Health Science 5

Length of Course: Full Year

Elective/Required: Required

Schools: Elementary

Eligibility: Grade 5

Credit Value: N/A

Date Approved: August 26, 2019
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Unit</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1 - Wellness</td>
<td>3</td>
</tr>
<tr>
<td>Unit 2 – Integrated Skills</td>
<td>7</td>
</tr>
<tr>
<td>Unit 3 – Drugs &amp; Medicines</td>
<td>11</td>
</tr>
<tr>
<td>Unit 4 – Human Relationships &amp; Sexuality</td>
<td>15</td>
</tr>
</tbody>
</table>
Unit 1- Wellness

Standard

● 2.1 - All students will learn and apply health promotion concepts and skills to support a healthy, active lifestyle.

Big Ideas

● Choices I make today will impact my health in the future.

Essential Questions

1. What do I need to care for my growing body?
2. As I change, how do I make healthy decisions?

Enduring Understandings

● Students will understand that:
  ○ The need for personal hygiene products.
  ○ How to resist unhealthy influences.
  ○ How their body will change over time.
  ○ How choices may affect future chronic health conditions.

Primary Teaching Resources

Unit Strands:
  A. Personal Growth and Development
  C. Disease and Health Conditions
  E. Social and Emotional Health

Suggested Pacing: 2-3 Weeks

CPI Proficiencies and “I Can” Statements

| 2.1.6.A.1 Explain how health data can be used | I can understand how staying | **Can be multiple days |

Instructional Strategies
<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
<th>Additional Resources</th>
</tr>
</thead>
</table>
| 2.1.6.A.2 | Relate how personal lifestyle habits, environment, and heredity influence growth and development in each life stage. | healthy is a lifelong process that includes all dimensions of well being. | DE Video: [A Healthy Diet](#)  
DE Video: [Good Things First! A Way to Wellness with Joan O’Keefe](#)  
**Newsgela**: [Students Should Learn that Being Healthy is More Important Than Losing Weight](#)  
**Newsgela**: [New Guidelines Stress the Importance of Exercise for Everyone, Young and Old](#)  
[Food Log](version #1)  
[Food Log](version #2)  
[Activity Log](version #1)  
[Activity Log](version #2) |
| 2.1.6.A.3 | Determine factors that influence the purchase of healthcare products and use of personal hygiene practices. | I can analyze factors that influence what healthcare and hygiene products are purchased. | Analyzing Advertising (Use advertisements for hygiene/healthcare products--deodorant, etc.)  
Analyzing Food Labels |
| 2.1.6.C.1 | Summarize means of detecting and treating diseases and health conditions that are prevalent in adolescents. | I can understand how early detection and treatment of diseases and health conditions impact one’s health. | **Newsgela**: [Students Lend a Hand to Classmates Dealing with Mental Health Issues](#)  
**BrainPop video**: [Depression](#)  
[Walk in our Shoes](website and activity) |
| 2.1.6.C.2 | Determine the impact of public health strategies in preventing diseases and health conditions. |  |  |
| 2.1.6.C.3 | Compare and contrast common mental illnesses (such as depression, anxiety and panic disorders, and phobias) and ways to detect and treat them. |  |  |
| 2.1.6.E.1 | Examine how personal assets and protective factors support healthy social and emotional development. | I can understand how social and emotional development impacts all components of wellness | **Mindfulness**: [The Present](#)  
**BrainPop video**: [Mindfulness](#) |
| 2.1.6.E.2 | Make recommendations to resolve incidences of school and community conflict, violence, harassment, gang violence, | I can understand how respect and acceptance for individuals regardless of gender, sexual | **BrainPop video**: [Bullying](#)  
DE video: [If you get bullied](#) |
<table>
<thead>
<tr>
<th>discrimination and bullying.</th>
<th>orientation, disability, ethnicity, socioeconomic background, religion, and/or culture provide a foundation for the prevention and resolution of conflict</th>
<th>Activity: No bullying at our school</th>
</tr>
</thead>
</table>

**2.1.6.E.3** Compare and contrast ways that individuals, families, and communities cope with change, crisis, rejection, loss and separation.

<table>
<thead>
<tr>
<th>I can understand how stress management skills impact an individual's ability to cope with different types of emotional situations.</th>
<th>BrainPop video: Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity:</strong> Dealing with it (Coping skills matching game)</td>
<td><strong>Activity:</strong> Stressful Scenarios flashcards</td>
</tr>
</tbody>
</table>

### Content and Academic Vocabulary

**Personal Growth and Development** - Dimensions of Wellness: Physical, Emotional, Mental, and Social, Life Stages; Infant, Toddler, Child, Adult, Elderly, Influences on Health & Wellness; Heredity, Environment, Relationships, Advertisements, Wise Consumer, Body Systems; Cardiovascular, Digestive, Endocrine, Immune, Nervous, Respiratory

**Disease and Health Conditions** - Colds & Flu, Food Allergies, Asthma, Diabetes, Obesity, Lyme's Disease, Concussions, Eating Disorders, Obesity, Infectious; Bacterial, Viral, Immune System, Vaccines, Non-Infectious disease; Allergy, Alzheimer's, Cancer, Heart Disease, Risk-Factors, Skin Cancer; melanoma, sunscreen, Lung Cancer; Smoking, Second-hand smoke, Preventative Health Care, Mental Health; Depression, Stigma, Treatment, Trusted-Adult


### Assessment Ideas/Options/Suggestions

**Formative:** food/exercise logs, class discussions, teacher observations, Newsela written responses/quizzes, BrainPop quizzes/mind maps

**Summative:** Create a digital or drawn PSA (Public Service Announcement) using multiple ways to stay safe and/or healthy. Students should focus on diet, exercise, and/or mental health. Students should focus on the benefits of wellness. Teacher developed assessment that will demonstrate student understanding of the essential questions related to this unit.

**Options/Suggestions:**

### Interdisciplinary Connections
**21st Century Skills**

**CRP2.** Apply appropriate academic and technical skills

**CRP4.** Communicate clearly and effectively and with reason.

**CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.

**9.2.4.A.4** Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

**Social Emotional Learning (SEL) Competencies**

- Acquire and apply the knowledge, attitudes, and skills necessary to manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

**NJSSL- Technology**

**8.1.2.E.1** Use digital tools and online resources to explore a problem or issue.

**8.2.2.C.1** Brainstorm ideas on how to solve a problem or build a product.

**8.2.2.D.1** Collaborate and apply a design process to solve a simple problem from everyday experiences.

**Next Generation Science Standards- CrossCutting Principles:**

**Patterns:** Observed patterns in nature guide organization and classification and prompt questions about relationships and causes underlying them.

- Patterns can be used as evidence to support and explanation

**Cause and Effect: Mechanism and Prediction:** Events have causes, sometimes simple, sometimes multifaceted. Deciphering causal relationships, and the mechanisms by they are mediated, is a major activity of science and engineering.

- Cause and effect relationships are routinely identified, tested, and used to explain change.
## Unit 2 - Integrated Skills

### Standard

- 2.2- All students will use health-enhancing personal, interpersonal, and life skills to support a healthy, active lifestyle

### Big Ideas

- I can be a successful member of a group. I can be a positive contributor to various communities.

### Essential Questions

1. How do I make an effective decision?
2. How do I negotiate difficult decisions?
3. What characteristics make a good role model?

### Enduring Understandings

- Students will understand:
  - How to make an effective decision concerning health and safety.
  - How personal ethics influence decision making.
  - How to choose good role models.
  - How to access health resources.

### Primary Teaching Resources

**Unit Strands:**
- A. Interpersonal Communication
- B. Decision-Making and Goal Setting
- C. Character Development
- E. Health Services and Information

**Suggested Pacing:** 2 Weeks
<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
<th>I Can</th>
<th>Resources</th>
</tr>
</thead>
</table>
| 2.2.6.A.1 | Effective communication may be a determining factor in the outcome of health and safety related situations | I can communicate my thoughts and feelings to improve my friendships and to solve conflicts. | Brain Pop: [Conflict Resolution](#)  
Brain Pop: [The Meaning of Beep Game](#)  
DE: [Emotional Talk](#) |
| 2.2.6.A.2 | Effective communication is the basis for strengthening interpersonal interactions and relationships and resolving conflicts | | |
| 2.2.6.B.1 | Use effective decision-making strategies | I can develop decision making skills to make healthy choices. | Brain Pop: [Goal Setting](#)  
DE: [Make Better Choices](#)  
Newsela: [How to Set, and Keep Your Goals](#) |
| 2.2.6.B.2 | Predict how the outcome(s) of a health related decision may differ if an alternative decision is made by self or others | I can describe how decisions affect my health and the health of others. | |
| 2.2.6.B.3 | Determine how conflicting interests may influence one's decision | I can identify and set short and long term goals and track my progress toward achieving goals. | |
| 2.2.6.B.4 | Apply personal health data and information to support achievement of one's short and long term health goals | I can develop decision making skills to make healthy choices. | |
| 2.2.6.C.1 | Explain how character and core ethical values can be useful in addressing challenging situations | I can identify and implement the traits of good character. | YouTube: [Character Counts](#)  
Activities: [Film Clips](#) |
| 2.2.6.C.2 | Predict situations that may challenge an individual's core ethical values | | |
| 2.2.6.C.3 | Develop ways to proactively include peers with disabilities at home, at school, and in community activities | | |
| 2.2.6.E.1 | Determine the validity and reliability of different types of health resources | I can identify different health resources. | DE: [Asking an Adult for Help](#)  
DE: [Helping Resources](#)  
Newsela: [Pro Basketball Player Shares Story](#) |
| 2.2.6.E.2 | Distinguish health issues that warrant support from trusted adults or health professionals | I can recognize when I need to ask for assistance from a health professional. | |
## Content and Academic Vocabulary

**Interpersonal Communication** - Expressing needs, wants, and feelings; Boundaries, Refusal skills, “I” Statements, Communication types- assertive, passive, aggressive, Active Listening, Support System

**Decision Making and Goal Setting** - Influence/Pressure; parents, peers, technology, culture, media, Goal setting; short-term and long-term goals, Refusal skills, Personal Responsibility, Pros/Cons of a Choice, Consequences, Reflection, Self-Esteem, Interests, Action Plan, Setback, Persistence

**Character Development** - Positive character traits; respectful, fair, trustworthy, Values, Empathy, Feelings, Types of Disabilities

**Health Services and Information** - Preventative healthcare, Trusted adults, Health professionals, Healthcare specialists, How to contact Emergency Response, Guidance Counselors, School Nurse

## Assessment Ideas/Options/Suggestions

**Formative:**
- Newsela responses
- Brainpop Quizzes
- Class discussions
- Teacher observation
- Anecdotal notes

**Summative:**
- Create short and long term goals and identify steps to accomplish goals
- Write a personal narrative on how a conflict with a friend was resolved
- Create a brochure identifying different health resources and trusted adults
- Teacher developed assessment that will demonstrate student understanding of the essential questions related to this unit

**Options/Suggestions:**

## Interdisciplinary Connections

**21st Century Skills**

**CRP2.** Apply appropriate academic and technical skills

**CRP4.** Communicate clearly and effectively and with reason.
CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Social Emotional Learning (SEL) Competencies
- Acquire and apply the knowledge, attitudes, and skills necessary to manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

NJSLS - Technology
8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.
8.2.2.C.1 Brainstorm ideas on how to solve a problem or build a product.
8.2.2.D.1 Collaborate and apply a design process to solve a simple problem from everyday experiences.

Next Generation Science Standards - CrossCutting Principles:
Cause and Effect: Mechanism and Prediction: Events have causes, sometimes simple, sometimes multifaceted. Deciphering causal relationships, and the mechanisms by they are mediated, is a major activity of science and engineering.
- Cause and effect relationships are routinely identified, tested, and used to explain change.
## Unit 3- Drugs and Medicines

### Standard

- 2.3 - Drugs and Medicines: All students will acquire knowledge about alcohol, tobacco, other drugs, and medicines and apply these concepts to support a healthy, active lifestyle.

### Big Ideas

- I need to use medicine responsibly. Medicine can be abused/misused. There are consequences to using drugs and alcohol. People who use drugs need help and support.

### Essential Questions

1. What are different kinds of medicines?
2. How are prescription and OTC drugs different?
3. What are some safety rules for using medications and why are they important?
4. What information is found on all OTC and prescription medicines?
5. How do drugs affect my body?
6. What are different kinds of drugs?
7. What is dependency?
8. What is addiction?
9. What are short and long-term effects of alcohol & tobacco on the body?
10. What are some of the reasons why people would use/abuse/misuse drugs?
11. What community supports are available for people who want to quit?
12. How would drugs, alcohol, or tobacco impact your future goals?

### Enduring Understandings

- Students will understand that:
  - Medications can either help or harm your health.
  - A drug is a substance other than food or water that changes the way the mind or body works.
  - Children’s bodies are in a state of growth, therefore alcohol, tobacco, and other drug use is more harmful.
  - There are laws created to help protect them.
  - Their future goals can be impacted by drug use.
  - Having several reasons why you choose not to use drugs, alcohol, or tobacco is a key factor in resisting pressure.
## Primary Teaching Resources

### Unit Strands:
- **A. Medicines**
- **B. Alcohol, Tobacco & Other Drugs**
- **C. Dependency/Addiction & Treatment**

### Suggested Pacing: 2-3 weeks

<table>
<thead>
<tr>
<th>CPI Proficiencies</th>
<th>“I Can” Statements</th>
<th>Instructional Strategies</th>
</tr>
</thead>
</table>
| **2.3.6.A.1** Compare and contrast short- and long term effects and the potential for abuse of commonly used over the-counter and prescription medications and herbal and medicinal supplements. | I can understand how medicines come in a variety of forms (prescription medicines, over the counter, medicinal supplements), are used for numerous reasons and should be taken as directed in order to be safe and effective. | All About Medicine  
Comparing over the counter and prescription medicines  
Reading and understanding the drug facts label |
| **2.3.6.A.2** Compare information found on over-the-counter and prescription medicines. | | |
| **2.3.6.B.1** Explain the system of drug classification and why it is useful in preventing substance abuse. | I can understand that there is a strong relationship between individuals who abuse drugs and increased intentional and unintentional health risk behaviors | BrainPop: Smoking  
Newsela: Many young people think vaping is safer than cigarettes, but they’re wrong  
DE: What tobacco does |
| **2.3.6.B.2** Relate tobacco use and the incidence of disease. | | |
| **2.3.6.B.3** Compare the effects of laws, policies, and procedures on smokers and nonsmokers. | | |
| **2.3.6.B.4** Determine the impact of the use and abuse of alcohol on the incidence of illness, injuries, and disease, the increase of risky health behaviors, and the likelihood of harm to one’s health. | I can understand that there is a strong relationship between individuals who abuse drugs and increased intentional and unintentional health risk behaviors | BrainPop: Alcohol  
DE video: Alcohol: What about it?  
KidsHealth: Alcohol |
| **2.3.6.B.5** Determine situations where the use of alcohol and other drugs influence decision-making and can place one at risk. | | BrainPop (cool science careers): Toxicologist |
| 2.3.6.B.6 | Summarize the signs and symptoms of inhalant abuse. | I can understand that there is a strong relationship between individuals who abuse drugs and increased intentional and unintentional health risk behaviors. | Newsela: Issue: Heroin Addiction  
National Drug & Alcohol IQ |
| 2.3.6.B.7 | Analyze the relationship between injected drug use and diseases such as HIV/AIDS and hepatitis. |  |  |
| 2.3.6.C.1 | Summarize the signs and symptoms of a substance abuse problem and the stages that lead to dependency/addiction. | I can understand substance abuse is caused by a variety of factors. | BrainPop: Addiction  
BrainPop: Substance Abuse  
Mouse Party |
| 2.3.6.C.2 | Explain how wellness is affected during the stages of drug dependency/addiction. |  |  |
| 2.3.6.C.3 | Determine the extent to which various factors contribute to the use and abuse of alcohol, tobacco, and other drugs by adolescents, such as peer pressure, low self-esteem, genetics, and poor role models. |  |  |
| 2.3.6.C.4 | Determine effective strategies to stop using alcohol, tobacco, and other drugs, and that support the ability to remain drug-free. | I can understand there are many ways to obtain treatment of alcohol, tobacco, and other substance abuse problems. | DE: Fishing for Questions  
DE: Asking an adult for help  
Create a poster/contract to be drug free |

### Content and Academic Vocabulary

**Medicines**- Drug, Medicine, Medicine Abuse, Pills, OTC, Prescription, Dosage, Trusted Adult, Tolerance, Food & Drug Administration, Side effects, Warnings

**Alcohol, Tobacco, & Other Drugs**- Cigarettes; Nicotine, Vaping, Second-Hand Smoke, Chewing Tobacco, Lung Cancer, Health Problems, Alcohol; Central Nervous System, Blood Alcohol Concentration, Intoxication, Cirrhosis, Alcoholism, Types of Drugs; Stimulants, Depressants, Inhalants, Opiates, Marijuana, Hallucinogens, Designer Drugs; MDMA, GHB, Ketamine

**Dependency/Addiction & Treatment**- Signs & Symptoms of Drug Use, Addiction; Physical Dependence, Tolerance, Psychological Dependence, Withdrawal, Quitting; Relapse, Cessation, Nicotine Replacement Therapy, Influences; Peer Pressure, Family Modeling, Advertising, Internal Pressure, Intervention; Treatment Center, Detoxification
### Assessment Ideas/Options/Suggestions

**Formative:** journals, class discussions, teacher observations, Newsela written responses/quizzes, BrainPop quizzes/mind maps

**Summative:** Create a brochure (digital or drawn) showing at least one type of drug (tobacco, alcohol, etc). Students should focus on what the drug is and why it is harmful. Develop a hand drawn or digital drawing of an “anti-drug” poster or slide presentation. Teacher developed assessment that will demonstrate student understanding of the essential questions related to this unit.

**Options/Suggestions:**  
- Anti-Drug Poster Ideas

### Interdisciplinary Connections

**21st Century Skills**

- CRP2. Apply appropriate academic and technical skills  
- CRP4. Communicate clearly and effectively and with reason.  
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.  
- 9.2.4.A.4 Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

**Social Emotional Learning (SEL) Competencies**

- Acquire and apply the knowledge, attitudes, and skills necessary to manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

**NJSLS- Technology**

- 8.1.2.E.1 Use digital tools and online resources to explore a problem or issue.
- 8.2.2.C.1 Brainstorm ideas on how to solve a problem or build a product.
- 8.2.2.D.1 Collaborate and apply a design process to solve a simple problem from everyday experiences.

**Next Generation Science Standards- Crosscutting Principles:**

- **Patterns:** Observed patterns in nature guide organization and classification and prompt questions about relationships and causes underlying them.  
  - Patterns can be used as evidence to support and explanation

- **Cause and Effect: Mechanism and Prediction:** Events have causes, sometimes simple, sometimes multifaceted. Deciphering causal relationships, and the mechanisms by they are mediated, is a major activity of science and engineering.  
  - Cause and effect relationships are routinely identified, tested, and used to explain change
<table>
<thead>
<tr>
<th>Unit 4- Human Relationships &amp; Sexuality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard</strong></td>
</tr>
<tr>
<td>● 2.4- Human Relationships and Sexuality: All students will acquire knowledge about the physical, emotional, and social aspects of human relationships and sexuality and apply these concepts to support a healthy, active lifestyle.</td>
</tr>
<tr>
<td><strong>Big Ideas</strong></td>
</tr>
<tr>
<td>● Each family’s relationship is unique. Positive relationships are important for wellness. Social connections will evolve throughout the stages of human development.</td>
</tr>
<tr>
<td><strong>Essential Questions</strong></td>
</tr>
<tr>
<td>1. What are the rules in my family?</td>
</tr>
<tr>
<td>2. What are my family values?</td>
</tr>
<tr>
<td>3. What makes a family healthy?</td>
</tr>
<tr>
<td>4. How do families cope when experiencing changing family dynamics?</td>
</tr>
<tr>
<td>5. How do messages (verbal and nonverbal) impact the health and or/relationships of oneself and those around you?</td>
</tr>
<tr>
<td><strong>Enduring Understandings</strong></td>
</tr>
<tr>
<td>● Students will understand that:</td>
</tr>
<tr>
<td>○ There are many types of families.</td>
</tr>
<tr>
<td>○ Families influence your values and attempt to provide basic human needs.</td>
</tr>
<tr>
<td>○ Families show love and support in different ways.</td>
</tr>
<tr>
<td>○ Not all families are perfect.</td>
</tr>
<tr>
<td>○ Families cope with changing dynamics by showing respect and caring.</td>
</tr>
<tr>
<td>○ Conflict will occur in human relationships.</td>
</tr>
<tr>
<td>○ Conflicts can be resolved by using specific strategies.</td>
</tr>
<tr>
<td><strong>Primary Teaching Resources</strong></td>
</tr>
<tr>
<td><strong>Unit Strand:</strong></td>
</tr>
<tr>
<td>A. Relationships</td>
</tr>
<tr>
<td><strong>Suggested Pacing:</strong> One Week</td>
</tr>
<tr>
<td>CPI Proficiencies</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>2.4.6.A.1</strong> Compare and contrast how families may change over time</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>2.4.6.A.2</strong> Analyze the characteristics of healthy friendships and other relationships</td>
</tr>
<tr>
<td><strong>2.4.6.A.3</strong> Examine the types of relationships adolescents may experience</td>
</tr>
<tr>
<td><strong>2.4.6.A.4</strong> Demonstrate successful resolution of a problem among friends and in other relationships</td>
</tr>
<tr>
<td><strong>2.4.6.A.5</strong> Compare and contrast the role of dating and dating behaviors in adolescence</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Content and Academic Vocabulary**

**Relationships**- Family Health; nurturing, structure, roles, nuclear, blended, couples, extended, adoptive, single-parent, Family Change; health problems, economic problems, relationship problems, separation, divorce, coping, Responsibilities; chores, jobs, school, college, career Human Development Stages; infancy, childhood, adolescence/puberty, adulthood, aging, death, grief, Social Skills; expressing yourself, active listening, body language, behavior, refusal skills, Sensitivity Skills; empathy, tolerance, Healthy Friendships; self-esteem, caring, respect, dependability, loyalty, honesty; Unhealthy relationships; characteristics, bullying, clique, abuse, peer pressure, conflict resolution, Dating; age-appropriate expectations, respect, communicating boundaries

**Assessment Ideas/Options/Suggestions**

**Formative:**
- Newsela responses
- Brainpop Quizzes
- Class discussions
- Teacher observation
- Anecdotal notes
**Summative:**
- Create a want ad for a friend demonstrating the qualities of a good friend. Teacher developed assessment that will demonstrate student understanding of the essential questions related to this unit.

**Options/Suggestions:**
Kidshealth.org

---

### Interdisciplinary Connections

**21st Century Skills**

**CRP2.** Apply appropriate academic and technical skills  
**CRP4.** Communicate clearly and effectively and with reason.  
**CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.  
**9.2.4.A.4** Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

**Social Emotional Learning (SEL) Competencies**
- Acquire and apply the knowledge, attitudes, and skills necessary to manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions.

**NJSLS- Technology**

**8.1.2.E.1** Use digital tools and online resources to explore a problem or issue.  
**8.2.2.C.1** Brainstorm ideas on how to solve a problem or build a product.  
**8.2.2.D.1** Collaborate and apply a design process to solve a simple problem from everyday experiences.

**Next Generation Science Standards- Crosscutting Principles**

**Patterns:** Observed patterns in nature guide organization and classification and prompt questions about relationships and causes underlying them.  
- Patterns can be used as evidence to support an explanation as seen by graphing responses.

**Cause and Effect: Mechanism and Prediction:** Events have causes, sometimes simple, sometimes multifaceted. Deciphering causal relationships, and the mechanisms by they are mediated, is a major activity of science and engineering.  
- Cause and effect relationships are routinely identified, tested, and used to explain change.

**Systems and System Models:** A system is an organized group of related objects or components; models can be used for understanding and predicting the behavior of systems.  
- A system can be described in terms of its components and their interactions  
- A system is a group of related parts that make up a whole and can carry out functions its individual parts cannot.
**Stability and Change**: For both designed and natural systems, conditions that affect stability and factors that control rates of change are critical elements to consider and understand.
- Change is measured in terms of differences over time and may occur at different rates.