



## Thursday, November 17, 2022 AGENDA

Regular Business Meeting – 7:00 PM  
SAU 106 Boardroom

Christopher K. Kellan, Superintendent  
Kristin Savage, Vice Chair

1. 7:00 PM Call to Order – Vice-Chair
2. Roll Call – Clerk
3. Pledge of Allegiance
4. Approval of Minutes
5. Delegates and Individuals
6. Student Representative
7. Current Business
  - a. 7:05 PM Second Read of High School Curriculum Units – ACTION
  - b. 7:10 PM First Read of Policies – ACTION
  - c. 7:15 PM Online Safety Training – ACTION
  - d. 7:20 PM Transportation Contract – ACTION
  - e. 7:25 PM Facilities Update – INFORMATIONAL
  - f. 7:30 PM Request for Additional Maintenance Employees – ACTION
  - g. 7:35 PM CIP Recommendations – ACTION
  - h. 8:20 PM Warrant Articles – INFORMATIONAL
  - i. 8:25 PM Reorganization of School Board – ACTION
8. 8:30 PM Administrator’s Report
9. 8:35 PM Personnel Report
10. 8:40 PM Committee Reports/Reports of the School Board
11. Correspondence Folder
12. Vendor and Payroll Registers
13. 8:45 PM Other Business
14. Nonpublic Session
15. Future Dates

| DATE        | TIME    | LOCATION               | TYPE OF MEETING  |
|-------------|---------|------------------------|------------------|
| December 1  | 7:00 PM | SAU Boardroom          | Regular Business |
| December 15 | 6:00 PM | Performing Arts Center | Regular Business |



**1-3. Open Meeting**

**4. Approval of Minutes** (1 set: November 3<sup>rd</sup> regular business meeting)

**5. Delegates and Individuals**

**6. Student Representative** (Matthew LaBelle to present)

**7. Current Business**

**a. Second Read of High School Curriculum Units**

Motion to act on the second read of the high school curriculum documents for Studies in Women's Health and Wellness; and Probability, Statistics, and Trigonometry.

**b. First Read of Policies**

Motion to act on the first read of Policies DJE and KF.

**c. Online Safety Training**

Motion to act on the request to subscribe to the Navigate360 online safety training platform submitted by Christopher Kellan.

**d. Transportation Contract**

Motion to act on the recommended transportation contracts submitted by the Transportation Committee for regular education school bus transportation and special education school bus transportation.

**e. Facilities Update**

Review the updated facilities' projects submitted by Karl Ingoldsby.

**f. Request for Additional Maintenance Employees**

Motion to act on the request of adding two maintenance technicians to the Facilities Department submitted by Karl Ingoldsby.

**g. CIP Recommendations**

Motion to act on the projects submitted by the CIP Committee.

**h. Warrant Articles**

No change to the warrant articles.

**i. Reorganization of School Board**

Determine membership of the School Board/Superintendent Leadership Committees.

**8. Administrators' Report**

Mr. Krieger and Mr. Kellan to present.

**9. Personnel Report**

**10. Committee Reports/Reports of the School Board**

**11. Recess until approximately 8:45 PM**

**12. Correspondence** – All correspondence is now forwarded to board members as it comes in.

**13. Vendor and Payroll Registers** – please be sure to review and sign electronically vendor and payroll registers.

**14. Other Business** – Board members to provide agenda items for future meeting consideration.

**15. Nonpublic Session** – If needed.

**16. Future Dates** – As indicated.

# DRAFT-NOT APPROVED

Note: When feasible, TRSB meetings are videotaped. These meeting minutes reflect only a basic summary of the meeting topics, discussion, and action. The Vimeo recording of this meeting can be viewed at: <https://vimeo.com/trsd>  
Materials presented at the board meeting may be viewed at: [School Board Meeting Agenda Materials](#)

## Timberlane Regional School Board Meeting Minutes

**Regular Board Meeting**  
**November 3, 2022**  
**7:00 PM**

**Superintendent's Office**  
**30 Greenough Road**  
**Plaistow, NH**

### Call to Order

Vice-Chair Savage opened the November 3, 2022 Timberlane Regional School Board meeting at 7:01 PM; this was followed by roll call and the Pledge of Allegiance.

### Board Members Present

Michael Boucher, Katie Knutsen, Shauna Manthorn, Kristin Savage, Mark Sherwood, and Kim McCormick. Excused absences: Kim Farah and Brian Boyle.

### Seated at the Board Table

Christopher Kellan, Superintendent of Schools  
Matthew LaBelle, Student Representative

### Administrators Present

Fran Decinto, Director of Human Resources  
Kelley Brooks, Director of Special Education  
Mark Pedersen, Director of Secondary Curriculum

### APPROVAL OF MINUTES (00:01:40)

**MOTION: Mrs. Knutsen motioned to approve the October 20, 2022 meeting minutes; seconded by Mrs. Manthorn. Motion passed 5-0-1 (Mrs. McCormick abstained).**

**MOTION: Mrs. Knutsen motioned to approve the October 20, 2022 nonpublic meeting minutes; seconded by Mr. Boucher. Motion passed 5-0-1 (Mrs. McCormick abstained).**

### DELEGATES AND INDIVIDUALS (00:03:37)

Louise Pajak of Sandown expressed to the Board her concern for the teachers who are left without a contract and the challenges they are facing. She implored the Board to offer the teachers a fair contract.

Catherine Lindblad of Plaistow who is a Middle School teacher and a parent of District students showed her support for her colleagues and encouraged the Board to offer the teachers a fair contract. She presented the difficulties that the teachers face in regards to their profession and requested to keep the retirement benefit in the contract for the teachers who have longevity with the District.

Tracy DiMarco of Plaistow who is a Middle School teacher and a parent of District students read a statement from her Middle School colleague which expressed that the teachers' needs are not being met

## **DRAFT-NOT APPROVED**

and detailed her concern for the salary of the teachers. She stated that the current salary is the 18<sup>th</sup> lowest in the area and described cost of living expenses.

Sarah Ommen of Plaistow explained that she is a product of the Timberlane Regional School District and wanted her children to experience her educational experience. She informed the Board that the majority of teachers are doing the job of two people and the District needs to value these teachers. She acknowledged James Dionne and Diane Gagnon as teachers who have positively impacted her children's lives. She expressed her disappointment in the removal of the retirement benefit from the proposed contract.

James Shivell of Danville is a concerned resident, parent, and High School teacher. He described education as an investment in our children's futures and that the district is falling short in this investment. He detailed that the teachers and other unions are working without a contract and the District is not offering competitive wages. He urged the Board to resolve this situation.

Coral Hampe of Danville vocalized her disappointment of the Timberlane Teachers' Association working without a contract and that the District is understaffed. She compared educator salaries between Timberlane Regional School District and other districts and expressed her concern of the District losing quality educators.

Mrs. Savage articulated her appreciation and support for the District staff. She explained that the Board's hands are tied as the TTA negotiations are at an impasse. Mr. Sherwood informed the public that there are inaccuracies presented and there is much common ground between the unions and School Board.

### **STUDENT REPRESENTATIVE (00:23:08)**

Matthew LaBelle presented the events that were happening at each of the schools including the TRHS English Honor Society's participation in sending holiday cards for overseas military members, a Veteran's Day celebration on November 8th, an upcoming Student Council holiday gingerbread-making party, Mealey's Meals raffle, football game, presentation of a Midsummer Night's Dream, and a request of donations for Project Hope. He was informed by Atkinson Academy administrators that the 4<sup>th</sup> grade toured the State House, the 5<sup>th</sup> grade visited the Museum of Science, and there will be an upcoming lip sync show on November 18<sup>th</sup>. At Pollard School, Matthew announced that Haydin Simmons is one of seven finalists for the NH Kid Governor and her focus is ending hunger in NH. At Sandown North, he informed the Board that they are participating in a trick-or-trash program and are collecting candy wrappers.

### **CURRENT BUSINESS**

#### **a. School Board Vacancy (00:29:35)**

Mrs. Savage announced the School Board member vacancy for a Sandown Representative. She thanked Steven Finnegan for his contribution to the School Board. She announced that Mrs. Manthorn will be on Policy Committee and Mr. Sherwood will be on TTA Negotiation Committee, in replacement of Mr. Finnegan.

#### **b. Warrant Articles (00:30:20)**

The Board reviewed the proposed warrant articles.

## **DRAFT-NOT APPROVED**

**c. Endorsement of Critical Shortage Special Education Administrator (00:30:40)**

Mrs. DeCinto explained that Mrs. Brooks was promoted to Director of Special Education in July 2021 and applied for certification through the NHDOE; this is a step in the process for her to receive her license.

**MOTION: Mr. Sherwood motioned in accordance with RSA 189:39a, the School Board is determining that there is a local critical staffing shortage for the Timberlane Regional School District and is endorsing this for the Special Ed administrator; seconded by Mrs. Knutsen. Motion passed 6-0-0.**

**d. Policies (00:35:48)**

The Board reviewed the policies presented for second read: repeal of BBBH, and adoption of revisions of BEA and DIH.

**MOTION: Mrs. Knutsen motioned to approve Policies BBBH, BEA and DIH for second read and adoption; seconded by Mr. Boucher. Motion passed 6-0-0.**

**e. High School Curriculum Units (00:37:50)**

Mr. Pedersen presented curriculum documents for first read on Studies in Women's Health and Wellness; and Probability, Statistics, and Trigonometry. He explained that both courses were approved last year and these are the rest of the curriculum documents.

**MOTION: Mr. Boucher motioned to accept the Studies in Women's Health and Wellness; and Probability, Statistics, and Trigonometry curriculum documents for first read; seconded by Mrs. Knutsen. Motion passed 6-0-0.**

**f. Field Trip Requests (00:40:46)**

Mr. Pedersen presented four field trips to the School Board in accordance with policy IJOA. He detailed the trips' purposes and sleeping accommodations for Harvard Model Congress Trip in February 2023, London Theater Trip in Summer 2024 (listed as Summer 2023 in the executive summary), German Cultural Exchange Trip in Summer 2024, and the Great Eclipse Exchange Trip in April 2024.

**MOTION: Mrs. McCormick motioned to approve the four field trips presented in the executive summary on November 3<sup>rd</sup> with the revised date for the London Theater Trip to take place in Summer 2024; seconded by Mr. Sherwood. Motion passed 6-0-0.**

**g. Finalized Legal Calendar (00:49:43)**

The Board reviewed the finalized legal calendar, which included a revised date for the Supervisor of Checklist Correction Session to be on January 24, 2023.

**Administrator's Report (00:50:30)**

None

**Personnel Report (00:50:52)**

Mrs. DeCinto presented the nomination for Danielle Muir as the Art Teacher at Sandown North Elementary School.

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**MOTION: Mr. Sherwood motioned to accept the nomination of Danielle Muir as the Art Teacher at Sandown North Elementary School; seconded by Mr. Boucher. Motion passed 6-0-0.**

### **Committee Reports (00:51:24)**

Budget Committee: Mr. Sherwood announced that BudCom would like to have a combined meeting with the School Board for a presentation from the Department of Education on the voucher program on December 15<sup>th</sup>. Discussion ensued regarding the start time of the School Board meeting on December 15<sup>th</sup>, which concluded with the start time of the School Board meeting to begin at 6:00 PM and the voucher program presentation to begin at 7:00 PM.

Safety Committee: Mrs. Savage announced that the next Safety Committee meeting will be November 8th and the training has been going well.

Curriculum and Assessment Committee: Mrs. McCormick announced that the program of studies will be coming next month for first read.

Mrs. Savage inquired about the track grant, in which Mrs. Watkins explained that they are still waiting.

Vice-Chair Savage concluded this School Board meeting at 7:57 PM.

Respectfully submitted,

Kelly Salovitch  
Chief Executive Assistant to the Superintendent

Approved by the School Board on \_\_\_\_\_.



## EXECUTIVE SUMMARY

November 3, 2022

In accordance to TRSB policy IGA, Curriculum Development/Adoption, I ask the board to adopt the full curriculum documents for the two TRHS courses: Studies in Women's Health and Wellness; and Probability, Statistics, and Trigonometry. Both of these courses were previously adopted by the school board in the fall of 2021 to be included in the 2022-2023 TRHS Program of Studies. At that time, the first unit of study, course description and course competencies were developed by teachers and brought through the Curriculum and Assessment committee to be adopted by the board. In keeping to the previously established process, the rest of the curriculum documents, which were developed by teachers in the interim, were brought through the Curriculum and Assessment committee prior to coming to the school board this evening.

Both these courses were developed to meet student interest and needs. Studies in Women's Health and Wellness meets a PE/Health graduation requirement, and sections are at maximum capacity this school year. Probability, Statistics and Trigonometry is in essence a consolidation and restructure of classes previously offered, but with more opportunities, added content and a better scheduling outcome, this course is an improvement over the previous math offerings. This course provides students with 4<sup>th</sup> year math content critical for College and Career readiness at both CCP and ACC level. The structure of this class as a full year class also allows a better optimization of scheduling for both staff and students.

Like with all TRSD curriculum, the competencies, skills, and content in both of these courses are based on state and national standards, and was written by TRHS faculty to ensure that they teachers who will be enacting the curriculum play a critical role in developing the curriculum.

Respectfully submitted,

Mark Pedersen  
Director of Secondary Education  
Timberlane Regional School District

# Studies in Women's Health & Wellness: Self Empowerment & Communication Skills

## Stage 1 Desired Results

|   |  |  |
|---|--|--|
| <p>ESTABLISHED GOALS:</p> <p><u>Competencies:</u></p> <ul style="list-style-type: none"> <li>• Students will apply knowledge and practice health behaviors and recognize health risks in order to promote a healthy lifestyle. (Health Comp 1)</li> <li>• Students will demonstrate the ability to use interpersonal communication and advocacy skills in order to promote personal and community health. (Health Comp 3)</li> <li>• Students will participate in physical activity in order to achieve and maintain an appropriate level of personal fitness. (PE Comp 1)</li> <li>• Students will recognize that physical activity provides opportunities for enjoyment, challenge, self-expression, improved self-confidence and positive social interaction in order to lead a healthy lifestyle. (PE Comp 3)</li> <li>• Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.</li> <li>• Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.</li> <li>• Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</li> </ul> <p><u>NHES Content Standards:</u></p> <ul style="list-style-type: none"> <li>• 4.12.1 Use skills for communicating effectively with family, peers, and others to enhance health.</li> <li>• 4.12.2 Demonstrate refusal, negotiation, and collaboration skills to enhance health and avoid or reduce health risks.</li> </ul> | <b>Transfer</b>  |  |
|   | <p><i>Students will be able to independently use their learning to <b>communicate effectively in a variety of situations to promote their health and well being.</b></i></p>   |  |
|   | <b>Meaning</b>   |  |
|   | <p>ENDURING UNDERSTANDINGS</p> <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>• Effective communication enhances personal, family, and community health.</li> <li>• responsible individuals use verbal and non-verbal skills to develop and maintain healthy personal relationships.</li> <li>• The ability to organize and to convey information and feelings is the basis for strengthening interpersonal interactions and reducing or avoiding conflict.</li> <li>• strong communications skills allow us to advance in our careers</li> </ul> | <p>ESSENTIAL QUESTIONS</p> <ul style="list-style-type: none"> <li>• How does an individual's communication skills affect their leadership abilities?</li> <li>• How can a person develop self empowerment to improve their health &amp; well being?</li> </ul> |
|   | <b>Acquisition</b>   |  |
| <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>• common barriers for effective communication</li> <li>• the 5 key elements of active listening</li> <li>• how communication impacts leadership</li> <li>• the 5 conflict resolution strategies and when they may be best used.</li> <li>• the most important qualities of an effective leader</li> </ul>  | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>• demonstrating effective speaking and listening skills while working with others.</li> <li>• using effective communication to work together with others, problem solve and think critically, display an openness for change, show empathy and respect for others during team based exercises</li> </ul>   |  |

|   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>• 4.12.3 Demonstrate strategies to prevent, manage, or resolve interpersonal conflicts without harming self or others.</li> <li>• 4.12.4 Demonstrate how to ask for and offer assistance to enhance the health of self and others.</li> <li>• 7.12.1 Analyze the role of individual responsibility for enhancing health.</li> <li>• 7.12.2 Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others.</li> <li>• 7.12.3 Demonstrate a variety of behaviors to avoid or reduce health risks to self and others.</li> </ul> <p><b><u>NPE Content Standards:</u></b></p> <p>S5. H1 Analyzes health benefits of self selected physical activity</p> <p>S5. H2 Chooses an appropriate level of challenge to experience success and desire to participate in selected physical activity.</p> <p>S1. H1 Demonstrates competency in 1 or more specialized skills in health related fitness activities.</p>  | <ul style="list-style-type: none"> <li>• <i>the most common leadership styles</i></li> <li>• <i>the value of leadership and how it can affect success</i></li> <li>• <i>personal assets and strengths of their own</i></li> <li>• <i>characteristics of positive role models</i></li> <li>• <i>strategies for expressing needs, wants and feelings appropriately</i></li> <li>• <i>positive ways to handle emotions, e.g., mood swings, loneliness, hurt feelings, sadness</i></li> <li>• <i>strategies for managing and reducing anger and conflict</i></li> <li>• <i>ways of dealing with frustration</i></li> <li>• <i>how the developmental process affects emotions and behaviors</i></li> <li>• <i>strategies to prepare for adulthood</i></li> <li>• <i>how to develop and demonstrate and sense of empowerment</i></li> <li>• <i>community health careers</i></li> </ul> <p><b><u>vocabulary:</u></b> <i>active listening, conflict resolution, cooperation, competition, collaboration, avoidance, accommodate, compromise, leadership, leadership styles</i></p> | <ul style="list-style-type: none"> <li>• <i>identifying personal leadership styles</i></li> <li>• <i>Participating in physical activity in order to achieve and maintain an appropriate level of personal fitness.</i></li> <li>• <i>Recognizing that physical activity provides opportunities for enjoyment, challenge, self-expression, improved self-confidence and positive social interaction in order to lead a healthy lifestyle.</i></li> <li>• <i>demonstrate effective ways to communicate with trusted adults</i></li> </ul> |
| <b>Content Area Literacy Standards</b>  |  | <b>21<sup>st</sup> Century Skills</b>   |
| <ul style="list-style-type: none"> <li>• RST.11-12.1 CITE SPECIFIC TEXTUAL EVIDENCE TO SUPPORT ANALYSIS OF SCIENCE AND TECHNICAL TEXTS, ATTENDING TO IMPORTANT DISTINCTIONS THE AUTHOR MAKES AND TO ANY GAPS OR INCONSISTENCIES IN THE ACCOUNT.</li> <li>• • RST.11-12.2 DETERMINE THE CENTRAL IDEAS OR CONCLUSIONS OF A TEXT; SUMMARIZE COMPLEX CONCEPTS, PROCESSES, OR INFORMATION PRESENTED IN A TEXT BY PARAPHRASING THEM IN SIMPLER BUT STILL ACCURATE TERMS.</li> <li>• • RST.11-12.3 FOLLOW PRECISELY A COMPLEX MULTISTEP PROCEDURE WHEN CARRYING OUT EXPERIMENTS, TAKING MEASUREMENTS, OR PERFORMING TECHNICAL TASKS; ANALYZE THE SPECIFIC RESULTS BASED ON EXPLANATIONS IN THE TEXT.</li> <li>• • RST.11-12.4 DETERMINE THE MEANING OF SYMBOLS, KEY TERMS, AND OTHER DOMAIN-SPECIFIC WORDS AND PHRASES AS THEY ARE USED IN A SPECIFIC SCIENTIFIC OR TECHNICAL CONTEXT RELEVANT TO GRADES 11-12 TEXTS AND TOPICS.</li> <li>• • WHST.11-12.4 PRODUCE CLEAR AND COHERENT WRITING IN WHICH THE DEVELOPMENT, ORGANIZATION, AND STYLE ARE APPROPRIATE TO TASK, PURPOSE, AND AUDIENCE.</li> </ul> |  | <ul style="list-style-type: none"> <li>• <i>solve problems,</i></li> <li>• <i>think creatively</i></li> <li>• <i>communicate clearly</i></li> <li>• <i>use and manage information</i></li> <li>• <i>interact effectively with others.</i></li> </ul>  |

## Stage 2 - Evidence

| <i>Evaluative Criteria</i> | <i>Assessment Evidence</i> |
|----------------------------|----------------------------|
|                            | PERFORMANCE TASK(S):       |
|                            | OTHER EVIDENCE:            |

## Stage 3 – Learning Plan

*Summary of Key Learning Events and Instruction*

| <i>Language Arts Integration</i>                             | <i>Mathematics Integration</i>                               |
|--|--|
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> | <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |
| <i>Technology Integration</i>                                | <i>District Materials</i>                                    |
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |  |

# Studies in Women's Health & Wellness: Safety & Violence Prevention

## Stage 1 Desired Results

|  |   |  |
|--|---|--|
| ESTABLISHED GOALS:   | <i>Transfer</i>   |  |
| <p><u>Competencies:</u></p> <ul style="list-style-type: none"> <li>• Students will apply knowledge and practice health behaviors and recognize health risks in order to promote a healthy lifestyle. (Health Comp 1)</li> <li>• Students will demonstrate the ability to use interpersonal communication and advocacy skills in order to promote personal and community health. (Health Comp 3)</li> <li>• Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.</li> <li>• Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.</li> <li>• Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</li> <li>• Participate in physical activity in order to achieve and maintain an appropriate level of personal fitness. (PE Comp 1)</li> <li>• Develop and apply knowledge, skill and movement in a variety of physical activities in order to maintain appropriate level of personal fitness. (PE Comp 2)</li> <li>• Recognize that physical activity provides opportunities for enjoyment, challenge, self-expression, improved self-confidence and positive social interaction in order to lead a healthy lifestyle. (PE Comp 3)</li> <li>• Exhibit responsible personal and social behavior in order to respect self and others in physically active settings. (PE Comp 4)</li> </ul> | <p><i>Students will be able to independently use their learning to <b>communicate and advocate for personal safety and injury prevention in a variety of situations.</b></i></p>  |  |
|  | <i>Meaning</i>  |  |
|  | <p>ENDURING UNDERSTANDINGS<br/><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>• proactive communication (verbal and non verbal) can create healthy relationships and solve differences with others peacefully</li> <li>• individuals can use a variety of strategies for preventing injuries and staying safe from accidents, manipulation, coercion, etc...</li> <li>• violence and injuries can have short term and long term effects to one's overall well being (in all dimensions)</li> <li>• prevention and building personal skills to increase safety and awareness can enhance a person's health</li> <li>• advocating for healthy communities increases the safety and well being of everyone.</li> </ul> | <p>ESSENTIAL QUESTIONS</p> <ul style="list-style-type: none"> <li>• How do an individual's communication skills affect their personal safety and well being?</li> </ul>  |
| <p><u>Content Standards:</u></p> <ul style="list-style-type: none"> <li>• 1.12.1 Predict how healthy behaviors can affect health status.</li> <li>• 1.12.3 Analyze how environment and personal health are interrelated.</li> </ul>  | <i>Acquisition</i>  |  |
|  | <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>• ways to communicate respect for self and others</li> <li>• diversity of relationships, e.g., family, friends, dating, marriage, same sex relationships</li> <li>• situational awareness tactics, principles of protection (self defense)</li> </ul>  | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>• demonstrating self defense tactics</li> <li>• demonstrate specific first-aid techniques</li> <li>• demonstrate personal responsibility to make health-enhancing choices</li> <li>• demonstrate interactions among individuals</li> </ul> |

- 1.12.5 Propose ways to reduce or prevent injuries and health problems.
- 1.12.8 Analyze personal susceptibility to injury, illness, or death if engaging in unhealthy behaviors.
- 1.12.9 Analyze the potential severity of injury or illness if engaging in unhealthy behaviors.
- 4.12.1 Use skills for communicating effectively with family, peers, and others to enhance health.
- 4.12.2 Demonstrate refusal, negotiation, and collaboration skills to enhance health and avoid or reduce health risks.
- 4.12.3 Demonstrate strategies to prevent, manage, or resolve interpersonal conflicts without harming self or others.
- 4.12.4 Demonstrate how to ask for and offer assistance to enhance the health of self and others.
- 7.12.1 Analyze the role of individual responsibility for enhancing health.
- 7.12.2 Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others.
- 7.12.3 Demonstrate a variety of behaviors to avoid or reduce health risks to self and others.
- 8.12.1 Utilize accurate peer and societal norms to formulate a health-enhancing message.
- 8.12.2 Demonstrate how to influence and support others to make positive health choices.
- 8.12.3 Work cooperatively as an advocate for improving personal, family, and community health.
- 8.12.4 Adapt health messages and communication techniques to a specific target audience.

- *strategies for refusing unwanted or unprotected sex*
- *benefits of setting sexual limits, e.g., staying in school, reputation, achieving future goals*
- *importance of respecting sexual limits of others*
- *strategies for dealing with pressures to cross sexual limits*
- *effects of alcohol and other drug use on sexual behavior*
- *influences on sexual behavior, e.g., family, peers, religion, media, culture, internal*
- *influences of violence, e.g., date rape and other abuse*
- *human trafficking (e.g. influences, cycle, prevention*
- *valid sources of information and help for violence, abuse, sexual assault*
- *online dating safety strategies, (apps, websites)*
- *how to build and maintain relationships, including appropriate ways to end relationships*
- *ways to avoid threatening situations*
- *causes of conflict*
- *conflict resolution techniques*
- *how to avoid fighting/bullying*
- *the importance of not carrying a weapon*
- *how to prevent dating violence*
- *how to prevent sexual assault*
- *how to recognize sexual harassment*
- *influence of AOD in conflict situations*
- *nonviolent ways to calm charged situations*
- *appropriate ways to end relationships*
- *techniques for negotiation and compromise*
- *how to advocate for needs and rights of others*
- *how to advocate for healthy social environment*
- *how to advocate for fairness*
- *how to advocate for health services in the community*
- *universal precautions (infection control procedures)*
- *steps for CPR*
- *techniques to give care for someone choking*
- *first aid steps for severe injuries, e.g., bleeding, broken bones*

- *demonstrate message tactics and strategies*
- *demonstrate refusal skills*
- *Evaluate the potentially positive and negative roles of technology and social media in relationships*
- *advocate a health message and persuade others to make healthful choices using passion and conviction*
- *advocate for safe environments that encourage dignified and respectful treatment of everyone*

*vocabulary: situational awareness, self defense principles, conflict resolution strategies, seual assault, healthy & unhealthy dating characteristics, sexual harrassment, human trafficking, sex trafficking cycle, types of human trafficking, grooming, coercion, advocacy,*

**Content Area Literacy Standards**

**21<sup>st</sup> Century Skills**

- RST.11-12.1 CITE SPECIFIC TEXTUAL EVIDENCE TO SUPPORT ANALYSIS OF SCIENCE AND TECHNICAL TEXTS, ATTENDING TO IMPORTANT DISTINCTIONS THE AUTHOR MAKES AND TO ANY GAPS OR INCONSISTENCIES IN THE ACCOUNT.
- • RST.11-12.2 DETERMINE THE CENTRAL IDEAS OR CONCLUSIONS OF A TEXT; SUMMARIZE COMPLEX CONCEPTS, PROCESSES, OR INFORMATION PRESENTED IN A TEXT BY PARAPHRASING THEM IN SIMPLER BUT STILL ACCURATE TERMS.
- • RST.11-12.3 FOLLOW PRECISELY A COMPLEX MULTISTEP PROCEDURE WHEN CARRYING OUT EXPERIMENTS, TAKING MEASUREMENTS, OR PERFORMING TECHNICAL TASKS; ANALYZE THE SPECIFIC RESULTS BASED ON EXPLANATIONS IN THE TEXT.
- • RST.11-12.4 DETERMINE THE MEANING OF SYMBOLS, KEY TERMS, AND OTHER DOMAIN-SPECIFIC WORDS AND PHRASES AS THEY ARE USED IN A SPECIFIC SCIENTIFIC OR TECHNICAL CONTEXT RELEVANT TO GRADES 11-12 TEXTS AND TOPICS.
- • WHST.11-12.4 PRODUCE CLEAR AND COHERENT WRITING IN WHICH THE DEVELOPMENT, ORGANIZATION, AND STYLE ARE APPROPRIATE TO TASK, PURPOSE, AND AUDIENCE.

- Critical thinking
- Communication skills
- Creativity
- Problem solving
- Collaboration
- Information literacy
- Technology skills and digital literacy
- Media literacy
- Global awareness
- Self-direction
- Social skills
- Literacy skills
- Social responsibility
- Thinking skills

## Stage 2 - Evidence

| <i>Evaluative Criteria</i> | <i>Assessment Evidence</i> |
|----------------------------|----------------------------|
|                            | PERFORMANCE TASK(S):       |
|                            | OTHER EVIDENCE:            |

## Stage 3 – Learning Plan

*Summary of Key Learning Events and Instruction*

| <i>Language Arts Integration</i>                             | <i>Mathematics Integration</i>                               |
|--|--|
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> | <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |
| <i>Technology Integration</i>                                | <i>District Materials</i>                                    |
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |  |

# Studies in Women's Health & Wellness: Goal Setting, Fitness & Body Image

## Stage 1 Desired Results

|   |   |   |
|---|---|---|
| ESTABLISHED GOALS:  | <b>Transfer</b>   |   |
| <u>Competencies:</u>  | <i>Students will be able to independently use their learning to <b>create a personal goal for self improvement in the area of health and wellness.</b></i>  |   |
| <ul style="list-style-type: none"> <li>● <i>Students will apply knowledge and practice health behaviors and recognize health risks in order to promote a healthy lifestyle. (Health Comp 1)</i></li> <li>● <i>Students will be able to analyze consequences of decisions, problem-solve, and set goals to enhance health or reduce health risks. (Health Comp 2)</i></li> <li>● <i>Students will be able to analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors. (Health Comp 5)</i></li> <li>● <i>Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.</i></li> <li>● <i>Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.</i></li> <li>● <i>Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</i></li> <li>● <i>Participate in physical activity in order to achieve and maintain an appropriate level of personal fitness. (PE Comp 1)</i></li> <li>● <i>Develop and apply knowledge, skill and movement in a variety of physical activities in order to maintain appropriate level of personal fitness. (PE Comp 2)</i></li> <li>● <i>Recognize that physical activity provides opportunities for enjoyment, challenge, self-expression, improved self-confidence and positive social interaction in order to lead a healthy lifestyle. (PE Comp 3)</i></li> <li>● <i>Exhibit responsible personal and social behavior in order to respect self and others in physically active settings. (PE Comp 4)</i></li> <li>●</li> </ul> | <b>Meaning</b>  |   |
|   | <p><b>ENDURING UNDERSTANDINGS</b><br/><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>● <i>body image affects self esteem and ultimately overall wellness in all dimensions</i></li> <li>● <i>an individual can be proactive in building positive body image to then build self esteem, happiness, and healthy choices.</i></li> <li>● <i>media, technology, perceptions or norms can impact body image positively and negatively.</i></li> </ul>  | <p><b>ESSENTIAL QUESTIONS</b></p> <ul style="list-style-type: none"> <li>● <i>How does positive self image and self esteem affect personal health choices?</i></li> </ul>   |
|   | <b>Acquisition</b>  |   |
| <u>Content Standards:</u>   | <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>● <i>benefits and risks of physical activity</i></li> <li>● <i>exercise needs: frequency, intensity, duration and type</i></li> <li>● <i>types of exercise: cardiorespiratory, muscular strength and endurance, and flexibility</i></li> <li>● <i>physiological responses to physical activity (energy expenditure, heart rate, respiratory rate, resting heart rate)</i></li> <li>● <i>components of health-related fitness</i></li> <li>● <i>personal physical activity levels</i></li> <li>● <i>how to develop plans that include types and amounts of activity and focus on health related physical fitness</i></li> </ul> | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>● <i>demonstrating personal introspection</i></li> <li>● <i>clarify personal expectations of self and others</i></li> <li>● <i>demonstrate personal responsibility to make health-enhancing choices</i></li> <li>● <i>identifying a realistic goal and writing a clear goal statement</i></li> <li>● <i>creating a plan for reaching a realistic goal</i></li> <li>● <i>identifying a reward for reaching a goal set</i></li> <li>● <i>examining the correlation between self empowerment and goal setting</i></li> </ul> |
| <ul style="list-style-type: none"> <li>● 2.12.5 Evaluate the effect of media on personal and family health.</li> </ul>  |   |   |

|   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>● 2.12.6 Evaluate the impact of technology on personal, family, and community health.</li> <li>● 2.12.7 Analyze how the perceptions of norms influence healthy and unhealthy behaviors.</li> <li>● 2.12.8 Analyze the influence of personal values and beliefs on individual health practices and behaviors.</li> <li>● 7.12.1 Analyze the role of individual responsibility for enhancing health.</li> <li>● 7.12.2 Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others.</li> <li>● 7.12.3 Demonstrate a variety of behaviors to avoid or reduce health risks to self and others.</li> <li>● 6.12.1 Assess personal health practices and overall health status.</li> <li>● 6.12.2 Develop a plan to attain a personal health goal that addresses strengths, needs, and risks.</li> <li>● 6.12.3 Implement strategies and monitor progress in achieving a personal health goal.</li> <li>● 6.12.4 Formulate an effective long-term personal health plan.</li> </ul> | <ul style="list-style-type: none"> <li>● <i>strategies for overcoming barriers to physical activity</i></li> <li>● <i>the importance of healthful eating and physical activity</i></li> <li>● <i>how to assess personal nutritional needs, preferences and practices</i></li> <li>● <i>strategies for overcoming barriers to healthful eating</i></li> <li>● <i>how mood and emotions affect food choices</i></li> <li>● <i>relationship between healthful physical activity and body composition</i></li> <li>● <i>healthful weight management practices</i></li> <li>● <i>how to develop and demonstrate and sense of empowerment</i></li> <li>● <i>how to develop and demonstrate a positive body image</i></li> <li>● <i>behaviors and symptoms of depression and other mental illness, e.g., obsessive compulsive disorder, impulse control disorders</i></li> <li>● <i>interaction of alcohol and other drugs with mental illness</i></li> <li>● <i>symptoms of eating disorders</i></li> <li>● <i>When, where, why and how to get help</i></li> <li>● <i>types of stressors, e.g., death, ending relationships, changing schools, rejection</i></li> <li>● <i>coping strategies to reduce stress, including exercise</i></li> <li>● <i>ways to avoid stress</i></li> <li>● <i>how the use of social media is connected to health risk and health promotion</i></li> </ul> <p><u>vocabulary:</u> <i>body image, body talk, self image, self esteem, LGBT, gender identity, gender expression, transgender, self empowerment, eating disorders, stress, coping strategies, barriers to exercise</i></p> |  |
| <b>Content Area Literacy Standards</b>  | <b>21<sup>st</sup> Century Skills</b>  |  |
| <ul style="list-style-type: none"> <li>● RST.11-12.1 CITE SPECIFIC TEXTUAL EVIDENCE TO SUPPORT ANALYSIS OF SCIENCE AND TECHNICAL TEXTS, ATTENDING TO IMPORTANT DISTINCTIONS THE AUTHOR MAKES AND TO ANY GAPS OR INCONSISTENCIES IN THE ACCOUNT.</li> <li>● RST.11-12.2 DETERMINE THE CENTRAL IDEAS OR CONCLUSIONS OF A TEXT; SUMMARIZE COMPLEX CONCEPTS, PROCESSES, OR INFORMATION PRESENTED IN A TEXT BY PARAPHRASING THEM IN SIMPLER BUT STILL ACCURATE TERMS.</li> </ul>   | <ul style="list-style-type: none"> <li>● <i>Goal Setting, Problem Solving, Reflecting</i></li> </ul>   |  |

- • RST.11-12.3 FOLLOW PRECISELY A COMPLEX MULTISTEP PROCEDURE WHEN CARRYING OUT EXPERIMENTS, TAKING MEASUREMENTS, OR PERFORMING TECHNICAL TASKS; ANALYZE THE SPECIFIC RESULTS BASED ON EXPLANATIONS IN THE TEXT.
- • RST.11-12.4 DETERMINE THE MEANING OF SYMBOLS, KEY TERMS, AND OTHER DOMAIN-SPECIFIC WORDS AND PHRASES AS THEY ARE USED IN A SPECIFIC SCIENTIFIC OR TECHNICAL CONTEXT RELEVANT TO GRADES 11-12 TEXTS AND TOPICS.
- • WHST.11-12.4 PRODUCE CLEAR AND COHERENT WRITING IN WHICH THE DEVELOPMENT, ORGANIZATION, AND STYLE ARE APPROPRIATE TO TASK, PURPOSE, AND AUDIENCE.

## Stage 2 - Evidence

| <i>Evaluative Criteria</i> | <i>Assessment Evidence</i>                    |
|----------------------------|---|
|                            | PERFORMANCE TASK(S): Goal Setting Experience? |
|                            | OTHER EVIDENCE:                               |

## Stage 3 – Learning Plan

*Summary of Key Learning Events and Instruction*

| <i>Language Arts Integration</i>                             | <i>Mathematics Integration</i>                               |
|--|--|
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> | <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |
| <i>Technology Integration</i>                                | <i>District Materials</i>                                    |
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |  |

# Studies in Women's Health & Wellness: Accessing Information for Women's Health Promotion

## Stage 1 Desired Results

|  |   |  |
|--|---|--|
| <p>ESTABLISHED GOALS:</p> <p><u>Competencies:</u></p> <ul style="list-style-type: none"> <li>Students will apply knowledge and practice health behaviors and recognize health risks in order to promote a healthy lifestyle. (Health Comp 1)</li> <li>Students will be able to access valid information and products and services to enhance health. (Health Comp 4)</li> <li>Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.</li> <li>Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.</li> <li>Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</li> <li>Participate in physical activity in order to achieve and maintain an appropriate level of personal fitness. (PE Comp 1) Recognize that physical activity provides opportunities for enjoyment, challenge, self-expression, improved self-confidence and positive social interaction in order to lead a healthy lifestyle. (PE Comp 3)</li> </ul> <p><u>Content Standards:</u></p> <ul style="list-style-type: none"> <li>3.12.1 Evaluate the validity of health information, products, and services.</li> <li>3.12.2 Use resources from home, school, and community that provide valid health information.</li> <li>3.12.3 Determine the accessibility of products and services that enhance health.</li> <li>3.12.4 Determine when professional health services may be required.</li> <li>3.12.5 Access valid and reliable health products and services.</li> <li>5.12.4 Generate alternatives to health-related issues or problems.             <ul style="list-style-type: none"> <li>5.12.5 Predict the potential short-term and long-term impact of each alternative on self and others.</li> </ul> </li> </ul> | <b>Transfer</b>   |  |
|  | <p><i>Students will be able to independently use their learning to identify and access valid health information and health-promoting products and services to achieve health literacy and enable prevention, early detection, and treatment of health problems.</i></p>   |  |
|  | <b>Meaning</b>  |  |
|  | <p><b>ENDURING UNDERSTANDINGS</b><br/><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>not all health claims for information, products and services are valid and accurate</li> <li>using reliable accurate sources of information (apps, websites, etc) checking can help a person make informed decisions about products and services that can enhance health</li> </ul>  | <p><b>ESSENTIAL QUESTIONS</b></p> <ul style="list-style-type: none"> <li>How can valid vs. invalid health information, products and services affect one's health?</li> </ul> |
| <b>Acquisition</b>   |   |  |
| <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>common symptoms of and treatment for STI's, including HIV</li> <li>laws related to sexual health care services, including STD &amp; HIV testing and treatment.</li> <li>signs of pregnancy, pregnancy options (i.e IVF)</li> <li>prenatal care services that contribute to or threaten healthy pregnancies.</li> <li>compare and contrast laws related to pregnancy, adoption, abortion and parenting.</li> <li>laws related to sexual and reproductive health care services ( i.e. contraception, pregnancy options, safe surrender policies, prenatal care)</li> <li>how to evaluate claims of performance-enhancing drugs and nutritional supplements</li> <li>how to select products, services and facilities related to physical activity</li> </ul>   | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>access accurate and valid information and resources.</li> <li>knowing that there is local testing and treatment services available.</li> <li>identify or cite specific sources</li> <li>provide reason for needing to access information</li> <li>evaluate validity of source</li> <li>provide rationale for appropriateness of source</li> <li>demonstrate ability to access appropriate community resources to meet specific needs             <ul style="list-style-type: none"> <li>similarities and differences among a variety of health care products</li> </ul> </li> <li>demonstrating a thoughtful decision making process: show what options were considered, evaluating pros and cons of options, a clear decision statement, and reflection of the decision</li> </ul> |  |

|   |   |                                       |
|---|---|---------------------------------------|
| <ul style="list-style-type: none"> <li>● 5.12.6 Defend the healthy choice when making decisions.</li> <li>● 5.12.7 Evaluate the effectiveness of health-related decisions.</li> </ul>   | <ul style="list-style-type: none"> <li>● <i>how to validate fitness claims</i></li> <li>● <i>validity of claims of nutritional supplements and weight loss products</i></li> <li>● <i>prevention strategies associated with primary health care (i.e. BSE, pap smear, blood lipid panels)</i></li> <li>● <i>benefits/risks of vaccinations</i></li> <li>● <i>ways to promote skin health and factors that may affect skin health/aging</i></li> </ul> <p><u>vocabulary:</u> <i>common STIs, HIV, prenatal care, types of adoption, abortion, contraception, safe surrender, supplements, personal care products, carcinogens, “green washing”, product claims</i></p> |                                       |
| <b>Content Area Literacy Standards</b>  |   | <b>21<sup>st</sup> Century Skills</b> |
| <ul style="list-style-type: none"> <li>● RST.11-12.1 CITE SPECIFIC TEXTUAL EVIDENCE TO SUPPORT ANALYSIS OF SCIENCE AND TECHNICAL TEXTS, ATTENDING TO IMPORTANT DISTINCTIONS THE AUTHOR MAKES AND TO ANY GAPS OR INCONSISTENCIES IN THE ACCOUNT.</li> <li>● • RST.11-12.2 DETERMINE THE CENTRAL IDEAS OR CONCLUSIONS OF A TEXT; SUMMARIZE COMPLEX CONCEPTS, PROCESSES, OR INFORMATION PRESENTED IN A TEXT BY PARAPHRASING THEM IN SIMPLER BUT STILL ACCURATE TERMS.</li> <li>● • RST.11-12.3 FOLLOW PRECISELY A COMPLEX MULTISTEP PROCEDURE WHEN CARRYING OUT EXPERIMENTS, TAKING MEASUREMENTS, OR PERFORMING TECHNICAL TASKS; ANALYZE THE SPECIFIC RESULTS BASED ON EXPLANATIONS IN THE TEXT.</li> <li>● • RST.11-12.4 DETERMINE THE MEANING OF SYMBOLS, KEY TERMS, AND OTHER DOMAIN-SPECIFIC WORDS AND PHRASES AS THEY ARE USED IN A SPECIFIC SCIENTIFIC OR TECHNICAL CONTEXT RELEVANT TO GRADES 11-12 TEXTS AND TOPICS.</li> <li>● • WHST.11-12.4 PRODUCE CLEAR AND COHERENT WRITING IN WHICH THE DEVELOPMENT, ORGANIZATION, AND STYLE ARE APPROPRIATE TO TASK, PURPOSE, AND AUDIENCE.</li> </ul> |   |                                       |

## Stage 2 - Evidence

| <i>Evaluative Criteria</i> | <i>Assessment Evidence</i> |
|----------------------------|----------------------------|
|                            | PERFORMANCE TASK(S):       |
|                            | OTHER EVIDENCE:            |

## Stage 3 – Learning Plan

*Summary of Key Learning Events and Instruction*

| <i>Language Arts Integration</i>                             | <i>Mathematics Integration</i>                               |
|--|--|
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> | <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |
| <i>Technology Integration</i>                                | <i>District Materials</i>                                    |
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |  |

# Studies in Women's Health & Wellness: Factors Influencing Women's Health

## Stage 1 Desired Results

|  |   |  |
|--|---|--|
| <p>ESTABLISHED GOALS:</p> <p><u>Content Competencies:</u></p> <ul style="list-style-type: none"> <li>• Students will apply knowledge and practice health behaviors and recognize health risks in order to promote a healthy lifestyle. (Health Comp 1)</li> <li>• Students will be able to analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors. (Health Comp 5)</li> <li>• Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.</li> <li>• Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.</li> <li>• Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</li> <li>• Participate in physical activity in order to achieve and maintain an appropriate level of personal fitness. (PE Comp 1)</li> <li>• Recognize that physical activity provides opportunities for enjoyment, challenge, self-expression, improved self-confidence and positive social interaction in order to lead a healthy lifestyle. (PE Comp 3)</li> </ul> <p><u>Content Standards:</u></p> <ul style="list-style-type: none"> <li>• 1.12.2 Describe the interrelationships of emotional, intellectual, physical, and social health.</li> <li>• 1.12.9 Analyze the potential severity of injury or illness if engaging in unhealthy behaviors.</li> <li>• 2.12.2 Analyze how the culture supports and challenges health beliefs, practices, and behaviors.</li> <li>• 2.12.5 Evaluate the effect of media on personal and family health.</li> <li>• 2.12.6 Evaluate the impact of technology on personal, family, and community health.</li> <li>• 2.12.7 Analyze how the perceptions of norms influence healthy and unhealthy behaviors.</li> </ul> | <b>Transfer</b>   |  |
|  | <p><i>Students will be able to independently use their learning to <b>identify and analyze stereotypes of women, gender roles, sexual identity, race and social classes in the media.</b></i></p>   |  |
|  | <b>Meaning</b>  |  |
|  | <p><b>ENDURING UNDERSTANDINGS</b><br/><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>• women are portrayed in the media unrealistically and inaccurately.</li> <li>• the portrayal of women in the media can desensitize our culture and affect health behaviors.</li> <li>• Media uses sexuality, violence, gender roles to appeal to senses, to sell products, or promote media.</li> <li>• the exploitation of women in the media creates negative attitudes toward women, limits career opportunities, creates an unrealistic expectation among men, leads to psychological disorders, increases likelihood and acceptance of sexual violence, and creates feelings of inadequacy for women.</li> </ul> | <p><b>ESSENTIAL QUESTIONS</b></p> <ul style="list-style-type: none"> <li>• What positive influences can teens surround themselves with and how can these influences positively impact their health behaviors?</li> </ul> |
| <b>Acquisition</b>   |   |  |
| <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>• <i>intrinsic, extrinsic, positive, and negative influences on a person's health and wellness</i></li> <li>• <i>the connection between positive influences and positive health behaviors</i></li> <li>• <i>ways to use social media safely, legally, and respectfully.</i></li> <li>• <i>the impact of social media on one's health</i></li> <li>• <i>the different ways sexuality is used in the media.</i></li> </ul>  | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>• <i>examining who/what influences positively promote healthy behaviors in various dimensions of health</i></li> <li>• <i>identifying positive influences to directly promote their own health and well being.</i></li> <li>• <i>analyzing the external influences and societal messages that impact attitudes about bullying, sexual harrassment, sexual abuse, sexual assault, incest, rape, and dating violence.</i></li> </ul>  |  |

|   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>● 2.12.8 Analyze the influence of personal values and beliefs on individual health practices and behaviors.</li> <li>● 2.12.9 Analyze how some health risk behaviors can influence the likelihood of engaging in unhealthy behaviors.</li> <li>● 2.12.10 Analyze how public health policies and government regulations can influence health promotion and disease prevention.</li> <li>● 7.12.1 Analyze the role of individual responsibility for enhancing health.</li> <li>● 7.12.2 Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others.</li> </ul> | <ul style="list-style-type: none"> <li>● <i>how media can influence one's beliefs about what constitutes a healthy sexual relationship</i></li> <li>● <i>Sexuality in the media can lead to different types of violence</i> <ul style="list-style-type: none"> <li>- Assault</li> <li>- Rape</li> <li>- Domestic violence</li> <li>- Emotional/verbal abuse</li> <li>- Physical Abuse</li> </ul> </li> <li>● <i>the variety of media forms that portray women in the media and their motivations.</i></li> <li>● <i>how cultural views of women have changed with the development of current media vs. historical media.</i></li> <li>● <i>how messages of gender roles and stereotypes can have an influence on attitudes, beliefs, and behaviors</i></li> <li>● <i>people can become more aware of gender role messages around us and make decisions about which ones to accept and to reject.</i></li> <li>● <i>how the feminism movement impacts women's health and role in society</i></li> </ul> <p><u>vocabulary:</u> <i>feminism, gender roles, racism, desensitization, sexualization, branding, connotation, consumers, demographics, critical viewing, media literacy, mass media, homophobia, sexist, slant, bias, stereotype, product placement, phallic symbolism, objectification of women, sexual orientation, sexism</i></p> | <ul style="list-style-type: none"> <li>● <i>Evaluating the impact of technology and the media on societal norms.</i></li> <li>● <i>Determining the consequences to health because of media in our culture</i></li> <li>● <i>Analyzing the effect of media on personal and family health practices.</i></li> <li>● <i>Analyzing how personal behaviors can lead to unhealthy risky behaviors due to media impact and values.</i></li> <li>● <i>Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others.</i></li> </ul> |
| <p><b>Content Area Literacy Standards</b></p>   |   | <p><b>21<sup>st</sup> Century Skills</b></p>   |
| <ul style="list-style-type: none"> <li>● RST.11-12.1 CITE SPECIFIC TEXTUAL EVIDENCE TO SUPPORT ANALYSIS OF SCIENCE AND TECHNICAL TEXTS, ATTENDING TO IMPORTANT DISTINCTIONS THE AUTHOR MAKES AND TO ANY GAPS OR INCONSISTENCIES IN THE ACCOUNT.</li> <li>● RST.11-12.2 DETERMINE THE CENTRAL IDEAS OR CONCLUSIONS OF A TEXT; SUMMARIZE COMPLEX CONCEPTS, PROCESSES, OR INFORMATION PRESENTED IN A TEXT BY PARAPHRASING THEM IN SIMPLER BUT STILL ACCURATE TERMS.</li> </ul>   |   | <ul style="list-style-type: none"> <li>● Life &amp; Career Skills</li> <li>● Learning &amp; Innovation Skills</li> <li>● Communication, collaboration, creativity, and critical thinking</li> <li>● Information, Media &amp; Technology Skills</li> </ul>  |

- RST.11-12.3 FOLLOW PRECISELY A COMPLEX MULTISTEP PROCEDURE WHEN CARRYING OUT EXPERIMENTS, TAKING MEASUREMENTS, OR PERFORMING TECHNICAL TASKS; ANALYZE THE SPECIFIC RESULTS BASED ON EXPLANATIONS IN THE TEXT.
- RST.11-12.4 DETERMINE THE MEANING OF SYMBOLS, KEY TERMS, AND OTHER DOMAIN-SPECIFIC WORDS AND PHRASES AS THEY ARE USED IN A SPECIFIC SCIENTIFIC OR TECHNICAL CONTEXT RELEVANT TO GRADES 11-12 TEXTS AND TOPICS.
- WHST.11-12.4 PRODUCE CLEAR AND COHERENT WRITING IN WHICH THE DEVELOPMENT, ORGANIZATION, AND STYLE ARE APPROPRIATE TO TASK, PURPOSE, AND AUDIENCE.

## Stage 2 - Evidence

| <i>Evaluative Criteria</i> | <i>Assessment Evidence</i> |
|----------------------------|----------------------------|
|                            | PERFORMANCE TASK(S):       |
|                            | OTHER EVIDENCE:            |

## Stage 3 – Learning Plan

*Summary of Key Learning Events and Instruction*

| <i>Science Integration</i>                                      | <i>College, Career, and Civic Life Integration</i> | <i>Technology Integration</i>   |
|---|--|---|
|   |  | Analyzing various forms of media—images and videos will be displayed using overhead projectors, laptops will be used to search for various media examples, and DVDs and other video resources will be shown for analysis. |
| <i>District Materials</i>                                       | <i>Distance Learning/Field Trips</i>               | <i>Technology Resources</i>   |
| DVD: Killing Us Softly 4, Dreamworlds, Sext Up Kids documentary |  | <ul style="list-style-type: none"> <li>- Laptop carts</li> <li>- Projection screen and laptop/projector cart</li> <li>- Internet</li> </ul>   |

# Probability, Statistics & Trigonometry: Trigonometry

| Stage 1 Desired Results   |  |   |
|---|--|---|
| <p><b>ESTABLISHED GOALS:</b></p> <p><u>Competencies:</u></p> <ul style="list-style-type: none"> <li>Students will demonstrate the ability to apply trigonometric functions to solve for unknown quantities.</li> <li>Students will demonstrate the ability to reason with the definitions, laws, and identities of trigonometry in order to create conjectures and prove statements.</li> <li>Students will demonstrate the ability to graph functions by using tables and analyzing equations.</li> <li>Students will demonstrate the ability to solve for missing quantities by applying the law of sines, law of cosines and vectors.</li> <li>Students will demonstrate the ability to model real world problems by building and analyzing the appropriate expression, equation, or function.</li> <li>Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.</li> <li>Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.</li> <li>Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</li> </ul> <p><u>Content Standards:</u></p> <ul style="list-style-type: none"> <li>HSG.SRT.C.6 Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.</li> <li>HSG.SRT.C.7 Explain and use the relationship between the sine and cosine of complementary angles.</li> <li>HSG.SRT.C.8 Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.</li> <li>HSG.SRT.D.9 (+) Derive the formula <math>A = \frac{1}{2} ab \sin(C)</math> for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite</li> <li>HSN.VM.A.1 (+) Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes (e.g., <math>\mathbf{v}</math>, <math> \mathbf{v} </math>, <math>  \mathbf{v}  </math>, <math>v</math>).</li> <li>HSN.VM.A.2 (+) Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point.</li> </ul> | <b>Transfer</b>  |   |
|   | <p><i>Students will be able to independently use their learning to <b>understand and make predictions involving periodic phenomena.</b></i></p>  |   |
|   | <b>Meaning</b>   |   |
|   | <p><b>ENDURING UNDERSTANDINGS</b><br/><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>in order to solve problems involving physical phenomena which carry a direction, the mathematics must consider both the magnitude and the direction.</li> </ul>   | <p><b>ESSENTIAL QUESTIONS</b></p> <ul style="list-style-type: none"> <li>How can we use trigonometry to solve problems with real world applications?</li> <li>How can we use trigonometry as a tool to describe the world around us?</li> </ul> |
| <b>Acquisition</b>  |  |   |
| <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>that trig definitions describe a specific ratio between two sides of a right triangle and are unitless.</li> <li>that right triangles can be used to solve problems that would be impossible to solve using direct measure.</li> <li>six trig definitions from two contexts               <ul style="list-style-type: none"> <li>coordinate standpoint <math>x, y, r</math></li> <li>geometric standpoint opposite leg length, adjacent leg length, hypotenuse length</li> </ul> </li> <li>exact and decimal values of trig ratios for the construction triangles: <math>45^\circ</math>-<math>45^\circ</math>-<math>90^\circ</math> and <math>30^\circ</math>-<math>60^\circ</math>-<math>90^\circ</math></li> <li>the basic trig identities.</li> <li>the cofunction theorem.</li> <li>that 1 degree = 60 minutes and 1 minute = 60 seconds</li> <li><math>r@\theta^\circ</math> format for vector quantities</li> <li>that approximately 6 radians exist on the edge of a given circle relative to its size</li> <li>that radians are unitless but a more accurate measure than degrees.</li> <li>the difference between linear and angular velocities</li> </ul>   | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>calculating exact and decimal values of six trig functions given one.</li> <li><math>(x,y)</math> point on the terminal side of theta <math>\vartheta</math> in standard position.</li> <li>calculating exact and decimal values of six trig functions given one angle and one side of a right triangle.</li> <li>calculating exact and decimal values of six trig functions given only an angle that is an increment of <math>30^\circ</math> or <math>45^\circ</math>.</li> <li>calculating exact and decimal values of remaining trig functions given one trig ratio in any quadrant.</li> <li>calculating and interpreting a reference angle given a trig ratio.</li> <li>using trig identities to prove equivalencies.</li> <li>converting angle measure between decimal degrees and degrees, minutes, seconds formats.</li> <li>determining the measurements of missing sides and angles in a right triangle, including multiple right triangles in a single situation.</li> <li>calculating the height of an object indirectly</li> <li>representing vectors accurately using graph paper, ruler, protractor to scale as well as abstractly.</li> <li>drawing and labeling an accurate representation of</li> </ul> |   |

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| <ul style="list-style-type: none"> <li>• CCSS.MATH.CONTENT.HSN.VM.A.3 (+) Solve problems involving velocity and other quantities that can be represented by vectors.</li> <li>• HSN.VM.B.4 (+) Add and subtract vectors. <ul style="list-style-type: none"> <li>◦ Add vectors end-to-end, component-wise, and by the parallelogram rule. Understand that the magnitude of a sum of two vectors is typically not the sum of the magnitudes.</li> </ul> </li> <li>• HSN.VM.B.5 (+) Multiply a vector by a scalar. <ul style="list-style-type: none"> <li>◦ Represent scalar multiplication graphically by scaling vectors and possibly reversing their direction; perform scalar multiplication component-wise, e.g., as <math>c(v_x, v_y) = (cv_x, cv_y)</math>.</li> </ul> </li> <li>• MP1 Make sense of problems and persevere in solving them.</li> <li>• MP2 Reason abstractly and quantitatively.</li> <li>• MP4 Model with mathematics.</li> <li>• MP6 Attend to precision.</li> <li>• MP7 Look for and make use of structure.</li> <li>• MP8 Look for and express regularity in repeated reasoning.</li> </ul> | <ul style="list-style-type: none"> <li>• <i>how unit analysis can assist to solve for missing information and to interpret given information.</i></li> <li>• <i>how the graphs of sine, cosine and tangent connect</i></li> <li>• <i>the criteria needed to determine which Law to apply when trying to find missing information given an oblique triangle.</i></li> <li>• <i>Law of Sines and Law of Cosines</i></li> </ul> <p><i>Vocabulary: initial side or ray, terminal side or ray, standard position, positive angle, negative angle, rotation, coterminal angles, sine, cosine, tangent, cosecant, secant, cotangent, reference angle, reciprocal identities, ratio identities, Pythagorean identities, odd-even identities,, refined angular measurement: degrees, minutes, seconds, angle of elevation, angle of depression, bearing vs. course, vector, scalar, vector components, resultant vector</i></p> | <p><i>a vector equation(i.e. <math>\vec{r}=3\vec{u}+2\vec{v}</math> if <math>\vec{u}=3\text{cm}@20^\circ</math> and <math>\vec{v}=7\text{cm}@52^\circ</math> ).</i></p> <ul style="list-style-type: none"> <li>• <i>adding and subtracting vectors.</i></li> <li>• <i>multiplying a scalar by a vector.</i></li> <li>• <i>modeling navigation by using vectors.</i></li> <li>• <i>sketching angles of rotation in standard position given a radian or degree measure.</i></li> <li>• <i>converting angles between degree and radian measure.</i></li> <li>• <i>determining the reference angle for a given theta of rotation (in degrees or radian form)</i></li> <li>• <i>interpreting and using all values labeled on the unit circle.</i></li> <li>• <i>calculating and interpreting arc length in context</i></li> <li>• <i>calculating and interpreting area sector in context</i></li> <li>• <i>calculating and interpreting linear and angular velocities given a real life context.</i></li> <li>• <i>solving equations using inverse functions.</i></li> <li>• <i>graphing sine, cosine and tangent functions.</i></li> <li>• <i>applying Law of Cosines depending on the given information</i></li> <li>• <i>calculating the area of an oblique triangle given only SAS or SSS information.</i></li> </ul> |
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| <b>Content Area Literacy Standards</b>  | <b>21<sup>st</sup> Century Skills</b>   |
|---|---|
| <ul style="list-style-type: none"> <li>• RST.11-12.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</li> <li>• RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</li> <li>• RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 11-12 texts and topics</i>.</li> <li>• RST.11-12.5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.</li> <li>• RST.11-12.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.</li> <li>• RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.</li> <li>• RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.</li> </ul> | <ul style="list-style-type: none"> <li>• <i>reason effectively</i></li> <li>• <i>use systems thinking</i></li> <li>• <i>solve problems</i></li> <li>• <i>be flexible</i></li> </ul> |

| <b>Stage 2 - Evidence</b>  |                            |
|----------------------------|----------------------------|
| <b>Evaluative Criteria</b> | <b>Assessment Evidence</b> |
|                            | PERFORMANCE TASK(S):       |

|  |                 |
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|  | OTHER EVIDENCE: |
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### Stage 3 – Learning Plan

*Summary of Key Learning Events and Instruction*

| <b><i>Language Arts Integration</i></b>                      | <b><i>Mathematics Integration</i></b>                        |
|--|--|
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> | <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |
| <b><i>Technology Integration</i></b>                         | <b><i>District Materials</i></b>                             |
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |  |

# Probability, Statistics & Trigonometry: Statistics

| Stage 1 Desired Results  |   |  |
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| <p><b>ESTABLISHED GOALS:</b><br/><u>Competencies:</u></p> <ul style="list-style-type: none"> <li>• <i>Students will demonstrate the ability to apply statistical methods in order to collect, organize, and interpret data.</i></li> <li>• <i>Students will demonstrate the ability to apply regression/correlation techniques in order to determine relationships that exist between two variables.</i></li> <li>• <i>Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.</i></li> <li>• <i>Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.</i></li> <li>• <i>Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</i></li> </ul> <p><u>Content Standards:</u></p> <ul style="list-style-type: none"> <li>• HSS.ID.A.1 Represent data with plots on the real number line (dot plots, histograms, and box plots).</li> <li>• HSS.ID.A.2 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.</li> <li>• HSS.ID.A.3 Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).</li> <li>• HSS.ID.B.5 Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.</li> <li>• HSS.ID.B.6 Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.</li> <li>• HSS.IC.A.1 Understand statistics as a process for making inferences about population parameters based on a random sample from that population.</li> <li>• HSS.IC.A.2 Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model?</li> <li>• HSS.IC.B.3 Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.</li> <li>• HSS.IC.B.4 Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.</li> <li>• HSS.IC.B.5 Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between</li> </ul> | <b>Transfer</b>   |  |
|  | <p><i>Students will be able to independently use their learning to <b>construct and defend a well thought out conclusion.</b></i></p>   |  |
|  | <b>Meaning</b>  |  |
|  | <p><b>ENDURING UNDERSTANDINGS</b><br/><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>• statistical representations are beneficial for either studying certain characteristics or influencing certain interpretations of the data.</li> <li>• just because there is a correlation between two things, that there is causation between them.</li> </ul>   | <p><b>ESSENTIAL QUESTIONS</b></p> <ul style="list-style-type: none"> <li>• Can you ever be sure that a conclusion is correct?</li> <li>• How can we determine if our understandings of a relationship are correct?</li> </ul>  |
| <b>Acquisition</b>   |   |  |
|  | <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>• <i>that a parameter describes the entire population, whereas a statistic describes only a sample of the population.</i></li> <li>• <i>that the sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample.</i></li> <li>• <i>that frequency distribution tables can be used for both categorical and numeric variables.</i></li> <li>• <i>a line of best fit can be used to determine the linear relationship between two quantities.</i></li> <li>• <i>a linear correlation does not mean that there is a causation between the two sets of data.</i></li> </ul> <p><u>vocabulary:</u> <i>statistics, population, census, sample, data, parameter, statistic, quantitative data, qualitative data, discrete data, continuous data, nominal level of measure, ordinal level of measure, interval level of measure, ratio level of measure, self-selected survey, loaded question, observational study, experiment, placebo effect, blinding, double blind, confounding, random sample, systematic sampling, convenience sampling, stratified sampling, cluster sampling, frequency table, lower class limits, upper class limits,</i></p> | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>• <i>identifying a value as a statistic or parameter.</i></li> <li>• <i>identifying abuses of statistics.</i></li> <li>• <i>identifying observational study/experiment.</i></li> <li>• <i>identifying sampling method.</i></li> <li>• <i>identifying class width/midpoint/boundary.</i></li> <li>• <i>constructing a cumulative frequency table.</i></li> <li>• <i>constructing a frequency table given data.</i></li> <li>• <i>analyzing histograms.</i></li> <li>• <i>constructing histograms.</i></li> <li>• <i>constructing scatter diagrams.</i></li> <li>• <i>constructing pie charts.</i></li> <li>• <i>constructing dot plots.</i></li> <li>• <i>constructing Pareto charts.</i></li> <li>• <i>constructing stem and leaf plots.</i></li> <li>• <i>finding mean, median, mode, and midrange.</i></li> <li>• <i>finding mean of a frequency table.</i></li> <li>• <i>finding range, standard deviation, and variance.</i></li> <li>• <i>finding standard deviation of a frequency table.</i></li> <li>• <i>finding the value of a percentile/decile/quartile</i></li> <li>• <i>constructing a box plot.</i></li> <li>• <i>testing for linear correlation.</i></li> <li>• <i>constructing and interpreting a scatter diagram.</i></li> </ul> |

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| <ul style="list-style-type: none"> <li>parameters are significant.</li> <li>HSS.IC.B.6 Evaluate reports based on data.</li> <li>HSS.CP.A.1 Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not").</li> <li>MP2 Reason abstractly and quantitatively.</li> <li>MP3 Construct viable arguments and critique the reasoning of others.</li> <li>MP4 Model with mathematics</li> <li>MP5 Use appropriate tools strategically.</li> <li>MP6 Attend to precision.</li> <li>MP7 Look for and make use of structure.</li> <li>MP8 Look for and express regularity in repeated reasoning.</li> </ul> | <i>class boundaries, class midpoints, class width, relative frequency table, cumulative frequency table, histogram, relative frequency histogram, dotplot, stem and leaf plot, pareto chart, pie chart, scatter diagram, measure of center, mean, median, mode, bimodal, multimodal, midrange, range, standard deviation, variance, range rule of thumb, empirical rule, Chebyshev's theorem, z-score, quartiles, deciles, percentiles, exploratory data analysis, outlier, 5-number summary, boxplot, correlation, scatterplot, linear correlation, coefficient, regression equation/line</i> | <ul style="list-style-type: none"> <li>finding the value of the linear correlation coefficient.</li> <li>identifying correlation errors.</li> <li>finding the equation of a regression line.</li> <li>finding the best predicted value.</li> </ul>  |
| <b>Content Area Literacy Standards</b>  |  | <b>21<sup>st</sup> Century Skills</b>   |
| <ul style="list-style-type: none"> <li>RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 11-12 texts and topics</i>.</li> <li>RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.</li> <li>RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</li> </ul>         |  | <ul style="list-style-type: none"> <li>reason effectively</li> <li>use systems thinking</li> <li>make judgments and decisions</li> <li>solve problems</li> <li>implement innovations</li> <li>communicate clearly</li> <li>analyze media</li> <li>apply technology effectively</li> </ul> |

| <b>Stage 2 - Evidence</b>  |                            |
|----------------------------|----------------------------|
| <b>Evaluative Criteria</b> | <b>Assessment Evidence</b> |
|                            | PERFORMANCE TASK(S):       |
|                            | OTHER EVIDENCE:            |

| <b>Stage 3 – Learning Plan</b>                        |
|---|
| <i>Summary of Key Learning Events and Instruction</i> |

| <b><i>Language Arts Integration</i></b>                      | <b><i>Mathematics Integration</i></b>                        |
|--|--|
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> | <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |
| <b><i>Technology Integration</i></b>                         | <b><i>District Materials</i></b>                             |
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |  |

# Probability, Statistics & Trigonometry: Probability

## Stage 1 Desired Results

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| <p><b>ESTABLISHED GOALS:</b></p> <p><u>Competencies:</u></p> <ul style="list-style-type: none"> <li>• <i>Students will demonstrate the ability to apply the principles of experimental and theoretical probability in order to determine the likelihood of a given outcome, make inferences, and justify or critique conclusions.</i></li> <li>• <i>Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.</i></li> <li>• <i>Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.</i></li> <li>• <i>Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</i></li> </ul> <p><u>Content Standards:</u></p> <ul style="list-style-type: none"> <li>• HSS.ID.A.4 Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.</li> <li>• HSS.CP.A.2 Understand that two events <math>A</math> and <math>B</math> are independent if the probability of <math>A</math> and <math>B</math> occurring together is the product of their probabilities, and use this characterization to determine if they are independent.</li> <li>• HSS.CP.A.3 Understand the conditional probability of <math>A</math> given <math>B</math> as <math>P(A \text{ and } B)/P(B)</math>, and interpret independence of <math>A</math> and <math>B</math> as saying that the conditional probability of <math>A</math> given <math>B</math> is the same as the probability of <math>A</math>, and the conditional probability of <math>B</math> given <math>A</math> is the same as the probability of <math>B</math>.</li> <li>• HSS.CP.A.4 Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.</li> <li>• HSS.CP.A.5 Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung</li> </ul> | <b>Transfer</b>  |   |
|   | <p><i>Students will be able to independently use their learning to <b>construct and defend a well thought out prediction.</b></i></p>  |   |
|   | <b>Meaning</b>   |   |
|   | <p><b>ENDURING UNDERSTANDINGS</b><br/><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>• the probability of an event's occurrence can be predicted with varying degrees of confidence.</li> </ul>  | <p><b>ESSENTIAL QUESTIONS</b></p> <ul style="list-style-type: none"> <li>• How confident can you be that a given outcome will occur?</li> </ul> |
|   | <b>Acquisition</b>   |   |
| <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>• the formulas for mean, standard deviation and variance of a binomial distribution.</li> <li>• the formula for maximum and minimum usual values.</li> </ul> <p><u>vocabulary:</u> event, sample space, classical approach to probability, relative frequency approximation of probability, subjective probability, complement, actual odds against, actual odds in favor, payoff odds, compound event, mutually exclusive, rule of complementary events, independent events, dependent events, fundamental counting rule, factorial, permutation, combination, random variable, probability distribution, discrete, continuous, binomial probability distribution, Poisson distribution, normal distribution, density curve, standard normal distribution, nonstandard normal distribution, central limit theorem</p>   | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>• finding probability using the classical approach</li> <li>• determining if an event is unusual.</li> <li>• estimating probability using the relative frequency approach.</li> <li>• listing all possible outcomes.</li> <li>• determining if events are mutually exclusive.</li> <li>• finding the probability of the complement of an event.</li> <li>• using addition rule for mutually exclusive and non-mutually exclusive events.</li> <li>• classifying events as independent or dependent.</li> <li>• using multiplication rule for independent events.</li> <li>• using addition rule for mutually exclusive events.</li> <li>• describing the complement of a given event.</li> <li>• finding the probability of "at least one".</li> <li>• using contingency tables to find conditional probability.</li> <li>• evaluating factorials, permutations, and combinations.</li> <li>• finding and using a number of combinations and permutations.</li> <li>• classifying random variables as discrete or continuous.</li> <li>• determining whether a probability distribution is described.</li> </ul> |   |

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| <p>cancer.</p> <ul style="list-style-type: none"> <li>• HSS.CP.B.6 Find the conditional probability of <math>A</math> given <math>B</math> as the fraction of <math>B</math>'s outcomes that also belong to <math>A</math>, and interpret the answer in terms of the model.</li> <li>• HSS.CP.B.7 Apply the Addition Rule, <math>P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)</math>, and interpret the answer in terms of the model.</li> <li>• HSS.CP.B.8 (+) Apply the general Multiplication Rule in a uniform probability model, <math>P(A \text{ and } B) = P(A)P(B A) = P(B)P(A B)</math>, and interpret the answer in terms of the model.</li> <li>• HSS.CP.B.9 (+) Use permutations and combinations to compute probabilities of compound events and solve problems.</li> <li>• MP1 Make sense of problems and persevere in solving them</li> <li>• MP2 Reason abstractly and quantitatively.</li> <li>• MP3 Construct viable arguments and critique the reasoning of others.</li> <li>• MP4 Model with mathematics.</li> <li>• MP7 Look for and make use of structure.</li> <li>• MP8 Look for and express regularity in repeated reasoning.</li> </ul>  |  | <ul style="list-style-type: none"> <li>• <i>finding the mean, standard deviation, and variance of a probability distribution.</i></li> <li>• <i>finding expected value.</i></li> <li>• <i>determining if a procedure results in a binomial distribution.</i></li> <li>• <i>finding the probability of exactly <math>x</math> successes</i></li> <li>• <i>finding the probability of at least/at most <math>x</math> successes.</i></li> <li>• <i>finding the mean, standard deviation, and variance for a binomial distribution.</i></li> <li>• <i>finding probability for continuous uniform distributions.</i></li> <li>• <i>finding probability for standard normal distributions given z-score(s).</i></li> <li>• <i>using z-score to compare relative position.</i></li> <li>• <i>finding the percentile corresponding to a given value.</i></li> <li>• <i>finding z-score for standard normal distributions given probability (area) and determine if it is unusual.</i></li> <li>• <i>finding probability for nonstandard normal distributions.</i></li> <li>• <i>finding the number of observations satisfying a given condition.</i></li> <li>• <i>finding values for a normal distribution given probabilities or percentages.</i></li> </ul> |
| <p><b>Content Area Literacy Standards</b></p>  |  | <p><b>21<sup>st</sup> Century Skills</b></p>  |
| <ul style="list-style-type: none"> <li>• RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</li> <li>• RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 11-12 texts and topics</i>.</li> <li>• RST.11-12.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.</li> <li>• RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.</li> <li>• RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.</li> <li>• RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.</li> </ul> |  | <ul style="list-style-type: none"> <li>• <i>reason effectively</i></li> <li>• <i>use systems thinking</i></li> <li>• <i>make judgments and decisions</i></li> <li>• <i>solve problems</i></li> <li>• <i>communicate clearly</i></li> </ul>  |

## Stage 2 - Evidence

| <i>Evaluative Criteria</i> | <i>Assessment Evidence</i> |
|----------------------------|----------------------------|
|                            | PERFORMANCE TASK(S):       |
|                            | OTHER EVIDENCE:            |

## Stage 3 – Learning Plan

*Summary of Key Learning Events and Instruction*

| <i>Language Arts Integration</i>                             | <i>Mathematics Integration</i>                               |
|--|--|
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> | <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |
| <i>Technology Integration</i>                                | <i>District Materials</i>                                    |
| <ul style="list-style-type: none"><li>• 1.OA.1 Use</li></ul> |  |

# Probability, Statistics & Trigonometry: Matrices

|  |  |  |  |
|--|--|--|--|
| <p>ESTABLISHED GOALS:</p> <p><u>Competencies:</u></p> <ul style="list-style-type: none"> <li>• Students will demonstrate the ability to apply matrices to solve problems in a variety of contexts.</li> <li>• Students will demonstrate the ability to use mathematics to model real world problems by building and analyzing the appropriate expression, equation, or function.</li> <li>• Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.</li> <li>• Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.</li> <li>• Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</li> </ul> <p><u>Content Standards:</u></p> <ul style="list-style-type: none"> <li>• HSN.VM.C.6 (+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network.</li> <li>• HSN.VM.C.7 (+) Multiply matrices by scalars to produce new matrices, e.g., as when all of the payoffs in a game are doubled.</li> <li>• HSN.VM.C.8 (+) Add, subtract, and multiply matrices of appropriate dimensions.</li> <li>• HSN.VM.C.9 (+) Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties.</li> <li>• HSN.VM.C.10 (+) Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse.</li> <li>• MP4 Model with mathematics.</li> <li>• MP5 Use appropriate tools strategically.</li> <li>• MP7 Look for and make use of structure.</li> <li>• MP8 Look for and express regularity in repeated reasoning.</li> </ul> | <b>Transfer</b>  |  |  |
|  | <p><i>Students will be able to independently use their learning to maximize or minimize a problem's solution given a set of restrictions.</i></p>  |  |  |
|  | <b>Meaning</b>   |  |  |
|  | <p>ENDURING UNDERSTANDINGS</p> <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>• matrices allow them to find solutions to problems without using variables.</li> </ul> | <p>ESSENTIAL QUESTIONS</p> <ul style="list-style-type: none"> <li>• How can we make the best decisions given a restrictive situation?</li> </ul>   |  |
| <b>Acquisition</b>   |  |  |  |
| <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>• systems with no solution can always be detected by the presence of a matrix row of the form <math>[0 \ 0 \dots   a]</math>, where <math>a</math> is a nonzero number</li> <li>• in order to add or subtract matrices, they must have the same dimensions</li> <li>• in order to multiply matrices, the columns of the first must be the same as the rows of the second</li> <li>• multiplication of matrices is not commutative</li> <li>• not all square matrices have inverses</li> <li>• an input-output matrix is summarized the interdependence among the industries of the economy</li> </ul> <p><i>vocabulary: elementary row operations, matrix, pivoting; row, column, &amp; square matrices; entries, coefficient matrix, scalar product, identity matrix, inverse of a matrix, final demand, production amounts, linear programming, optimal point, transpose</i></p>  |  | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>• solve systems of equations using the Gauss-Jordan elimination method.</li> <li>• using a graphing calculator to solve systems using matrices.</li> <li>• pivoting a matrix around a given nonzero entry.</li> <li>• adding, multiplying, and subtracting matrices by hand and with a graphing calculator.</li> <li>• performing scalar multiplication.</li> <li>• finding the inverse of a matrix using Gauss-Jordan and with a calculator.</li> <li>• solving a matrix equation.</li> <li>• using a matrix inverse to solve a system of equations.</li> <li>• performing input-output analysis using matrix.</li> </ul> |  |

|  |  |  |
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|  |  |  |
|--|--|--|

- RST.9-10.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.
- RST.9-10.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 9-10 texts and topics*.
- RST.9-10.7 Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.

- *reason effectively*
- *use systems thinking*
- *solve problems*
- *access and evaluate information*
- *use and manage information*
- *be self-directed learners*

| Assessment Evidence        |                            |
|----------------------------|----------------------------|
| <i>Evaluative Criteria</i> | <i>Assessment Evidence</i> |
|                            | PERFORMANCE TASK(S):       |
|                            | OTHER EVIDENCE:            |

| Summary of Key Learning Events and Instruction        |  |                               |
|---|--|-------------------------------|
| <i>Summary of Key Learning Events and Instruction</i> |  |                               |
| <i>Science Integration</i>                            | <i>College, Career, and Civic Life Integration</i> | <i>Technology Integration</i> |
|   |  |                               |
| <i>District Materials</i>                             | <i>Distance Learning/Field Trips</i>               | <i>Technology Resources</i>   |
|   |  |                               |

# Probability, Statistics & Trigonometry: Sequences and Series

| Stage 1 Desired Results   |   |   |
|---|---|---|
| <p>ESTABLISHED GOALS:</p> <p><u>Competencies:</u></p> <ul style="list-style-type: none"> <li>• Students will demonstrate the ability to simplify algebraic expressions and equations by applying the properties of operations and arithmetic of complex numbers.</li> <li>• Students will demonstrate the ability to apply functions to solve problems in a variety of contexts by interpreting and analyzing multiple representations of functions.</li> <li>• Students will demonstrate the ability to model real world problems by building and analyzing the appropriate expression, equation, or function.</li> <li>• Students will demonstrate the ability to analyze and summarize text and integrate knowledge to make meaning of discipline-specific materials.</li> <li>• Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences.</li> <li>• Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</li> </ul> <p><u>Content Standards:</u></p> <ul style="list-style-type: none"> <li>• A.SSE.A.1.A Interpret parts of an expression, such as terms, factors, and coefficients.</li> <li>• F.IF.C.8.B Use the properties of exponents to interpret expressions for exponential functions.</li> <li>• F.BF.A.1.A Determine an explicit expression, a recursive process, or steps for calculation from a context.</li> <li>• F.BF.A.1.B Combine standard function types using arithmetic operations.</li> <li>• A.SSE.B.4 Derive the formula for the sum of a finite geometric series (when the common ratio is not 1), and use the formula to solve problems.</li> <li>• MP2 Reason abstractly and quantitatively.</li> <li>• MP4 Model with mathematics.</li> <li>• MP7 Look for and make use of structure.</li> <li>• MP8 Look for and express regularity in repeated reasoning.</li> </ul> | Transfer  |   |
|   | <p><i>Students will be able to independently use their learning to make informed decisions based upon their understanding of the patterns of numbers.</i></p>   |   |
|   | Meaning   |   |
|   | <p>ENDURING UNDERSTANDINGS<br/><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>• a constant increase or decrease applied at regular intervals always results in a linear relationship between two quantities.</li> <li>• a constant percent increase or decrease applied at regular intervals always results in an exponential relationship between two quantities.</li> </ul>   | <p>ESSENTIAL QUESTIONS</p> <ul style="list-style-type: none"> <li>• How do different factors alter an outcome?</li> </ul> |
| Acquisition   |   |   |
| <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li>• the recursive rule for an arithmetic sequence.</li> <li>• the recursive rule for geometric sequence.</li> <li>• <math>a_n = a_1 + (n - 1)d</math>.</li> <li>• <math>a_n = a_1 r^{n-1}</math>.</li> <li>• the formula for geometric mean.</li> <li>• summation notation.</li> </ul> <p><i>vocabulary: arithmetic sequence, arithmetic series, geometric sequence, geometric series, geometric mean</i></p>  | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li>• writing recursive and explicit formulas for arithmetic sequences.</li> <li>• calculating the sum of the first <math>n</math> terms of an arithmetic series.</li> <li>• writing recursive and explicit formulas for geometric sequences.</li> <li>• calculating the sum of the first <math>n</math> terms of a geometric series.</li> <li>• calculating the sum of an infinite geometric series</li> <li>• using induction to prove statements.</li> </ul> |   |

|   |  |   |
|---|--|---|
|   |  |   |
| <b>Content Area Literacy Standards</b>  |  | <b>21<sup>st</sup> Century Skills</b>   |
| <ul style="list-style-type: none"> <li>• RST.11-12.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</li> <li>• RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</li> <li>• RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 11-12 texts and topics</i>.</li> </ul> |  | <ul style="list-style-type: none"> <li>• <i>reason effectively</i></li> <li>• <i>use systems thinking</i></li> <li>• <i>apply technology effectively</i></li> <li>• <i>make judgments and decisions</i></li> <li>• <i>solve problems</i></li> <li>• <i>access and evaluate information</i></li> </ul> |

| <b>Stage 2 - Evidence</b>  |                            |
|----------------------------|----------------------------|
| <b>Evaluative Criteria</b> | <b>Assessment Evidence</b> |
|                            | PERFORMANCE TASK(S):       |
|                            | OTHER EVIDENCE:            |

## Stage 3 – Learning Plan

*Summary of Key Learning Events and Instruction*

### ***Language Arts Integration***

- 1.OA.1 Use

### ***Mathematics Integration***

- 1.OA.1 Use

### ***Technology Integration***

- 1.OA.1 Use

### ***District Materials***

# Probability, Statistics & Trigonometry: Logic

| Stage 1 Desired Results  |  |  |
|--|--|--|
| <p><b>ESTABLISHED GOALS:</b></p> <p><u>Competencies:</u></p> <ul style="list-style-type: none"> <li>Students will demonstrate the ability to use mathematical reasoning in order to comprehend and construct mathematical arguments.</li> <li>Students will demonstrate the ability to analyze and summarize text and integrate knowledge to</li> <li>Students will demonstrate the ability to produce coherent and supported writing in order to communicate effectively for a range of discipline-specific tasks, purposes, and audiences. meaning of discipline-specific materials.</li> <li>Students will demonstrate the ability to speak purposefully and effectively by strategically making decisions about content, language use, and discourse style.</li> </ul> <p><u>Content Standards:</u></p> <ul style="list-style-type: none"> <li>A.SSE.A.1.A Interpret parts of an expression, such as terms, factors, and coefficients.</li> <li>F.IF.C.8.B Use the properties of exponents to interpret expressions for exponential functions.</li> <li>F.BF.A.1.A Determine an explicit expression, a recursive process, or steps for calculation from a context.</li> <li>U h U</li> <li>MP2 Reason abstractly and quantitatively.</li> <li>U h #</li> <li>MP4 Model with mathematics.</li> <li>U h y</li> <li>U h "</li> <li>MP7 Look for and make use of structure.</li> <li>MP8 Look for and express regularity in repeated reasoning.</li> </ul> | Transfer   |  |
|  | <p><i>Students will be able to independently use their learning to <b>make informed decisions based upon their understanding of the rules of Logic.</b></i></p>  |  |
|  | Meaning  |  |
|  | <p><b>ENDURING UNDERSTANDINGS</b><br/><i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>The study of logic forms the underlying basis for many things we use every day, including our smartphones, computers, cars and all other technology involving programming.</li> </ul>   | <p><b>ESSENTIAL QUESTIONS</b></p> <ul style="list-style-type: none"> <li>How can the study of Logics be used to assess if someone is making a valid or invalid argument?</li> <li>Why is the language of Logic so important when making a valid argument?</li> </ul> |
| Acquisition  |  |  |
| <p><i>Students will know...</i></p> <ul style="list-style-type: none"> <li><i>The rules of logic give precise meaning to mathematical statements and are used to distinguish between valid and invalid arguments.</i></li> <li><i>Predicate logic can be used to express the meaning of a wide range of statements in mathematics and computer science in ways that permit us to reason and explore relationships between objects.</i></li> <li><i>Existential, universal, and nested quantifiers can be used to represent mathematical statements and can be used to translate English sentences into mathematical statements.</i></li> </ul> <p><i>vocabulary: logic statements, connectives, truth tables, logical equivalence, contradictions, conditional statements, converse, inverse, contrapositive, arguments, logic circuits, DeMorgan's Law</i></p>  | <p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> <li><i>creating and understanding logic statements and connectives.</i></li> <li><i>translating to and from symbolic notation.</i></li> <li><i>reading and writing truth tables.</i></li> <li><i>understanding logical equivalence.</i></li> <li><i>constructing tautologies and contradictions.</i></li> <li><i>writing and interpreting conditional statements and their negations.</i></li> <li><i>understanding and writing biconditionals.</i></li> <li><i>distinguishing between valid and invalid arguments.</i></li> <li><i>understanding logic circuits.</i></li> <li><i>understanding and interpreting quantifiers and their negations.</i></li> <li><i>analyzing mathematical statements using propositional and predicate logic.</i></li> <li><i>applying propositional logic to translations of English sentences and to Boolean searches, logic puzzles, and logic circuits.</i></li> <li><i>analyzing and constructing tautologies and contradictions.</i></li> <li><i>applying the rules of inferences in propositional logic and for quantified statements in order to produce valid argument.</i></li> </ul> |  |

|   |  |   |
|---|--|---|
|   |  |   |
| <b>Content Area Literacy Standards</b>  |  | <b>21<sup>st</sup> Century Skills</b>   |
| <ul style="list-style-type: none"> <li>• RST.11-12.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.</li> <li>• RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.</li> <li>• RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 11-12 texts and topics</i>.</li> </ul> |  | <ul style="list-style-type: none"> <li>• <i>reason effectively</i></li> <li>• <i>use systems thinking</i></li> <li>• <i>apply technology effectively</i></li> <li>• <i>make judgments and decisions</i></li> <li>• <i>solve problems</i></li> <li>• <i>access and evaluate information</i></li> </ul> |

| <b>Stage 2 - Evidence</b>  |                            |
|----------------------------|----------------------------|
| <b>Evaluative Criteria</b> | <b>Assessment Evidence</b> |
|                            | PERFORMANCE TASK(S):       |
|                            | OTHER EVIDENCE:            |

## Stage 3 – Learning Plan

*Summary of Key Learning Events and Instruction*

### ***Language Arts Integration***

- 1.OA.1 Use

### ***Mathematics Integration***

- 1.OA.1 Use

### ***Technology Integration***

- 1.OA.1 Use

### ***District Materials***



NH School Administrative Unit 106 | Timberlane Regional School District

30 Greenough Road, Plaistow, NH 03865 Voice: (603) 382-6119 Fax: (603) 382-3334

Timberlane.net

@TimberlaneRegional

@TimberlaneRSD

@TimberlaneRSD

# TRSD POLICY COMMITTEE'S RECOMMENDATIONS TO THE SCHOOL BOARD

November 17, 2022

## First Read

| <b>Policy</b>                                     | <b>Changes/Recommendations</b>  |
|---|---|
| <b>DJE:</b> Bidding Requirements                  | PC recommends to increase the competitive bid amount to \$50,000.   |
| <b>KF:</b> Use of School Buildings and Facilities | PC recommends to increase the age to 22 and give the Superintendent the authority to waive or adjust rental fees. |

|  |                                    |
|--|------------------------------------|
| <p><b>Timberlane Regional School District</b></p>  | <p><b>Policy Code:     DJE</b></p> |
| <p><b>Adopted:   01-03-91</b><br/> <b>Revised:   06-19-08</b><br/> <b>Revised:   05-08-14</b><br/> <b>Revised:   10-04-18</b><br/> <b>Revised:</b></p> | <p><b>Page 1 of 1</b></p>          |

**BIDDING REQUIREMENTS**

The Superintendent is required to get written competitive bids on purchases of supplies, materials, equipment, and contractual services in the amount of ~~\$10,000~~ \$50,000 or more. Purchases of \$5,000 or more will require at least three competitive documented quotes for the open market. All purchases made in the open market shall be consummated after careful evaluation.

When bidding procedures are used, bids shall be advertised appropriately, including on the district website. Suppliers shall be invited to have their names placed on mailing lists to receive invitations to bid. When specifications are prepared, they will be mailed to all merchants and firms who have indicated an interest in bidding.

All bids must be submitted in sealed envelopes, addressed to the Superintendent, and plainly marked with the name of the bid and the time of the bid opening. Bids shall be opened at the time specified and all bidders and other persons shall be invited to be present.

The School Board with input from the Superintendent reserves the right to reject any or all bids and to accept that bid which appears to be in the best interest of the district. The School Board with input from the Superintendent also reserves the right to waive any formalities in, or reject, any or all bids or any part of any bid. Any bid may be withdrawn prior to the scheduled time for the opening of bids. Any bid received after the time and date specified, shall not be considered. The School Board with input from the Superintendent also reserves the right to negotiate with a bidder when all bids exceed the budgeted appropriation.

The bidder to whom the award is made shall be required to enter into a written contract with the district with appropriate bonding. Contractors shall be required to provide a certificate of insurance.

Specialized educational and related services are exempt from this policy when the interests of children so dictate (i.e. textbook purchases, psychological services, etc.).

Existing services that continue to meet the needs of the district shall be subject to an annual review by the board and may not need to go out to bid.

**Legal References:**

- RSA 194-C:4 II (a), Superintendent Services*
- NH Code of Administrative Rules, Section Ed. 303.01 (b), Substantive Duties of School Boards*

**DJE - BIDDING REQUIREMENTS**

|   |                        |
|---|------------------------|
| <b>Timberlane Regional School District</b>                              | <b>Policy Code: KF</b> |
| <b>Adopted: 10-13-98</b><br><b>Revised: 12-15-16</b><br><b>Revised:</b> | <b>Page 1 of 1</b>     |

## USE OF SCHOOL BUILDINGS AND FACILITIES

Any group or individual requesting the use of school facilities, except for school activities, must submit an application to the school principal or his/her designee not less than two weeks prior to the time school facilities are needed. School sponsored activities shall take precedence over any outside use unless approved by the Superintendent.

Approval may be denied due to lack of appropriate space or if a previous activity by the applicant resulted in a violation of any aspect of any School Board policy or guidelines. Approval will be issued on a first come basis.

When schools have been closed because of inclement weather, the facilities will be closed for all use. The schools do not assume the responsibility of contacting groups when such closures occur.

Organizations connected with and promoting recognized school functions may use the buildings without charge.

Other organizations may use school property upon payment of suitable fees and costs, according to the fee schedule recommended by the Superintendent and approved by the Board. "Other organizations" includes the Boy Scouts of America, Big Sisters of America, Boys and Girls Clubs of America, Future Farmers of America, Girl Scouts of America, Little League Baseball, Inc., and any other group intended to serve youth under the age of ~~twenty-one (21)~~ **twenty-two (22)** and listed in Title 36 of the United States Code. The Board **and/or superintendent** reserves the right to waive rental fees for charitable or non-profit organizations.

Whenever a community group is permitted to use a school or other facility, at least one district employee must be on hand, paid for by the organization, when in the opinion of the Superintendent, it is necessary to supervise the individuals and protect school property. The number of paid employees shall depend on the type of service, number to be served and number of volunteers.

No school building or facility shall be used for any purpose which could result in picketing, rioting, disturbing the peace or damaging property or for any purpose prohibited by law. The Superintendent or his/her designee, on the basis of this policy and its accompanying regulations, shall approve all rentals of school facilities **and/or have the authority to waive or adjust rental fees.** ~~The School Board must approve any special requests or exceptions to this policy and/or regulations.~~

*Appendix KF-R*



## Executive Summary

November 17, 2022

In an effort to continue our commitment to school safety, we need to provide ongoing training and support to our staff, students and community. As the next step, we will provide instructional materials and resources to our staff to be used to support student learning at developmentally appropriate levels. In order to provide consistent learning for all stakeholders, we are proposing that we employ Navigate360, which is an online eLearning platform that provides a range of resources.

Navigate360 Training Institute is an evolving ecosystem of on-demand eLearning courses focused on personal safety education that positions you to promote and exemplify a culture of preparedness and resilience.

ALICE Training® with robust resources for educators, including:

- Lesson plans specific to grades
- Age- and ability-appropriate lessons
- Content for educators of students with special needs
- Promote confidence during an emergency with expert-curated courses supported by evidence and research
- Ensure a trauma-informed approach to safety education, helping to increase retention and recall
- Make it easy for staff to utilize preparedness courses with on-demand access

Respectfully submitted,

Christopher K. Kellan  
Superintendent of Schools



## EXECUTIVE SUMMARY-Plant Operations

November 17, 2022

We received \$26,190 from the State Agency Auction for the vehicles that we replaced.

The following is a list of updates for outstanding approved projects:

District Wide Re-keying and Door Locking Hardware Replacement:

- Performing Arts Center: Complete
- SAU Administration Building: Complete
- Danville Elementary: Complete
- Sandown North: Complete
- Sandown Central: Scheduled 11/16-11/23
- Atkinson: Scheduled start 11/28
- Pollard Elementary School: Scheduled start 12/5
- TRMS: Scheduled start 12/19
- TRHS Scheduled start 1/2/2023
- We are still waiting to hear if we are awarded a SAFER Grant.

Timberlane Regional Middle School Boiler Replacement:

- 2 new boilers have been installed at the Middle School.
- New mixing valve was added.
- New hot water heater has been installed.

Timberlane Regional Middle School Window Replacement:

- Windows are still in Queue with manufacturer.

Timberlane Regional Middle School HVAC Replacement:

- The RTU's are scheduled to ship 1/27/23

HS and MS Building Automation Systems Server Failure/Upgrade:

- The 20+ year old server for the HVAC Controls reached its end of life.
- We have replaced the JAYCE Controller in the high school and now have controls through our newer controller.
- Middle School JAYCE Controller has been replaced and is being programmed to give us control over the HVAC systems in the Middle School.



High School/Performing Arts Center Sprinkler Water Supply Leak:

- American Leak Detectors discover 9 potential leaks.
- Companies we have contacted to provide repair quotes:
  - Hampshire Fire Protection: Unable to provide a quote due to busy schedule.
  - Pulsar Alarm Systems: They do not offer this service.
  - Cogswell: Left two messages and we are still waiting for their response.
  - Busby: Emailed and called them, we are still waiting for their response.

Lead In drinking water update:

- All outlets have been identified, labeled and documented.
- Testing bottles have been received.
- Samples will be taken on weekends over the next month.

Paving repairs:

All repairs have been completed. One area needs some finalization and Busby will take care of it.

Door Shades have all been installed.

HS Server Room Mini-Split Replacement: Still trying to find the right time to accomplish this.

Burglar Alarm upgrade has been completed. All the alarms throughout the District are 4G and accessed and managed through Alarm.com.

Staffing Update:

- New Groundskeeper Started Monday November 14<sup>th</sup>.
- Sarah Vaira successfully completed the Primex Supervisor's Academy
- Current Open Positions:
  - Atkinson Academy Custodian 2<sup>nd</sup> Shift (no applicants)
  - Substitute Custodians (I just forwarded the only applicant for hire)
  - Virtual Job Fair held on the 15<sup>th</sup>.

Respectfully submitted,

Karl Ingoldsby

Director of Plant Operations



## EXECUTIVE SUMMARY-Plant Operations

November 17, 2022

### Re: Maintenance Staffing Request

After being in this district for just over a year, witnessing the hard work and work loads of the district maintenance staff, I have conducted some research to try to investigate the staffing needs as far as Facilities Maintenance is concerned. Increased work loads have the maintenance mechanics with 40+ work orders assigned at any given time to include preventive maintenance as well as general maintenance work requests. Current open work orders total 134, 10 of which are Preventive Maintenance, the rest are work requests. The average age of current open work orders is 79 days.

The following Agency was used to look at Industry Standards:

- Association of Physical Plant Administrators: This organization is geared toward higher education facility managers; however, they also have a robust public K-12 membership and most information can be useful to both levels of facilities management.

The Association of Physical Plant Administrators defines facility maintenance into 5 levels. These levels are:

- Level 1 - Showpiece Facility (Highest)
- Level 2 - Comprehensive Stewardship (Recommended)
- Level 3 - Managed Care
- Level 4 - Reactive Management
- Level 5 – Crisis Response

Showpiece Facility Definition: Maintenance activities appear highly focused. Typical equipment and building components are fully functional and in excellent condition. Service and maintenance calls are responded to immediately. Buildings and equipment are regularly upgraded, keeping them current with modern standards and usage.

Comprehensive Stewardship Definition: Maintenance activities appear organized with direction. Equipment and building components are usually functional and in operating condition. Service and maintenance calls are responded to in a timely manner. Buildings and equipment are regularly upgraded, keeping them current with modern standards and usage.



Managed Care Definition: Maintenance Activities appear to be somewhat organized, But they remain people dependent. Equipment and building components are mostly functional, but they suffer occasional breakdowns. Service and maintenance call response times are variable and sporadic without apparent cause. Buildings and equipment are periodically upgraded to current standards and usage, but not enough to control the effects of normal usage and deterioration

Reactive Maintenance Definition: Maintenance activities appear to be somewhat chaotic and people dependent. Equipment and building components are frequently broken and inoperative. Service and maintenance calls are typically not responded to in a timely manner. Normal usage and deterioration continues unabated, making buildings and equipment inadequate to meet present usage needs.

Determining Maintenance Staffing:

Maintainable Square Footage (MSF) is divided into four categories. These categories combine a multitude of different types of use to simplify the method of determining staff. The categories are:

- Classroom
- Laboratory
- Office
- Residence Hall

At Timberlane Regional School District the MSF for each Category is estimated at:

- Classroom: 600,000 approximately
- Office: 20,000 approximately

Total MSF is approximately 620,000 sq. ft.

The formulas for maintenance staffing, as indicated in the references, based upon MSF per category would require the following square footage per maintenance technicians:

Level 1 41,667(Office) to 66,667(Classroom)

Level 2 62,500(Office) to 83,333(Classroom)

Level 3 90,909(Office) to 111,111(Classroom)

Level 4 125,000(Office) to 125,000(Classroom)

Level 5 250,000(Office) to 236,098(Classroom)



Current Staffing for maintenance is 3 Maintenance Technicians.  $620,000/3=206,667$  sq. ft. per maintenance technician. This has us in the upper level 5, or Crisis Response, of the standards.

An additional 2 technicians would bring us to 123,200 sq. ft. per maintenance technician or lower level 4, Reactive Management. If we add an additional third maintenance technician, it would increase the level of service to the upper level 3, Managed Care, giving 102,667 sq. ft. per maintenance technician.

The age of the facilities, spread out nature of the Timberlane Community, and lack of any major upgrades over the past 20 years, must be considered when we discuss maintenance staffing levels.

We have some very proud technicians that take pride in their work, and some even do their work with a smile on their face no matter what is happening or their workload! Sometimes they do not see a light at the end of the tunnel and get frustrated.

Thank you for your consideration,

Respectfully submitted,

Karl Ingoldsby  
Director of Plant Operations



# EXECUTIVE SUMMARY

November 17, 2022

Below please find a list of the projects that the CIP Committee is recommending for FY2023 and FY2024.

### FY2023 & 2024 Capital Improvement Priorities

| Project   | Location            | Classification    | Cost               | Potential Rebate | Estimated Annual Savings |
|---|---------------------|-------------------|--------------------|------------------|--------------------------|
| ECM 3 Replace Ballasted Roof (Roof G)                   | Atkinson            | Roof              | \$262,010          |                  |                          |
| EM 5 Replace 3 Electric panels                          | SCS                 | Automation        | \$63,840           |                  |                          |
| Architectural Review Masonry Walls                      | AA,DE,SCS,TRMS,TRHS | Feasibility Study | \$100,000          |                  |                          |
| ECM4 HVAC Controls                                      | Danville            | Automation        | \$359,100          |                  | \$3,950                  |
| ECM 1 Upgrade Pneumatic                                 | TMS                 | Automation        | \$463,739          | \$12,000         | \$3,900                  |
| ECM 6 Boiler Upgrade                                    | THS                 | Boilers           | \$945,200          | \$20,000         | \$3,000                  |
| ECM 2 Consolidate boilers & Convert to LP               | Danville            | Boilers           | \$769,365          | \$16,000         | \$15,000                 |
| ECM 10 Architectural Program for New School Feasibility | THS & TMS           | Feasibility Study | \$35,000           |                  |                          |
| <b>Total CIP Project</b>                                |                     |                   | <b>\$2,998,254</b> | <b>\$48,000</b>  | <b>\$25,850</b>          |

### Alternate Projects Considered

|                                   |         |      |                    |  |  |
|-----------------------------------|---------|------|--------------------|--|--|
| ECM 8 B&D Roofs                   | THS     | Roof | \$850,200          |  |  |
| ECM 7 Cafeteria Unit              | Pollard | HVAC | \$325,000          |  |  |
| ECM 11 Cafeteria Ventilation Unit | TMS     | HVAC | \$285,000          |  |  |
| <b>Total Alternate Projects</b>   |         |      | <b>\$1,460,200</b> |  |  |

Respectfully Submitted By:  
Maria Watkins, CFO/Business Administrator

# 2023 Timberlane Regional School District Warrant

## State of New Hampshire

To the inhabitants of the School District of the Towns of Atkinson, Danville, Plaistow, and Sandown, New Hampshire, qualified to vote in District affairs:

### First Session of Annual Meeting (Deliberative)

You are hereby notified to meet at the Timberlane Performing Arts Center, 40 Greenough Road, Plaistow, New Hampshire, on Thursday, the 9<sup>th</sup> day of February 2023, at 7:00 p.m. This session shall consist of explanation, discussion, and debate of warrant articles number 2 through number X. Warrant articles may be amended subject to the following limitations: (a) warrant articles whose wording is prescribed by law shall not be amended, (b) warrant articles that are amended shall be placed on the official ballot for a final vote on the main motion, as amended, and (c) no warrant article shall be amended to eliminate the subject matter of the article.

### Second Session of Annual Meeting (Voting)

Voting on warrant articles number 1 through number X will be conducted by official ballot to be held in conjunction with town meeting voting to be held on Tuesday, the 14<sup>th</sup> day of March 2023, at the Town election polls in Atkinson, Danville, Plaistow, and Sandown, New Hampshire.

|          |   |
|----------|---|
| Atkinson | Voting will be conducted at the Atkinson Community Center from 7am-8pm    |
| Danville | Voting will be conducted at the Danville Community Center from 8am-8pm    |
| Plaistow | Voting will be conducted at the Plaistow Public Works Garage from 7am-8pm |
| Sandown  | Voting will be conducted at the Sandown Town Hall from 8am-8pm            |

### Article 1 - Election of Officers

To choose the following school district officers:

|                 |                         |             |
|-----------------|-------------------------|-------------|
| Atkinson Voters | School Board Member     | 1-Year Term |
| Atkinson Voters | School Board Member     | 3-Year Term |
| Danville Voters | School Board Member     | 3-Year Term |
| Plaistow Voters | School Board Member     | 3-Year Term |
| Atkinson Voters | Budget Committee Member | 3-Year Term |
| Danville Voters | Budget Committee Member | 3-Year Term |
| Plaistow Voters | Budget Committee Member | 3-Year Term |
| Plaistow Voters | Budget Committee Member | 1-Year Term |
| Sandown Voters  | Budget Committee Member | 1-Year Term |

**Article 2 - Operating Budget**

Shall the voters of the Timberlane Regional School District raise and appropriate as an operating budget, not including appropriations by special warrant articles and other appropriations voted separately, the amounts set forth on the budget posted with the warrant or as amended by vote of the first session, for the purposes set forth therein, totaling \$X? Should this article be defeated, the operating budget shall be \$X which is the same as last year, with certain adjustments required by previous action of the Timberlane Regional School District or by law; or the governing body may hold one special meeting, in accordance with RSA 40:13, X and XVI, to take up the issue of a revised operating budget only. Note: Warrant Article 2 (the operating budget) does not include appropriations proposed under any other warrant articles. (MAJORITY VOTE REQUIRED)

*Recommended by the School Board*  
*Recommended by the Budget Committee*

**Article 3 - X Year Collective Bargaining Agreement (Timberlane Administrative Assistants/Secretaries and Skilled Maintenance Union)**

Shall the voters of the Timberlane Regional School District approve the cost items included in the collective bargaining agreement reached between the Timberlane Administrative Assistants and Maintenance Union and the Timberlane Regional School Board, which calls for the following increases in salaries and benefits at the current staffing levels over the amount paid in the prior fiscal year:

Fiscal Year  
Estimated Increase  
X-Year Total

And further to raise and appropriate the sum of \$X for the 2023-24 fiscal year, such sum representing the additional costs attributable to the increase in salaries and benefits required by the new agreement over those that would be paid at the current staffing levels? (MAJORITY VOTE REQUIRED)

*Recommended by the School Board*  
*Recommended by the Budget Committee*

**Article 4 - Authorization for Special Meeting on Cost Items**

Shall the voters of the Timberlane Regional School District, if Article 3 is defeated, authorize the Timberlane Regional School Board to call one special meeting, at its option, to address Article 3 cost items only? (MAJORITY VOTE REQUIRED)

*Recommended by the School Board*

**Article 5 - X Year Collective Bargaining Agreement (Timberlane Administrators' Union)**

Shall the voters of the Timberlane Regional School District approve the cost items included in the collective bargaining agreement reached between the Timberlane Administrators' Union and the Timberlane Regional School Board, which calls for the following increases in salaries and benefits at the current staffing levels over the amount paid in the prior fiscal year:

- Fiscal Year
- Estimated Increase
- X-Year Total

And further to raise and appropriate the sum of \$X for the 2023-24 fiscal year, such sum representing the additional costs attributable to the increase in salaries and benefits required by the new agreement over those that would be paid at the current staffing levels? (MAJORITY VOTE REQUIRED)

***Recommended by the School Board***  
***Recommended by the Budget Committee***

**Article 6 - Authorization for Special Meeting on Cost Items**

Shall the voters of the Timberlane Regional School District, if Article 5 is defeated, authorize the Timberlane Regional School Board to call one special meeting, at its option, to address Article 5 cost items only? (MAJORITY VOTE REQUIRED)

***Recommended by the School Board***

**Article 7 - X Year Collective Bargaining Agreement (Timberlane Teachers' Association)**

Shall the voters of the Timberlane Regional School District approve the cost items included in the collective bargaining agreement reached between the Timberlane Teachers' Association and the Timberlane Regional School Board, which calls for the following increases in salaries and benefits at the current staffing levels over the amount paid in the prior fiscal year:

- Fiscal Year
- Estimated Increase
- X-Year Total

And further to raise and appropriate the sum of \$X for the 2023-24 fiscal year, such sum representing the additional costs attributable to the increase in salaries and benefits required by the new agreement over those that would be paid at the current staffing levels? (MAJORITY VOTE REQUIRED)

***Recommended by the School Board***  
***Recommended by the Budget Committee***

**Article 8 - Authorization for Special Meeting on Cost Items**

Shall the voters of the Timberlane Regional School District, if Article 7 is defeated, authorize the Timberlane Regional School Board to call one special meeting, at its option, to address Article 7 cost items only? (MAJORITY VOTE REQUIRED)

***Recommended by the School Board***

**Article 9 - X Year Collective Bargaining Agreement (Timberlane Support Staff Union)**

Shall the voters of the Timberlane Regional School District approve the cost items included in the collective bargaining agreement reached between the Timberlane Support Staff Union and the Timberlane Regional School Board, which calls for the following increases in salaries and benefits at the current staffing levels over the amount paid in the prior fiscal year:

- Fiscal Year
- Estimated Increase
- X-Year Total

And further to raise and appropriate the sum of \$X for the 2023-24 fiscal year, such sum representing the additional costs attributable to the increase in salaries and benefits required by the new agreement over those that would be paid at the current staffing levels? (MAJORITY VOTE REQUIRED)

***Recommended by the School Board***  
***Recommended by the Budget Committee***

**Article 10 - Authorization for Special Meeting on Cost Items**

Shall the voters of the Timberlane Regional School District, if Article 9 is defeated, authorize the Timberlane Regional School Board to call one special meeting, at its option, to address Article 9 cost items only? (MAJORITY VOTE REQUIRED)

***Recommended by the School Board***

**Article 11 - Capital Reserve Fund by Surplus**

Shall the voters of the Timberlane Regional School District raise and appropriate up to \$250,000 to be placed in the School Building Construction, Reconstruction, Capital Improvement and Land Purchase Capital Reserve Fund established in 1996, with such amount to be transferred from those funds in the June 30, 2023 unassigned fund balance available for transfer on July 1 of this year which were apportioned as Capital Expenses in 2022-2023 in accordance with Article 6 of the Timberlane Regional School District Articles of Agreement? No amount to be raised by additional taxation. (MAJORITY VOTE REQUIRED)

***Recommended by the School Board***  
***Recommended by the Budget Committee***

**Article 12 - General Acceptance of Reports**

Shall the voters of the Timberlane Regional School District accept reports of agents, auditors, and committees as written in the 2022 Annual Report? (MAJORITY VOTE REQUIRED)

***Recommended by the School Board***

## **Articles for Consideration**

### **Article XX – Emergency Contingency Fund**

Shall the School District establish a contingency fund for the upcoming fiscal year for unanticipated expenses that may arise as the district continues to respond to the national economic crisis and further raise and appropriate \$500,000 to go into the fund? Any appropriation left in the fund at the end of the year will lapse to the general fund and used to offset the local education property tax rate. (MAJORITY VOTE REQUIRED)

Recommended by the School Board 0-0-0

Recommended by the Budget Committee 0-0-0

### **Article XX - Fund Balance Retention**

Shall the Timberlane Regional School District vote to authorize, indefinitely until rescinded, to retain year-end unassigned general funds in an amount not to exceed, in any fiscal year, 5% of the current fiscal year's net assessment, in accordance with RSA 198:4-b, II. (MAJORITY VOTE REQUIRED)

Recommended by the School Board 0-0-0

Recommended by the Budget Committee 0-0-0

### **Article XX – Use of Capital Reserve Fund**

Shall the voters of the Timberlane Regional School District appropriate the sum of \$950,000 to repair the XXXXXXXX and to authorize the District to withdraw the sum of \$950,000 from the existing School Building Construction, Reconstruction, Capital Improvements and Land Purchase Capital Reserve Fund? No amount to be raised by additional taxation. (MAJORITY VOTE REQUIRED)

Recommended by the School Board 0-0-0

Recommended by the Budget Committee 0-0-0

# Timberlane Regional School Board Committee Assignments

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|  |                                     |   |
|--|-------------------------------------|---|
| <b>Budget Committee</b>  | <b>Policy Committee</b>             | <b>Safety Committee</b>                           |
| Mark Sherwood  | Shauna Manthorn<br>Mark Sherwood    | Katie Knutsen<br>Kristin Savage                   |
| <b>CIP Committee</b>   | <b>Personnel Committee - TTA</b>    | <b>Personnel Committee - TSSU</b>                 |
| Michael Boucher<br>Kim Farah<br>Shauna Manthorn<br>Mark Sherwood | Kim Farah<br>Mark Sherwood          | Kim Farah<br>Kim McCormick<br>X                   |
| <b>Curriculum &amp; Assessment Committee</b>                     | <b>Personnel Committee TAU</b>      | <b>Personnel Committee TAAM</b>                   |
| Michael Boucher<br>Kim McCormick<br>Mark Sherwood                | X<br>Brian Boyle<br>Mark Sherwood   | Michael Boucher<br>Katie Knutsen<br>Kim McCormick |
| <b>Energy Committee</b>  | <b>Strategic Planning Committee</b> | <b>Wellness Committee</b>                         |
| Kim Farah<br>Shauna Manthorn                                     | Michael Boucher<br>Kim McCormick    | Shauna Manthorn<br>Kim McCormick                  |
| <b>Check Registers</b>   | <b>Facilities Committee</b>         | <b>NHSBA Delegate</b>                             |
| Michael Boucher  | Katie Knutsen<br>Kristin Savage     | Kim McCormick                                     |