called: Brain Power! The NIDA Junior Scientist Program.

The Nevada Standards Alignment Packet

This packet is designed to help teachers integrate the Brain Power! program into their regular classroom curriculum.

- Listing of each Nevada science, health, mathematics, and language arts standard covered in each module of the program.
- Standards listed are based on teachers doing the entire module, including the additional and extension activities listed in the modules.
- Standards used are the most recent versions available on the Nevada Department of Education website (www.doe.nv.gov) as of May 2011.
- Includes standards for each of the grades covered in the corresponding *Brain Power!* Kit.
- Pages are color coded to match the color of the corresponding module's tab.
- Standards pages can be placed within their corresponding module or kept as a separate package.

Project Website

The project website is www.NevadaPRC.org/education.php. It includes:

- Project information and updates
- Resources for teachers and parents
- Assessments
- Technical Assistance

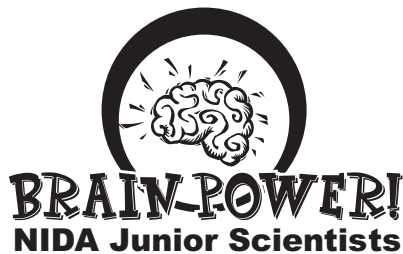
Special Note to School Counselors

These modules cover the following standards from the *ASCA National Standards for Students*.

- PS:A1.6 Distinguish between appropriate and inappropriate behavior.
- PS:B1.2 Understand consequences of decisions and choices
- PS:B1.8 Know when peer pressure is influencing a decision
- PS:C1.8 Learn about the emotional and physical dangers of substance use and abuse

American School Counselor Association (2004). *ASCA National Standards for Students*. Alexandria, VA: Author.





Module 1: Drugs in Society

Grade 4

Learning Objectives:

- Students understand the difference between legal and illegal drugs.
- Students find examples of how drugs are presented in the media.
- Students create a scrapbook identifying how drugs are presented in print media.
- Students draw conclusions about why drug use is a pervasive problem in our culture.

Nevada Science Standards:

- N.5.A.1 Students know scientific progress is made by conducting careful investigations, recording data, and communicating the results in an accurate method.
- N.5.A.7 Students know observable patterns can be used to organize items and ideas.
- N.5.B.3 Students know the benefits of working with a team and sharing findings.

Nevada Health Standards:

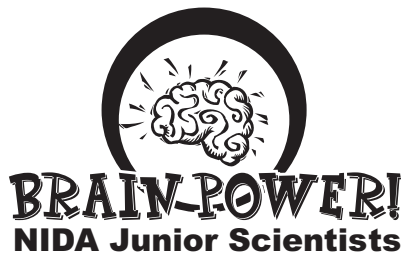
- 2.5.4 Describe how various sources influence individual practices and behaviors.
- 2.5.6 Analyze how stated and implied messages from media influence health behaviors.
- 8.5.1 Describe ways to influence and support others to make positive health choices.

Nevada Math Standards:

- 5.4.1 Pose questions that can be used to guide the collection of categorical and numerical data.

Nevada Language Arts Standards:

- 4.4.2 Identify persuasive and propaganda techniques.
- 4.4.5 Summarize information.
- 4.4.6 Make inferences and draw conclusions based on evidence.
- 5.4.7 Prepare a legible final draft to display or share.
- 6.4.6 Write persuasive paragraphs that include supporting evidence.
- 7.4.1 Listen for a variety of purposes including gaining information.



Module 1: Drugs in Society

Grade 5

Learning Objectives:

- Students understand the difference between legal and illegal drugs.
- Students find examples of how drugs are presented in the media.
- Students create a scrapbook identifying how drugs are presented in print media.
- Students draw conclusions about why drug use is a pervasive problem in our culture.

Nevada Science Standards:

- N.5.A.1 Students know scientific progress is made by conducting careful investigations, recording data, and communicating the results in an accurate method.
- N.5.A.7 Students know observable patterns can be used to organize items and ideas.
- N.5.B.3 Students know the benefits of working with a team and sharing findings.

Nevada Health Standards:

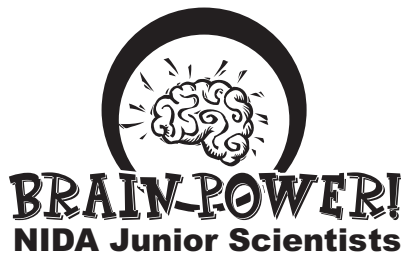
- 2.5.4 Describe how various sources influence individual practices and behaviors.
- 2.5.6 Analyze how stated and implied messages from media influence health behaviors.
- 8.5.1 Describe ways to influence and support others to make positive health choices.

Nevada Math Standards:

- 5.5.1 Pose questions that can be used to guide the collection of categorical and numerical data.

Nevada Language Arts Standards:

- 4.5.2 Identify language used for the purpose of persuasion and propaganda.
- 4.5.5 Summarize information.
- 4.5.6 Make inferences and draw conclusions based on evidence.
- 5.5.7 Prepare a legible final draft to display or share.
- 7.5.1 Listen for a variety of purposes including gaining information.



Module 2: Your Amazing Brain

Grade 4

Learning Objectives:

- Students learn about different parts of the brain and the function of each part.
- Students discuss three different techniques used to study the brain.
- Students analyze pictures taken with each device and figure out what information can be obtained from each kind of picture.
- Students learn about the work of different brain researchers.

Nevada Science Standards:

- N.5.A.1 Students know scientific progress is made by conducting careful investigations, recording data, and communicating the results in an accurate method.
- N.5.B.3 Students know the benefits of working with a team and sharing findings.
- L.5.B Students understand that living things have specialized structures that perform a variety of life functions.

Nevada Health Standards:

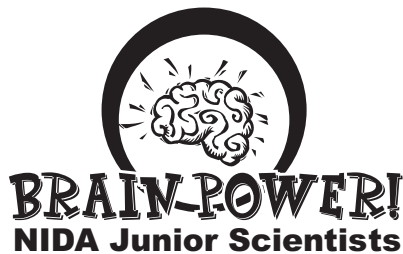
- 1.5.2 Explain the basic structure, function, and developmental processes of human body systems.
- 1.5.6 Explain how substances can affect the way people make decisions and perform tasks.
- 2.5.5 Describe ways technology can influence health and disease.

Nevada Math Standards:

- 5.4.1 Pose questions that can be used to guide the collection of categorical and numerical data.

Nevada Language Arts Standards:

- 1.4.5 Identify content-specific vocabulary in text.
- 4.4.1 Identify and explain the use of bold-faced words.
- 4.4.5 Make connections to self, other text, and/or the world.
- 7.4.1 Listen for a variety of purposes including gaining information.
- 7.4.3 Expand vocabulary through listening.



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Grade 5

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- Students learn about the work of different brain researchers.

Nevada Science Standards:

- N.5.A.1 Students know scientific progress is made by conducting careful investigations, recording data, and communicating the results in an accurate method.
- N.5.B.3 Students know the benefits of working with a team and sharing findings.
- L.5.B Students understand that living things have specialized structures that perform a variety of life functions.

Nevada Health Standards:

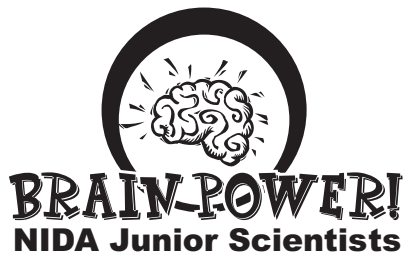
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Nevada Math Standards:

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Nevada Language Arts Standards:

- 4.5.2 Identify language used for the purpose of persuasion and propaganda.
- 4.5.5 Summarize information.
- 4.5.6 Make inferences and draw conclusions based on evidence.
- 5.5.7 Prepare a legible final draft to display or share.
- 7.5.1 Listen for a variety of purposes including gaining information.



Module 3: Neurotransmission

Grade 4

Learning Objectives:

- Students learn about neurons and what they do.
- Students find out how neurons communicate with each other.
- Students explore the relationship between the brain and the rest of the central nervous system.
- Students learn more about neurotransmission by playing a board game.
- Students apply what they have learned by figuring out a unique way to explain the topic.

Nevada Science Standards:

- N.5.A.1 Students know scientific progress is made by conducting careful investigations, recording data, and communicating the results in an accurate method.
- N.5.B.3 Students know the benefits of working with a team and sharing findings.
- L.5.B Students understand that living things have specialized structures that perform a variety of life functions.

Nevada Health Standards:

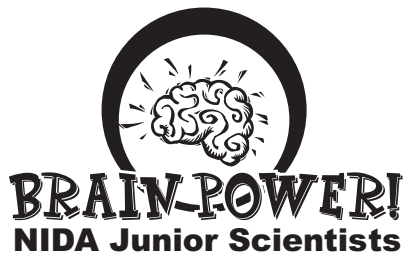
- 1.5.2 Explain the basic structure, function, and developmental processes of human body systems.

Nevada Math Standards:

- 1.4.3 Read, write, compare, and order whole numbers.

Nevada Language Arts Standards:

- 1.4.5 Identify content-specific vocabulary in text.
- 4.4.5 Summarize information.
- 5.4.7 Prepare a legible final draft to display or share. With assistance, select a publishing format appropriate to the audience and purpose.
- 7.4.1 Listen for a variety of purposes including gaining information.
- 7.4.3 Expand vocabulary through listening.



Module 3: Neurotransmission

Grade 5

Learning Objectives:

- Students learn about neurons and what they do.
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- Students explore the relationship between the brain and the rest of the central nervous system.
- Students learn more about neurotransmission by playing a board game.
- Students apply what they have learned by figuring out a unique way to explain the topic.

Nevada Science Standards:

- N.5.A.1 Students know scientific progress is made by conducting careful investigations, recording data, and communicating the results in an accurate method.
- N.5.B.3 Students know the benefits of working with a team and sharing findings.
- L.5.B Students understand that living things have specialized structures that perform a variety of life functions.

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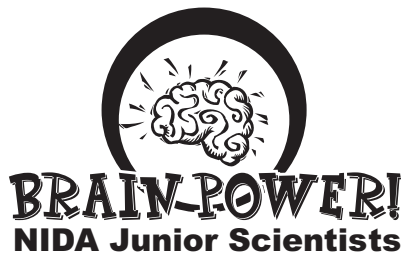
- 1.5.2 Explain the basic structure, function, and developmental processes of human body systems.

Nevada Math Standards:

- 1.5.3 Read, write, compare, and order integers in mathematical and practical situations.

Nevada Language Arts Standards:

- 4.5.5 Summarize information.
- 5.5.7 Prepare a legible final draft to display or share. Select a publishing format appropriate to the audience and purpose.
- 7.5.1 Listen for a variety of purposes including gaining information.
- 7.5.3 Expand vocabulary through listening.



Module 4: How Stimulants Affect the Nervous System Grade 4

Learning Objectives:

- Students learn how certain stimulants affect the brain and the nervous system.
- Students study PET scans showing the difference between a normal brain and one exposed to stimulants.
- Students discuss the impact of drug use.

Nevada Science Standards:

N.5.A.1 Students know graphic representations of recorded data can be used to make predictions.

N.5.B.3 Students know the benefits of working with a team and sharing findings.

L.5.B Students understand that living things have specialized structures that perform a variety of life functions.

Nevada Health Standards:

1.5.2 Explain the basic structure, function, and developmental processes of human body systems.

1.5.6 Explain how substances can affect the way people make decisions and perform tasks.

5.5.2 Predict how decisions about substance use and abuse have consequences for self and others.

Nevada Math Standards:

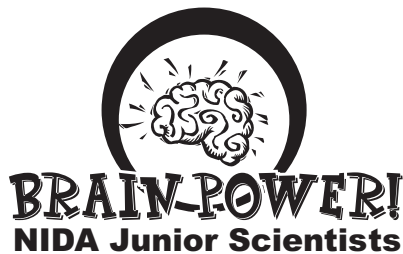
5.4.1 Pose questions that can be used to guide the collection of categorical and numerical data.

Nevada Language Arts Standards:

4.4.5 Summarize information.

7.4.1 Listen for a variety of purposes including gaining information.

7.4.3 Expand vocabulary through listening.



Module 4: How Stimulants Affect the Nervous System Grade 5

Learning Objectives:

- Students learn how certain stimulants affect the brain and the nervous system.
- Students study PET scans showing the difference between a normal brain and one exposed to stimulants.
- Students discuss the impact of drug use.

Nevada Science Standards:

N.5.A.1 Students know graphic representations of recorded data can be used to make predictions.

N.5.B.3 Students know the benefits of working with a team and sharing findings.

L.5.B Students understand that living things have specialized structures that perform a variety of life functions.

Nevada Health Standards:

1.5.2 Explain the basic structure, function, and developmental processes of human body systems.

1.5.6 Explain how substances can affect the way people make decisions and perform tasks.

5.5.2 Predict how decisions about substance use and abuse have consequences for self and others.

Nevada Math Standards:

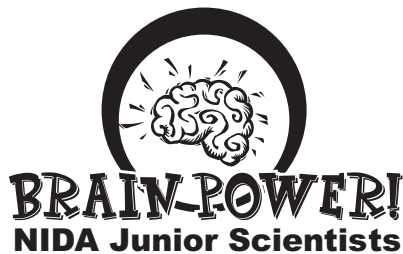
5.5.1 Pose questions that can be used to guide the collection of categorical and numerical data.

Nevada Language Arts Standards:

4.5.5 Summarize information.

7.5.1 Listen for a variety of purposes including gaining information.

7.5.3 Expand vocabulary through listening.



Module 5: Alcohol, Marijuana, and Inhalants

Grade 4

Learning Objectives:

- Students learn about alcohol, marijuana, and inhalants.
- Students find out how alcohol, marijuana, and inhalants affect the brain and the nervous system.
- Students examine how alcohol, marijuana, and inhalants affect the body.

Nevada Science Standards:

N.5.A.1 Students know graphic representations of recorded data can be used to make predictions.

N.5.B.3 Students know the benefits of working with a team and sharing findings.

L.5.B Students understand that living things have specialized structures that perform a variety of life functions.

Nevada Health Standards:

1.5.2 Explain the basic structure, function, and developmental processes of human body systems.

1.5.6 Explain how substances can affect the way people make decisions and perform tasks.

5.5.2 Predict how decisions about substance use and abuse have consequences for self and others.

Nevada Math Standards:

5.4.1 Pose questions that can be used to guide the collection of categorical and numerical data.

Nevada Language Arts Standards:

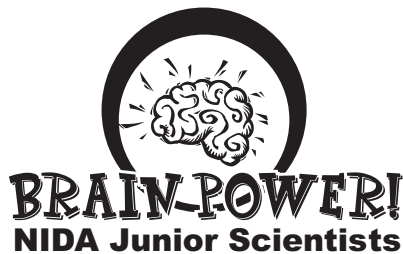
4.4.1 Identify the purpose of and gain information from charts.

4.4.3 Identify a cause and its effect on events and/or relationships.

4.4.5 Summarize information.

7.4.1 Listen for a variety of purposes including gaining information.

7.4.3 Expand vocabulary through listening.



Module 5: Alcohol, Marijuana, and Inhalants

Grade 5

Learning Objectives:

- Students learn about alcohol, marijuana, and inhalants.
- Students find out how alcohol, marijuana, and inhalants affect the brain and the nervous system.
- Students examine how alcohol, marijuana, and inhalants affect the body.

Nevada Science Standards:

N.5.A.1 Students know graphic representations of recorded data can be used to make predictions.

N.5.B.3 Students know the benefits of working with a team and sharing findings.

L.5.B Students understand that living things have specialized structures that perform a variety of life functions.

Nevada Health Standards:

1.5.2 Explain the basic structure, function, and developmental processes of human body systems.

1.5.6 Explain how substances can affect the way people make decisions and perform tasks.

5.5.2 Predict how decisions about substance use and abuse have consequences for self and others.

Nevada Math Standards:

5.5.1 Pose questions that can be used to guide the collection of categorical and numerical data.

Nevada Language Arts Standards:

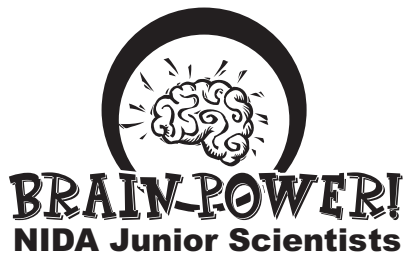
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4.5.5 Summarize information.

7.5.1 Listen for a variety of purposes including gaining information.

7.5.3 Expand vocabulary through listening.



Module 6: What is Addiction?

Grade 4

Learning Objectives:

- Students learn about addiction.
- Students discuss how addiction relates to the drug abuse problem in this country.
- Students rethink the scrapbooks they developed during Module 1 to reflect their new ideas about drugs.

Nevada Science Standards:

- N.5.A.1 Students know graphic representations of recorded data can be used to make predictions.
- N.8.A.3 Students know how to draw conclusions from scientific evidence.
- L.5.B Students understand that living things have specialized structures that perform a variety of life functions.

Nevada Health Standards:

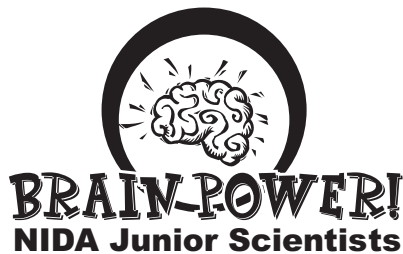
- 1.5.2 Explain the basic structure, function, and developmental processes of human body systems.
- 1.5.6 Explain how substances can affect the way people make decisions and perform tasks.
- 5.5.2 Predict how decisions about substance use and abuse have consequences for self and others.
- 8.5.2 Compare consumer and environmental health messages.

Nevada Math Standards:

- 5.4.1 Pose questions that can be used to guide the collection of categorical and numerical data.

Nevada Language Arts Standards:

- 4.4.3 Identify a cause and its effect on events and/or relationships.
- 4.4.6 Make inferences and draw conclusions based on evidence.
- 6.4.9 Write research papers.
- 7.4.1 Listen for a variety of purposes including gaining information.



Module 6: What is Addiction?

Grade 5

Learning Objectives:

- Students learn about addiction.
- Students discuss how addiction relates to the drug abuse problem in this country.
- Students rethink the scrapbooks they developed during Module 1 to reflect their new ideas about drugs.

Nevada Science Standards:

- N.5.A.1 Students know graphic representations of recorded data can be used to make predictions.
- N.8.A.3 Students know how to draw conclusions from scientific evidence.
- L.5.B Students understand that living things have specialized structures that perform a variety of life functions.

Nevada Health Standards:

- 1.5.2 Explain the basic structure, function, and developmental processes of human body systems.
- 1.5.6 Explain how substances can affect the way people make decisions and perform tasks.
- 5.5.2 Predict how decisions about substance use and abuse have consequences for self and others.
- 8.5.2 Compare consumer and environmental health messages.

Nevada Math Standards:

- 5.5.1 Pose questions that can be used to guide the collection of categorical and numerical data.

Nevada Language Arts Standards:

- 4.5.3 Explain a cause and its effect on events and/or relationships.
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