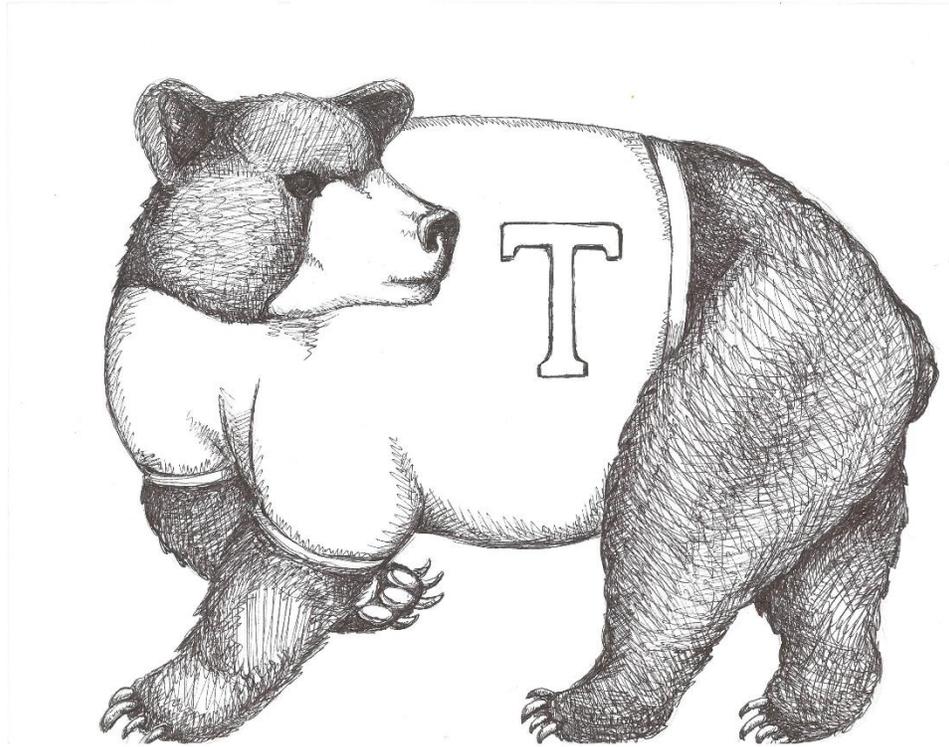


# **Thomaston Public Schools**

**158 Main Street**

**Thomaston, Connecticut 06787**

**www.thomastonschools.org – 860-283-4796**



**Thomaston Public Schools Curriculum**

**Black Rock School**

**Grade(s): One- Technology 2015**

**A Nurturing Community Where Children Are Primary**

# Acknowledgements

Curriculum Writer(s): Tammy Dayton

We acknowledge and celebrate the professionalism, expertise, and diverse perspectives of these teachers. Their contributions to this curriculum enrich the educational experiences of all Thomaston students.

*Alisha DiCorpo*\_\_\_\_\_

Alisha L. DiCorpo

Director of Curriculum and Professional Development

**Date of Presentation to the Board of Education: August 2015**

**(Technology Curriculum Grade 1)**

## **Grade: One- Technology**

### **Board of Education Mission Statement:**

**IN A PARTNERSHIP OF FAMILY, SCHOOL AND COMMUNITY, OUR MISSION IS TO EDUCATE, CHALLENGE AND INSPIRE EACH INDIVIDUAL TO EXCEL AND BECOME A CONTRIBUTING MEMBER OF SOCIETY.**

**Departmental Philosophy:** The Thomaston Public School District Technology Curriculum is designed to promote technological and information literacy utilizing the 21st Century Skills of critical thinking, problem solving, collaboration, leadership, adaptability, entrepreneurialism effective oral and written communication, accessing and analyzing information, curiosity and imagination. These skills will enable our students to compete in an ethical and responsible manner in our ever-changing global economy. Our curriculum seeks to promote academic success by embedding technology tools and applications into the teaching and learning process.

All students will develop technology skills in a wide-range of contexts while simultaneously strengthening understanding of essential academic knowledge and skills. This real-world approach allows classroom teachers to enhance the learning process, enrich the academic experience, and provide students with the skills necessary to succeed in life. Students are active participants in the learning process and learn to efficiently access, explore, apply, and synthesize information in our digital world. They will become resourceful learners, utilizing information, media, and technology literacy and will become responsible citizens demonstrating the characteristics of pride, leadership, confidence, respect, motivation and flexibility.

**Course Description:** The focus of the first grade Technology is to expand the skills learned in Kindergarten. The course reviews effectively controlling the mouse, understanding the location of computer parts, navigating the desktop and internet, using software applications and being safe online.

The students will become more independent on the computer. They will be able to use basic computer navigation and computer applications. They will demonstrate proper care and use of equipment, identify specific parts of the computer, and use computer hardware to create, save, and share a project in a digital format with a text and graphics. The students will use templates to make sense of information using electronic graphic organizers. They will be able to use the computer as a tool to assist in learning.

**Technology Unit -  
Rigorous Curriculum Design Template  
Unit :One/Digital Citizenship**

**Subject:** Technology

**Grade/Course:** One

**Pacing:** 4 weeks

**Unit of Study:** Digital Citizenship

**Priority Standards:** Students practice responsible, legal, safe and ethical use of information resources and technology.

**Overview:** In this unit the students will learn to follow rules to ensure responsible and safe use of the computer and other technologies.

**“Unwrapped” Standards**

<b>Concepts (What Students Need to Know)</b>	<b>Skills (What Students Need to Be Able to Do)</b>
Responsible, legal, safe and ethical uses of information resources and technology.  ☐	Practice (DOK-1)

**Essential Understandings**

Demonstrate proper care of materials and equipment.

- Follow classroom rules for responsible use of computers and other technologies.
- Identify and practice appropriate and safe behaviors online.
- Discuss the importance of following the rules for Internet use.
- Follow the school’s rules for using computers and the internet.
- Explain and discuss the importance of a password.

<b>Essential Questions</b>	<b>Big ideas</b>
Why do we need to be responsible when using technology?	We need to follow rules to be safe.

<b>Assessments</b>		
Common Formative Pre-Assessments	Progress Monitoring Checks – “Dipsticks”	Common Formative Mid and or Post-Assessments Resources
<a href="https://assessments.commonsensemedia.org/">https://assessments.commonsensemedia.org/</a> *Immediate feedback provided to instructor.	Ongoing Teacher Observation For example; teacher will scan classroom for students demonstrating proper computer usage. A thumbs up thumbs down question can be used to check understanding.	<a href="https://assessments.commonsensemedia.org/">https://assessments.commonsensemedia.org/</a> *Immediate feedback provided to instructor.

<b>Performance Task/Engaging Scenario</b>
*To be completed at a later date.
<b>Engaging Learning Experiences</b>

<b>Instructional Strategies</b>	<b>Meeting the Needs of All Students</b>
---------------------------------	--

### 21st Century Skills

- Critical thinking and problem solving
- Collaboration and leadership
- Agility and adaptability
- Initiative and entrepreneurialism
- Effective oral and written communication
- Accessing and analyzing information
- Curiosity and imagination

### Marzano's Nine Instructional Strategies for Effective

#### Teaching and Learning

- 1. Identifying Similarities and Differences:** helps students understand more complex problems by analyzing them in a simpler way
- 2. Summarizing and Note-taking:** promotes comprehension because students have to analyze what is important and what is not important and put it in their own words
- 3. Reinforcing Effort and Providing Recognition:** showing the connection between effort and achievement helps students see the importance of effort and allows them to change their beliefs to emphasize it more. Note that recognition is more effective if it is contingent on achieving some specified standard.
- 4. Homework and Practice:** provides opportunities to extend learning outside the classroom, but should be assigned based on relevant grade level. All homework should have a purpose and that purpose should be readily evident to the students. Additionally, feedback should be given for all homework assignments.
- 5. Nonlinguistic Representations:** has recently been proven to stimulate and increase brain activity.
- 6. Cooperative Learning:** has been proven to have a positive impact on overall learning. Note: groups should be small enough to be effective and the strategy should be used in a systematic and consistent

### **Differentiated Instruction**

#### Differentiate:

- content
- process
- product

#### Base on Student:

- readiness
- interests
- learning profile

#### Through:

- multiple intelligences
- jigsaw
- graphic organizers
- supplementary materials
- small group instruction
- varied questioning strategies
- additional time
- reteaching
- manipulatives
- mentor/tutor
- pre-teaching
- use of visuals and realia
- ongoing comprehension checks
- co-teaching
- build on prior knowledge

<p>manner.</p> <p><b>7. Setting Objectives and Providing Feedback:</b> provide students with a direction. Objectives should not be too specific and should be adaptable to students' individual objectives. There is no such thing as too much positive feedback, however, the method in which you give that feedback should be varied.</p> <p><b>8. Generating and Testing Hypotheses:</b> it's not just for science class! Research shows that a deductive approach works best, but both inductive and deductive reasoning can help students understand and relate to the material.</p> <p><b>9. Cues, Questions, and Advanced Organizers:</b> helps students use what they already know to enhance what they are about to learn. These are usually most effective when used before a specific lesson.</p>	
--	--

New Vocabulary	Students Achieving Below Standard	Students Achieving Above Standard
<p>online safety site download personal information</p>	<p>The following provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are below grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used.</p> <p><b><u>Provide Multiple Means of Representation</u></b></p> <ul style="list-style-type: none"> <li>● Guide students as they select and practice using their own graphic organizers and models to solve.</li> <li>● Use direct instruction for vocabulary with visual or concrete representations.</li> </ul>	<p>The following chart provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are above grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used. Provide Multiple Means of Representation Teach students how to ask questions (such as, "Do you agree?" and "Why do you think so?") to extend "think-pair-share" conversations. Model and post conversation "starters," such as: "I agree because..." "Can you explain how you solved it?" "I noticed that..." "Your solution is different from/ the same as mine because..." "My mistake was to..." Incorporate written reflection, evaluation, and synthesis. Allow creativity in expression and modeling solutions. Provide Multiple Means of Action</p>

- Use explicit directions with steps and procedures enumerated.
- Guide students through initial practice promoting gradual independence. "I do, we do, you do."
- Use alternative methods of delivery of instruction such as recordings and videos that can be accessed independently or repeated if necessary.
- Scaffold complex concepts and provide leveled problems for multiple entry points.

**Provide Multiple Means of Action and Expression**

- Have students restate their learning for the day. Ask for a different representation in the restatement. 'Would you restate that answer in a different way or show me by using a diagram?'
- Encourage students to explain their thinking and strategy for the solution.
- Choose tasks that are "just right" for learners but teach the same concepts.

**Provide Multiple Means of Engagement**

- Clearly model steps, procedures, and questions to ask when solving.
- Cultivate peer-assisted learning interventions for instruction (e.g., dictation) and practice (e.g., peer modeling).
- Have students work together and then check their solutions.
- Teach students to ask

and Expression Encourage students to explain their reasoning both orally and in writing. Offer choices of independent or group assignments for early finishers. Have students share their observations in discussion and writing (e.g., journaling). Facilitate research and exploration through discussion, experiments, internet searches, trips, etc. Let students choose their mode of response: written, oral, concrete, pictorial, or abstract. Increase the pace. Adjust difficulty level by increasing the number of steps (e.g., change a one-step problem to a two-step problem). Provide Multiple Means of Engagement Push student comprehension into higher levels of Bloom's Taxonomy with questions such as: "What would happen if...?" "Can you propose an alternative...?" "How would you evaluate...?" "What choice would you have made...?" Ask "Why?" and "What if?" questions. Accept and elicit student ideas and suggestions for ways to extend games. Cultivate student persistence in problem-solving and do not neglect their need for guidance and support.

	<p>themselves questions: Do I know the meaning of all the words?; What is being asked?; Do I have all of the information I need?; What do I do first?</p> <ul style="list-style-type: none"> <li>● Practice routine to ensure smooth transitions.</li> <li>● Set goals with the students regarding next steps and what to focus on next.</li> </ul>	
--	---	--

<b>Instructional Resources</b>
<p> <a href="http://www.kidsmart.org.uk/teachers/lessonplans.aspx">www.kidsmart.org.uk/teachers/lessonplans.aspx</a>  <a href="http://sites.google.com/a/apps.district279.org/elementary-technology">sites.google.com/a/apps.district279.org/elementary-technology</a>  <a href="http://www.kto8.com">www.kto8.com</a>  <a href="http://www.assessments.commonsensemedia.org">www.assessments.commonsensemedia.org</a> </p> <p>Books:</p> <p><u>iSafe Internet Safety Activities</u> by iSafe</p> <p><u>Cyber-Safe Kids</u> by Nancy Willard</p> <p>Little Bird’s Internet Security Adventure by Jim Mercado and Siobhan McDermott</p> <p>The Berenstain Bears Computer Trouble by Jan Berenstain</p> <p>Tips for Internet safety (appendix)</p> <p>Proper care of materials and equipment/following rules for responsible use of computer and other technology devices in student friendly language(I can statements) (appendix)</p>

**Technology Unit -**

**Rigorous Curriculum Design Template**

**Unit : Two/Technology Operations and Concepts**

**Subject:** Technology

**Grade/Course:** One

**Pacing:** 6 weeks with 1 week buffer

**Unit of Study:** Technology Operations and Concepts

**Priority Standards:** Students demonstrate a sound understanding of technology concepts, systems, and operations and use computers and other technologies for productivity, problem solving and learning across all content areas.

**Overview:** In this unit the students will demonstrate beginning skills in computer use and applications. They will begin to identify common icons for symbols such as folder, file and application. They will use the computer as a writing and drawing tool. Students will also demonstrate beginning keyboarding skills and develop an understanding of the internet.

**“Unwrapped” Standards**

<b>Concepts (What Students Need to Know)</b>	<b>Skills (What Students Need to Be Able to Do)</b>
A sound understanding of technology concepts, systems, and operations.  Computers and other technologies for productivity, problem solving and learning across all content areas.	Demonstrate (DOK-2)  Use (DOK-2)

**Essential Understandings**

Demonstrate beginning skills in using computers and applications such as:

- Turn a computer on and off.
- Log on and log off of a network.
- Access programs.
- Mouse use-point and click, drag and drop.
- Print documents with assistance.
- Open and close computer applications
- Save documents to proper location.
- Locate saved documents.

Open and close computer applications.

Identify and define terms associated with media and technology.

- Identify and explain common icons such as symbols for folder, file and application.

Word Processing

- Use the computer as a writing and drawing tool.
- Use a word processing application to write, edit, print and save a simple assignment.

**Multimedia**

- Demonstrate the ability to use tools in a painting or drawing software program.

**Demonstrate beginning keyboarding skills**

- Identify, locate and practice and use letters and numbers as well as common keys on the keyboard such as; space bar, shift, delete, and backspace.

Begin to use ergonomic techniques for proper keyboarding.

**Begin to demonstrate an understanding of the Internet**

- Use menus and icons to visit pre-selected websites.
- Begin to understand that the Internet links computers and allows people to access information and communicate.

**\*\*Sample lesson provided - See Appendix - C**

<b>Essential Questions</b>	<b>Big ideas</b>
How does technology help us in our everyday lives?	Correct use of technology helps us to live, learn and work.

<b>Assessments</b>		
<b>Common Formative Pre-Assessments</b>	<b>Progress Monitoring Checks – “Dipsticks”</b>	<b>Common Formative Mid and or Post-Assessments</b>
Create and share a project in a digital format with text and graphics. Rubric -See Appendix - B	Ongoing teacher observations. Is student able to: <ul style="list-style-type: none"><li>● manipulate the basic functions of the computer</li><li>● access web resources</li><li>● add text</li><li>● add image</li><li>● add title</li><li>● use color</li></ul>	Create and share a project in a digital format with text and graphics. Rubric - See Appendix - B

**Performance Task**

\*To be completed at a later date.

### Engaging Learning Experiences

<b>Instructional Strategies</b>	<b>Meeting the Needs of All Students</b>
<p data-bbox="292 1291 535 1333"><b><u>21st Century Skills</u></b></p> <ul data-bbox="113 1333 665 1648" style="list-style-type: none"><li>● Critical thinking and problem solving</li><li>● Collaboration and leadership</li><li>● Agility and adaptability</li><li>● Initiative and entrepreneurialism</li><li>● Effective oral and written communication</li><li>● Accessing and analyzing information</li><li>● Curiosity and imagination</li></ul> <p data-bbox="97 1701 747 1795"><b><u>Marzano's Nine Instructional Strategies for Effective Teaching and Learning</u></b></p> <p data-bbox="73 1806 698 1953"><b>1. Identifying Similarities and Differences:</b> helps students understand more complex problems by analyzing them in a simpler way</p>	<p data-bbox="925 1291 1347 1333"><b>Differentiated Instruction</b></p> <p data-bbox="787 1365 958 1396">Differentiate:</p> <ul data-bbox="836 1396 990 1512" style="list-style-type: none"><li>● content</li><li>● process</li><li>● product</li></ul> <p data-bbox="787 1543 998 1575">Base on Student:</p> <ul data-bbox="836 1575 1071 1690" style="list-style-type: none"><li>● readiness</li><li>● interests</li><li>● learning profile</li></ul> <p data-bbox="787 1722 909 1753">Through:</p> <ul data-bbox="836 1753 1234 1963" style="list-style-type: none"><li>● multiple intelligences</li><li>● jigsaw</li><li>● graphic organizers</li><li>● supplementary materials</li><li>● small group instruction</li><li>● varied questioning strategies</li></ul>

**2. Summarizing and Note-taking:** promotes comprehension because students have to analyze what is important and what is not important and put it in their own words

**3. Reinforcing Effort and Providing Recognition:** showing the connection between effort and achievement helps students helps them see the importance of effort and allows them to change their beliefs to emphasize it more. Note that recognition is more effective if it is contingent on achieving some specified standard.

**4. Homework and Practice:** provides opportunities to extend learning outside the classroom, but should be assigned based on relevant grade level. All homework should have a purpose and that purpose should be readily evident to the students. Additionally, feedback should be given for all homework assignments.

**5. Nonlinguistic Representations:** has recently been proven to stimulate and increase brain activity.

**6. Cooperative Learning:** has been proven to have a positive impact on overall learning. Note: groups should be small enough to be effective and the strategy should be used in a systematic and consistent manner.

**7. Setting Objectives and Providing Feedback:** provide students with a direction. Objectives should not be too specific and should be adaptable to students' individual objectives. There is no such thing as too much positive feedback, however, the method in which you give that feedback should be varied.

**8. Generating and Testing Hypotheses:** it's not just for science class! Research shows that a deductive approach works best, but both inductive and deductive reasoning can help students understand and relate to the material.

**9. Cues, Questions, and Advanced Organizers:** helps

- additional time
- reteaching
- manipulatives
- mentor/tutor
- pre-teaching
- use of visuals and realia
- ongoing comprehension checks
- co-teaching
- build on prior knowledge

<p>students use what they already know to enhance what they are about to learn. These are usually most effective when used before a specific lesson.</p>	
--	--

New Vocabulary	Students Achieving Below Standard	Students Achieving Above Standard
<p>desktop arrow keys delete edit chart application</p>	<p>The following provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are below grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used.</p> <p><b><u>Provide Multiple Means of Representation</u></b></p> <ul style="list-style-type: none"> <li>● Guide students as they select and practice using their own graphic organizers and models to solve.</li> <li>● Use direct instruction for vocabulary with visual or concrete representations.</li> <li>● Use explicit directions with steps and procedures enumerated.</li> <li>● Guide students through initial practice promoting gradual independence. “I do, we do, you do.”</li> <li>● Use alternative methods of delivery of instruction such as recordings and videos that can be accessed independently or repeated if necessary.</li> <li>● Scaffold complex concepts and provide leveled problems for</li> </ul>	<p>The following chart provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are above grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used. Provide Multiple Means of Representation Teach students how to ask questions (such as, “Do you agree?” and “Why do you think so?”) to extend “think-pair-share” conversations. Model and post conversation “starters,” such as: “I agree because...” “Can you explain how you solved it?” “I noticed that...” “Your solution is different from/ the same as mine because...” “My mistake was to...” Incorporate written reflection, evaluation, and synthesis. Allow creativity in expression and modeling solutions. Provide Multiple Means of Action and Expression Encourage students to explain their reasoning both orally and in writing. Offer choices of independent or group assignments for early finishers. Have students share their observations in discussion and writing (e.g., journaling). Facilitate research and exploration through discussion, experiments, internet searches, trips, etc. Let students choose their mode of response: written, oral, concrete, pictorial, or abstract. Increase the pace. Adjust difficulty level by increasing the number of steps (e.g., change a one-step problem to a two-</p>

multiple entry points.

**Provide Multiple Means of Action and Expression**

- Have students restate their learning for the day. Ask for a different representation in the restatement. 'Would you restate that answer in a different way or show me by using a diagram?'
- Encourage students to explain their thinking and strategy for the solution.
- Choose tasks that are "just right" for learners but teach the same concepts.

**Provide Multiple Means of Engagement**

- Clearly model steps, procedures, and questions to ask when solving.
- Cultivate peer-assisted learning interventions for instruction (e.g., dictation) and practice (e.g., peer modeling).
- Have students work together and then check their solutions.
- Teach students to ask themselves questions: Do I know the meaning of all the words?; What is being asked?; Do I have all of the information I need?; What do I do first?
- Practice routine to ensure smooth transitions.
  - Set goals with the students regarding next steps and what to focus on next.

step problem). Provide Multiple Means of Engagement Push student comprehension into higher levels of Bloom's Taxonomy with questions such as: "What would happen if...?" "Can you propose an alternative...?" "How would you evaluate...?" "What choice would you have made...?" Ask "Why?" and "What if?" questions. Accept and elicit student ideas and suggestions for ways to extend games. Cultivate student persistence in problem-solving and do not neglect their need for guidance and support.

**Website:**

[www.Kto8.com](http://www.Kto8.com)

[www.starfall.com](http://www.starfall.com)

[www.homeschooled-kids.com/mrpumpkinhead.html](http://www.homeschooled-kids.com/mrpumpkinhead.html)

[www.cubpack81.com/images/carve\\_pumpkin.swf](http://www.cubpack81.com/images/carve_pumpkin.swf)

**Programs:**

Microsoft Word

Tux Paint

Kidspiration

Kidpix

Media Blender

Type to Learn

## Technology Unit -

### Rigorous Curriculum Design Template

#### Unit : Three/Research and Information Fluency

**Subject:** Technology

**Grade/Course:** One

**Pacing:** 6 weeks with 1 week buffer

**Unit of Study:** Research and Information Fluency

**Priority Standards:** Students locate, access, evaluate, synthesize and use information effectively and efficiently to conduct research, solve problems and manage projects throughout all content areas.

**Overview:** In this unit the students will practice using a graphic organizer (KWL). They will visit preselected websites, use keyword searching to locate, organize and summarize information they find. Students will also use drawing/writing tools to record their information.

#### "Unwrapped" Standards

Concepts (What Students Need to Know)	Skills (What Students Need to Be Able to Do)
Information effectively and efficiently to conduct research, solve problems and manage projects throughout all content areas.	Locate (DOK-1) Access (DOK-1) Evaluate (DOK-3) Synthesize (DOK-4) Use (DOK-2)

**Essential Understandings**

- Through teacher modeling and whole group practice, determine existing knowledge and identify information needed with a graphic organizer (KWL).
- Use icons and links to visit pre-selected websites.
- Use keyword searching, with teacher assistance, to locate information.
- Organize information using webbing.
- Summarize information with assistance.
- Use drawing/writing to record information from a story the teacher reads aloud or an electronic or print illustration.
- Use a computer to draw illustrations conveying thoughts and ideas.

**\*\*Sample lesson provided - See Appendix - C**

<b>Essential Questions</b>	<b>Big ideas</b>
How can I use technology to learn?	I can use technology to find and use information.

<b>Assessments</b>		
Common Formative Pre-Assessments	Progress Monitoring Checks – “Dipsticks”	Common Formative Mid and or Post-Assessments Resources
KWL Chart connected to a Science /Social Studies topic. e.g. life cycle of a butterfly  Rubric - See Appendix - B	Ongoing Teacher Observations Student is able to: <ul style="list-style-type: none"> <li>● complete the first two columns of the KWL chart</li> <li>● research topic</li> <li>● gather information on topic</li> <li>● complete the last column on the KWL chart</li> </ul>	KWL Chart connected to a Science/Social Studies topic. e.g., life cycle of a butterfly  Rubric - See Appendix - B

**Performance Task/Engaging Scenario**

\*To be completed at a later date.

**Engaging Learning Experiences**

<b>Instructional Strategies</b>	<b>Meeting the Needs of All Students</b>
<p data-bbox="293 863 537 894"><u><b>21st Century Skills</b></u></p> <ul data-bbox="126 909 669 1209" style="list-style-type: none"><li>● Critical thinking and problem solving</li><li>● Collaboration and leadership</li><li>● Agility and adaptability</li><li>● Initiative and entrepreneurialism</li><li>● Effective oral and written communication</li><li>● Accessing and analyzing information</li><li>● Curiosity and imagination</li></ul> <p data-bbox="112 1268 747 1352"><u><b>Marzano's Nine Instructional Strategies for Effective Teaching and Learning</b></u></p> <p data-bbox="82 1377 768 1948"><b>1. Identifying Similarities and Differences:</b> helps students understand more complex problems by analyzing them in a simpler way</p> <p data-bbox="82 1541 768 1730"><b>2. Summarizing and Note-taking:</b> promotes comprehension because students have to analyze what is important and what is not important and put it in their own words</p> <p data-bbox="82 1755 768 1948"><b>3. Reinforcing Effort and Providing Recognition:</b> showing the connection between effort and achievement helps students helps them see the importance of effort and allows them to change their beliefs to emphasize it</p>	<p data-bbox="980 863 1295 894"><u><b>Differentiated Instruction</b></u></p> <p data-bbox="794 936 956 968">Differentiate:</p> <ul data-bbox="842 974 987 1073" style="list-style-type: none"><li>● content</li><li>● process</li><li>● product</li></ul> <p data-bbox="794 1115 997 1146">Base on Student:</p> <ul data-bbox="842 1152 1073 1251" style="list-style-type: none"><li>● readiness</li><li>● interests</li><li>● learning profile</li></ul> <p data-bbox="794 1293 906 1325">Through:</p> <ul data-bbox="842 1331 1268 1850" style="list-style-type: none"><li>● multiple intelligences</li><li>● jigsaw</li><li>● graphic organizers</li><li>● supplementary materials</li><li>● small group instruction</li><li>● varied questioning strategies</li><li>● additional time</li><li>● reteaching</li><li>● manipulatives</li><li>● mentor/tutor</li><li>● pre-teaching</li><li>● use of visuals and realia</li><li>● ongoing comprehension checks</li><li>● co-teaching</li><li>● build on prior knowledge</li></ul>

more. Note that recognition is more effective if it is contingent on achieving some specified standard.

**4. Homework and Practice:** provides opportunities to extend learning outside the classroom, but should be assigned based on relevant grade level. All homework should have a purpose and that purpose should be readily evident to the students. Additionally, feedback should be given for all homework assignments.

**5. Nonlinguistic Representations:** has recently been proven to stimulate and increase brain activity.

**6. Cooperative Learning:** has been proven to have a positive impact on overall learning. Note: groups should be small enough to be effective and the strategy should be used in a systematic and consistent manner.

**7. Setting Objectives and Providing Feedback:** provide students with a direction. Objectives should not be too specific and should be adaptable to students' individual objectives. There is no such thing as too much positive feedback, however, the method in which you give that feedback should be varied.

**8. Generating and Testing Hypotheses:** it's not just for science class! Research shows that a deductive approach works best, but both inductive and deductive reasoning can help students understand and relate to the material.

**9. Cues, Questions, and Advanced Organizers:** helps students use what they already know to enhance what they are about to learn. These are usually most effective when used before a specific lesson.

**New Vocabulary**

**Students Achieving Below Standard**

**Students Achieving Above Standard**

keyword  
research  
clipart  
copy  
electronic  
enter/return  
graphic  
save as  
ebooks

The following provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are below grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used.

**Provide Multiple Means of Representation**

- Guide students as they select and practice using their own graphic organizers and models to solve.
- Use direct instruction for vocabulary with visual or concrete representations.
- Use explicit directions with steps and procedures enumerated.
- Guide students through initial practice promoting gradual independence. "I do, we do, you do."
- Use alternative methods of delivery of instruction such as recordings and videos that can be accessed independently or repeated if necessary.
- Scaffold complex concepts and provide leveled problems for multiple entry points.

**Provide Multiple Means of Action and Expression**

- Have students restate their learning for the day. Ask for a different representation in the restatement. 'Would you restate that answer in a different way or show me by using a diagram?'

The following chart provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are above grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used. Provide Multiple Means of Representation Teach students how to ask questions (such as, "Do you agree?" and "Why do you think so?") to extend "think-pair-share" conversations. Model and post conversation "starters," such as: "I agree because..." "Can you explain how you solved it?" "I noticed that..." "Your solution is different from/ the same as mine because..." "My mistake was to..." Incorporate written reflection, evaluation, and synthesis. Allow creativity in expression and modeling solutions. Provide Multiple Means of Action and Expression Encourage students to explain their reasoning both orally and in writing. Offer choices of independent or group assignments for early finishers. Have students share their observations in discussion and writing (e.g., journaling). Facilitate research and exploration through discussion, experiments, internet searches, trips, etc. Let students choose their mode of response: written, oral, concrete, pictorial, or abstract. Increase the pace. Adjust difficulty level by increasing the number of steps (e.g., change a one-step problem to a two-step problem). Provide Multiple Means of Engagement Push student comprehension into higher levels of Bloom's Taxonomy with questions such as: "What would happen if...?" "Can you propose an alternative...?" "How would you evaluate...?" "What choice would you have made...?" Ask "Why?" and "What if?" questions. Accept and elicit student ideas and suggestions for ways to extend games. Cultivate student persistence in problem-solving and do not

	<ul style="list-style-type: none"> <li>● Encourage students to explain their thinking and strategy for the solution.</li> <li>● Choose tasks that are “just right” for learners but teach the same concepts.</li> </ul> <p><b><u>Provide Multiple Means of Engagement</u></b></p> <ul style="list-style-type: none"> <li>● Clearly model steps, procedures, and questions to ask when solving.</li> <li>● Cultivate peer-assisted learning interventions for instruction (e.g., dictation) and practice (e.g., peer modeling).</li> <li>● Have students work together and then check their solutions.</li> <li>● Teach students to ask themselves questions: Do I know the meaning of all the words?; What is being asked?; Do I have all of the information I need?; What do I do first?</li> <li>● Practice routine to ensure smooth transitions. <ul style="list-style-type: none"> <li>● Set goals with the students regarding next steps and what to focus on next.</li> </ul> </li> </ul>	neglect their need for guidance and support.
--	---	--

<b>Instructional Resources</b>
<p>KWL Chart  Pebblego website  National Geographic website  Publisher Program</p> <p>Books:  <u>A Butterfly’s Life</u> by Dona Rice  <u>From Caterpillar to Butterfly</u> by Deborah Helligman</p>

--

**Technology Unit -**

**Rigorous Curriculum Design Template**

**Unit : Four/Literature Appreciation and Independent Learning**

**Subject:** Technology

**Grade/Course:** One

**Pacing:** 7 weeks with 1 week buffer

**Unit of Study:** Literature Appreciation and Independent Learning

**Priority Standards:** Students read widely and use a variety of digital media resources for personal growth, independent learning and enjoyment.

**Overview:** In this unit students will develop appreciation and self-motivation as a reader. They will learn the difference between fiction and nonfiction, sense of story and parts of a book. Students will collaborate and share knowledge of information and literary sources. They will also determine and select materials appropriate to personal abilities and interests. Students will use the MyOn digital books program to enhance their reading.

**“Unwrapped” Standards**

<b>Concepts (What Students Need to Know)</b>	<b>Skills (What Students Need to Be Able to Do)</b>
A variety of digital media resources for personal growth, independent learning and enjoyment.	Read (DOK-1) Use (DOK-2)

## Essential Understandings

Develop appreciation and self-motivation as a reader.

- Participate in read-aloud, storytelling and booktalking, silent and voluntary reading experiences.
- Demonstrate active listening skills.
- Demonstrate sense of story (e.g., beginning, middle, end, characters, and details).
- Locate and identify the parts of a book including cover, spine label, title page, author/illustrator, table of contents, glossary and index.
- Understand the difference between an author and an illustrator.
- Use illustrations to acquire a greater understanding of a story.
- Differentiate between fiction and nonfiction.
- Identify award-winning books.

Collaborate and share knowledge of information and literary sources.

- Collaborate with others, both in person and through technologies, to share knowledge of literary sources, both print and non-print.
- Share books by favorite authors and illustrators.
- Compare print and non-print versions of a story and describe the differences.
- Use drawing/writing to record information from a story the teacher reads aloud or an electronic or print illustration.

Determine and select materials appropriate to personal abilities and interests.

- Understand and use the library as an information and pleasure reading source.
- Locate selected sources in appropriate areas of media center.
- Select resources for personal and informational purposes.
- Develop and communicate personal criteria for selecting resources for information needs and enjoyment.

Ethical and Responsible Use.

- Demonstrate ability to check out, return and care for library materials.
- Give examples of works of print and non-print media that are created by and belong to an author, illustrator or publisher.

Essential Questions	Big ideas
Why should I read?	Reading is an important skill for learning, growing, and enjoyment.

## Assessments

Common Formative Pre-Assessments	Progress Monitoring Checks – “Dipsticks”	Common Formative Mid and or Post-Assessments Resources
<p>Given two books on the same topic, the student will identify which is fiction and which is non-fiction and give reasons why.</p> <p>Rubric - See Appendix - B</p> <p>MyOn digital books</p>	<p>Ongoing Teacher Observations Student is able to:</p> <ul style="list-style-type: none"> <li>● identify fiction book</li> <li>● identify non-fiction book</li> <li>● give one or two reasons</li> <li>● give three or four reasons</li> <li>● give more than four reasons</li> </ul> <p>MyOn digital books</p>	<p>Given two books on the same topic, the student will identify which is fiction and which is non-fiction and give reasons why.</p> <p>Rubric - See Appendix - B</p> <p>MyOn digital books</p>

<b>Performance Task</b>	
*To be completed at a later date.	
<b>Engaging Learning Experiences</b>	

<b>Instructional Strategies</b>	<b>Meeting the Needs of All Students</b>
---------------------------------	--

### 21st Century Skills

- Critical thinking and problem solving
- Collaboration and leadership
- Agility and adaptability
- Initiative and entrepreneurialism
- Effective oral and written communication
- Accessing and analyzing information
- Curiosity and imagination

### Marzano's Nine Instructional Strategies for Effective

#### Teaching and Learning

- 1. Identifying Similarities and Differences:** helps students understand more complex problems by analyzing them in a simpler way
- 2. Summarizing and Note-taking:** promotes comprehension because students have to analyze what is important and what is not important and put it in their own words
- 3. Reinforcing Effort and Providing Recognition:** showing the connection between effort and achievement helps students help them see the importance of effort and allows them to change their beliefs to emphasize it more. Note that recognition is more effective if it is contingent on achieving some specified standard.
- 4. Homework and Practice:** provides opportunities to extend learning outside the classroom, but should be assigned based on relevant grade level. All homework should have a purpose and that purpose should be readily evident to the students. Additionally, feedback should be given for all homework assignments.
- 5. Nonlinguistic Representations:** has recently been proven to stimulate and increase brain activity.
- 6. Cooperative Learning:** has been proven to have a positive impact on overall learning. Note: groups should be small enough to be effective and the strategy should be used in a systematic and consistent

### **Differentiated Instruction**

#### Differentiate:

- content
- process
- product

#### Base on Student:

- readiness
- interests
- learning profile

#### Through:

- multiple intelligences
- jigsaw
- graphic organizers
- supplementary materials
- small group instruction
- varied questioning strategies
- additional time
- reteaching
- manipulatives
- mentor/tutor
- pre-teaching
- use of visuals and realia
- ongoing comprehension checks
- co-teaching
- build on prior knowledge

<p>manner.</p> <p><b>7. Setting Objectives and Providing Feedback:</b> provide students with a direction. Objectives should not be too specific and should be adaptable to students' individual objectives. There is no such thing as too much positive feedback, however, the method in which you give that feedback should be varied.</p> <p><b>8. Generating and Testing Hypotheses:</b> it's not just for science class! Research shows that a deductive approach works best, but both inductive and deductive reasoning can help students understand and relate to the material.</p> <p><b>9. Cues, Questions, and Advanced Organizers:</b> helps students use what they already know to enhance what they are about to learn. These are usually most effective when used before a specific lesson.</p>	
--	--

New Vocabulary	Students Achieving Below Standard	Students Achieving Above Standard
<p>glossary index digital media e-books</p>	<p>The following provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are below grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used.</p> <p><b><u>Provide Multiple Means of Representation</u></b></p> <ul style="list-style-type: none"> <li>● Guide students as they select and practice using their own graphic organizers and models to solve.</li> <li>● Use direct instruction for vocabulary with visual or</li> </ul>	<p>The following chart provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are above grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used. Provide Multiple Means of Representation Teach students how to ask questions (such as, "Do you agree?" and "Why do you think so?") to extend "think-pair-share" conversations. Model and post conversation "starters," such as: "I agree because..." "Can you explain how you solved it?" "I noticed that..." "Your solution is different from/ the same as mine because..." "My mistake was to..." Incorporate written reflection, evaluation, and synthesis. Allow creativity in expression and modeling solutions.</p>

concrete representations.

- Use explicit directions with steps and procedures enumerated.
- Guide students through initial practice promoting gradual independence. "I do, we do, you do."
- Use alternative methods of delivery of instruction such as recordings and videos that can be accessed independently or repeated if necessary.
- Scaffold complex concepts and provide leveled problems for multiple entry points.

**Provide Multiple Means of Action and Expression**

- Have students restate their learning for the day. Ask for a different representation in the restatement. 'Would you restate that answer in a different way or show me by using a diagram?'
- Encourage students to explain their thinking and strategy for the solution.
- Choose tasks that are "just right" for learners but teach the same concepts.

**Provide Multiple Means of Engagement**

- Clearly model steps, procedures, and questions to ask when solving.
- Cultivate peer-assisted learning interventions for instruction (e.g., dictation) and practice (e.g., peer modeling).
- Have students work together and then check their solutions.

Provide Multiple Means of Action and Expression Encourage students to explain their reasoning both orally and in writing. Offer choices of independent or group assignments for early finishers. Have students share their observations in discussion and writing (e.g., journaling). Facilitate research and exploration through discussion, experiments, internet searches, trips, etc. Let students choose their mode of response: written, oral, concrete, pictorial, or abstract. Increase the pace. Adjust difficulty level by increasing the number of steps (e.g., change a one-step problem to a two-step problem). Provide Multiple Means of Engagement Push student comprehension into higher levels of Bloom's Taxonomy with questions such as: "What would happen if...?" "Can you propose an alternative...?" "How would you evaluate...?" "What choice would you have made...?" Ask "Why?" and "What if?" questions. Accept and elicit student ideas and suggestions for ways to extend games. Cultivate student persistence in problem-solving and do not neglect their need for guidance and support.

- |  |   |  |
|--|---|--|
|  | <ul style="list-style-type: none"><li>● Teach students to ask themselves questions: Do I know the meaning of all the words?; What is being asked?; Do I have all of the information I need?; What do I do first?</li><li>● Practice routine to ensure smooth transitions.</li><li>● Set goals with the students regarding next steps and what to focus on next.</li></ul> |  |
|--|---|--|

Instructional Resources
<p>Books: <u>Owen</u> by Kevin Henkes (Characters) <u>Stellaluna</u> by Janell Canon (Plot) <u>When I Was Young In The Mountains</u> by Cynthia Rylant (Setting)</p> <p>Computer Program: MyOn</p> <p>Smartboard</p>

**Technology Unit -**

**Rigorous Curriculum Design Template**

**Unit : Five/Communication and Innovation**

**Subject:** Technology

**Grade/Course:** One

**Pacing:** 7 weeks with 1 week buffer

**Unit of Study:** Communication and Innovation

**Priority Standards:** Students interpret, evaluate, communicate and work collaboratively to create innovative products using digital and visual media.

**Overview:** In this unit students will illustrate and communicate original ideas and stories using digital tools and resources. They will work collaboratively to use a variety of technologies to produce a presentation for a curriculum area.

**“Unwrapped” Standards**

<b>Concepts (What Students Need to Know)</b>	<b>Skills (What Students Need to Be Able to Do)</b>
To create innovative products using digital and visual media.	Interpret (DOK-2) Evaluate (DOK-3) Communicate (DOK-1) Work Collaboratively (DOK-4)

**Essential Understandings**

Illustrate and communicate original ideas and stories using digital tools and resources.

In a collaborative group, use a variety of technologies to produce a presentation for a curriculum area.

<b>Essential Questions</b>	<b>Big ideas</b>
How can I communicate/express my ideas using technology?	The appropriate choice and creative use of media allows us to communicate effectively.

<b>Assessments</b>		
Common Formative Pre-Assessments	Progress Monitoring Checks – “Dipsticks”	Common Formative Mid and or Post-Assessments Resources
<p>Students will work collaboratively to complete a teacher created digital graphic organizer template for information they have gathered.</p> <p>Rubric - See Appendix - B</p>	<p>Ongoing Teacher Observations Is student able to:</p> <ul style="list-style-type: none"> <li>● participate with group</li> <li>● research topic</li> <li>● work in template</li> <li>● generate ideas</li> <li>● complete template</li> </ul>	<p>Students will work collaboratively to complete a teacher created digital graphic organizer template for information they have gathered.</p> <p>Rubric - See Appendix - B</p>

--	--	--

**Performance Task**

**\*See Appendix - A**

**Engaging Learning Experiences**

**Instructional Strategies**

**Meeting the Needs of All Students**

### 21st Century Skills

- Critical thinking and problem solving
- Collaboration and leadership
- Agility and adaptability
- Initiative and entrepreneurialism
- Effective oral and written communication
- Accessing and analyzing information
- Curiosity and imagination

### Marzano's Nine Instructional Strategies for Effective

#### Teaching and Learning

- 1. Identifying Similarities and Differences:** helps students understand more complex problems by analyzing them in a simpler way
- 2. Summarizing and Note-taking:** promotes comprehension because students have to analyze what is important and what is not important and put it in their own words
- 3. Reinforcing Effort and Providing Recognition:** showing the connection between effort and achievement helps students helps them see the importance of effort and allows them to change their beliefs to emphasize it more. Note that recognition is more effective if it is contingent on achieving some specified standard.
- 4. Homework and Practice:** provides opportunities to extend learning outside the classroom, but should be assigned based on relevant grade level. All homework should have a purpose and that purpose should be readily evident to the students. Additionally, feedback should be given for all homework assignments.
- 5. Nonlinguistic Representations:** has recently been proven to stimulate and increase brain activity.
- 6. Cooperative Learning:** has been proven to have a positive impact on overall learning. Note: groups should be small enough to be effective and the strategy should be used in a systematic and consistent

### **Differentiated Instruction**

#### Differentiate:

- content
- process
- product

#### Base on Student:

- readiness
- interests
- learning profile

#### Through:

- multiple intelligences
- jigsaw
- graphic organizers
- supplementary materials
- small group instruction
- varied questioning strategies
- additional time
- reteaching
- manipulatives
- mentor/tutor
- pre-teaching
- use of visuals and realia
- ongoing comprehension checks
- co-teaching
- build on prior knowledge

<p>manner.</p> <p><b>7. Setting Objectives and Providing Feedback:</b> provide students with a direction. Objectives should not be too specific and should be adaptable to students' individual objectives. There is no such thing as too much positive feedback, however, the method in which you give that feedback should be varied.</p> <p><b>8. Generating and Testing Hypotheses:</b> it's not just for science class! Research shows that a deductive approach works best, but both inductive and deductive reasoning can help students understand and relate to the material.</p> <p><b>9. Cues, Questions, and Advanced Organizers:</b> helps students use what they already know to enhance what they are about to learn. These are usually most effective when used before a specific lesson.</p>	
--	--

New Vocabulary	Students Achieving Below Standard	Students Achieving Above Standard
<p>template</p> <p>visual media</p> <p>animated clipart</p> <p>image</p> <p>multimedia</p>	<p>The following provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are below grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used.</p> <p><b><u>Provide Multiple Means of Representation</u></b></p> <ul style="list-style-type: none"> <li>● Guide students as they select and practice using their own graphic organizers and models to solve.</li> <li>● Use direct instruction for vocabulary with visual or concrete representations.</li> <li>● Use explicit directions with steps</li> </ul>	<p>The following chart provides a bank of suggestions within the Universal Design for Learning framework for accommodating students who are above grade level in your class. Variations on these accommodations are elaborated within lessons, demonstrating how and when they might be used. Provide Multiple Means of Representation Teach students how to ask questions (such as, "Do you agree?" and "Why do you think so?") to extend "think-pair-share" conversations. Model and post conversation "starters," such as: "I agree because..." "Can you explain how you solved it?" "I noticed that..." "Your solution is different from/ the same as mine because..." "My mistake was to..." Incorporate written reflection, evaluation, and synthesis. Allow creativity in expression and modeling solutions. Provide Multiple Means of Action and Expression Encourage students</p>

and procedures enumerated.

- Guide students through initial practice promoting gradual independence. "I do, we do, you do."
- Use alternative methods of delivery of instruction such as recordings and videos that can be accessed independently or repeated if necessary.
- Scaffold complex concepts and provide leveled problems for multiple entry points.

**Provide Multiple Means of Action and Expression**

- Have students restate their learning for the day. Ask for a different representation in the restatement. 'Would you restate that answer in a different way or show me by using a diagram?'
- Encourage students to explain their thinking and strategy for the solution.
- Choose tasks that are "just right" for learners but teach the same concepts.

**Provide Multiple Means of Engagement**

- Clearly model steps, procedures, and questions to ask when solving.
- Cultivate peer-assisted learning interventions for instruction (e.g., dictation) and practice (e.g., peer modeling).
- Have students work together and then check their solutions.
- Teach students to ask themselves questions: Do I know

to explain their reasoning both orally and in writing. Offer choices of independent or group assignments for early finishers. Have students share their observations in discussion and writing (e.g., journaling). Facilitate research and exploration through discussion, experiments, internet searches, trips, etc. Let students choose their mode of response: written, oral, concrete, pictorial, or abstract. Increase the pace. Adjust difficulty level by increasing the number of steps (e.g., change a one-step problem to a two-step problem). Provide Multiple Means of Engagement Push student comprehension into higher levels of Bloom's Taxonomy with questions such as: "What would happen if...?" "Can you propose an alternative...?" "How would you evaluate...?" "What choice would you have made...?" Ask "Why?" and "What if?" questions. Accept and elicit student ideas and suggestions for ways to extend games. Cultivate student persistence in problem-solving and do not neglect their need for guidance and support.

	<p>the meaning of all the words?;          What is being asked?; Do I have all of the information I need?;          What do I do first?</p> <ul style="list-style-type: none"> <li>● Practice routine to ensure smooth transitions.</li> <li>● Set goals with the students regarding next steps and what to focus on next.</li> </ul>	
--	---	--

<b>Instructional Resources</b>
<p>Programs:            Tux Paint            Kidspiration            Microsoft Word            Kidpix            Media Blender            Type to Learn</p> <p>Technology Resources: (e.g. logical thinking programs, writing tools, digital cameras, and drawing tools.) for problem solving, communication, and illustration of thoughts, ideas and stories.</p> <p>Books:            The Little Red Hen by Paul Galdone (collaboration)</p>

## Performance Assessment -

**This is the culmination of the study of basic life cycle concepts. Successful completion of this assessment will require students to:**

- **Access the world wide web**
- **Research the life cycles of a frog and a butterfly**
- **Complete a Venn Diagram analysis of the similarities and differences between these two life cycles**

Congratulations! You have just received your first research grant as a scientist at the highly prestigious, Black Rock Life Cycle Research Center! Your grant award requires you to decide the key similarities and differences between two animal life cycles. Your findings will lead to further investigations into the history and functions of species in the animal kingdom and, if successful, will almost certainly lead to a Nobel Prize in science. In order to complete the task you need to search resources on the World Wide Web so you can compare and contrast the life cycles of two animal families (amphibians and insects).

1. To begin you must log onto the internet and use the identified web pages so you can answer the following questions:
  - What is the life cycle of a butterfly (insect)?
  - What is the life cycle of a frog (amphibian)?

To answer these question, go to the Pebblego website, read and review what you see, and then fill in the appropriate spaces in the Research Grid.

2. Using your completed Research Grid, compare the information by filling in the Venn Diagram to demonstrate your excellent scientific skills. Be sure to use titles and labels.
3. Design a brochure using your findings. If you really want that Nobel Prize and all of the world wide attention that goes with it, you may want to use color and pictures to distinguish your work.
4. Write a report explaining your findings of your comparisons of the life cycle of the butterfly and the frog.

Check your work by reviewing the Student Assessment Sheet and then hand your two worksheets into your teacher.

Item	Self	Teacher
1. Does my Research Grid have all the boxes filled in with the correct information?		
2. Is my Research Grid neat and easy to read?		
3. Was I able to use the web sites and the computer in an independent and responsible manner?		
4. Does my Venn Diagram include all the necessary information?		
5. Is the information compared and contrasted correctly?		
6. Are my titles and labels correct?		
7. Is my Venn Diagram neat and easy to read?		
Total Score		

**Life Cycles in the Animal Kingdom**

**Research Grid Assessment Sheet**

Criteria	Insufficient - 0	Sufficient - 1	Proficient - 2	Exemplary - 3	Evidence/ Comment
<b>Necessary information is included.</b>	Chart includes little or no accurate information in many of the squares.	Chart includes some necessary and accurate information for each of the life cycles.	Chart includes all the necessary and accurate information about each animal life cycle.	Chart includes all the necessary information with extra data about each animal family.	
<b>Work is neat and easy to read.</b>	No work is attempted or work is impossible to read.	Work is readable, but messy.	Work is neat and easy to read.	Work is neat, easy to read and appealing to look at.	
	Numerous and distracting spelling or grammatical errors.	While there may be spelling or grammatical errors, it can be understood.	There are few spelling or grammar errors evident.	There are no spelling or grammar errors.	

<b>Use of Technology</b>	Unable or unwilling to use the Web resources designated for the research activity.	Although assistance may be needed, the student uses the internet to access enough of the resources to complete the research activity.	Without assistance is able to access all of the resources required on the internet within the time allotted.	Uses all of the provided internet resources and is able to find additional resources aligned with the topic.	
	Is unsure or unable to manipulate the computer for basic operations.	With some direction is able to manipulate the basic functions of the computer.	Independently manipulates the basic functions of the computer.	Independently manipulates advanced functions and helps others succeed.	

**Pass = at least a 1 in every column.**

***Life Cycles in the Animal Kingdom***

## Venn Diagram/Brochure/Report Rubric

Criteria	Insufficient - 0	Sufficient – 1	Proficient - 2	Exemplary - 3	Evidence/ Comment
<b>Necessary information is included.</b>	Includes little of the necessary information about two life cycles.	Includes most of the necessary information about two life cycles.	Includes all necessary information about two life cycles.	Includes information that goes beyond provided resources about two life cycles.	
<b>Information is compared and contrasted correctly.</b>	Little of the information is correctly placed to compare and contrast the life cycles.	Most of the information is correctly placed to compare and contrast the life cycles.	Information is correctly placed to compare and contrast the life cycles.	Extra information is correctly placed to compare and contrast the life cycles.	
<b>Titles and Labels are correct.</b>	Some of the titles or labels are correct, but major errors are present.	Most titles or labels are correct.	All titles and labels are correct.	All titles and labels are correct and shows extra effort and visual appeal.	
<b>Work is neat and easy to read.</b>	Work is difficult to read and messy.	Work is readable, but messy.	Work is neat.	Work is neat and easy to read.	

--	--	--	--	--	--

**Passing = At least a 1 in each column.**

**Performance Assessment from Middletown Public Schools**

**Assessments:**

**Unit One -**

<https://assessments.commonsensemedia.org/> (immediate feedback is provided)

**Rubric -**

No rubric needed.

**Unit Two -**

Create and share a project in a digital format with text and graphics.

**Rubric -**

<b>4</b> Exceeds Expectations on Grade Level Standards	Text or image includes additional descriptive words or formatting such as color, shapes or titles.
<b>3</b> Meets Expectations on Grade Level Standards	Image and Text included and related to topic.
<b>2</b> Partially Meets Expectations on Grade Level Standards	Image and text included but not related to topic.
<b>1</b> Does Not Meet Expectations on Grade Level Standards	Either image or text missing.

**Unit Three -**

Complete a KWL chart on a topic they have learned.

**Rubric -**

	<b>Below Standard (2pts)</b>	<b>Proficient (3pts)</b>	<b>Exemplary (5pts)</b>
--	------------------------------	--------------------------	-------------------------

Quantity	Student does not complete all three columns.	Student completes all three columns, but only lists a few ideas in each.	Student completes all three columns with several ideas in each.
Reading	Student never or rarely refers to the topic in the what I learned column.	Student refers to details on the topic in the what I learned column.	Student refers to details and main ideas on the topic in the what I learned column.
Reflection	Student does not list what they know about the topic and does not demonstrate how they would could continue learning.	Student refers to own knowledge but does not demonstrate how they could continue learning.	Student refers to own experiences/knowledge, makes it personally meaningful, and shows reflective thinking in how they could continue.
Critical Thinking	Student's ideas are short and shallow.	Student's ideas show evidence of critical thinking.	Student's comments are in depth and show evidence of critical thinking.

**Unit Four -**

Given two books on the same topic, the student will identify which is fiction and which is non-fiction and explain why.

Rubric -

<b>4</b> Exceeds Expectations on Grade Level Standards	Student is able to give more than 4 reasons.
<b>3</b> Meets Expectations on Grade Level Standards	Student is able to give 3 - 4 reasons.
<b>2</b> Partially Meets Expectations on Grade Level Standards	Student is able to give 1 - 2 reasons.
<b>1</b> Does Not Meet Expectations on Grade Level Standards	Student is unable to give any reasons.

**Unit Five -** Working collaboratively students will complete a teacher created digital graphic organizer for the information they have gathered.

**Rubric -**

**GRAPHIC ORGANIZER RUBRIC**

Criteria	4 Exceeding	3 meeting	2	1
Organization	Extremely well organized.  Order & structure of information is compelling and flows smoothly	Organized. Structure allows reader to move through content without confusion. Flows smoothly	Somewhat organized structure allows reader to move through some of the content without confusion. Flow is sometimes interrupted.	Poorly organized. A clear sense of direction is not evident. Flow is frequently interrupted.
Content	Thorough and insightful understanding of content	Complete understanding of content	Shows some understanding of content	Shows incomplete understanding of material
Creativity	Enthusiastically uses materials and ideas for enhancement	Use of materials and ideas for enhancement	Shows some use of materials and ideas	Shows minimal effort for enhancement of materials and ideas
Ideas	Insightful and well considered ideas making multiple connections	Ideas are considered; more than one thoughtful connection is made	Ideas are somewhat on topic; makes some connections	Ideas are unclear few connections

Appendix - C

Sample Lessons:

## Lesson 1 - Using the mouse

### Objective:

Students will practice using the mouse while creating their own pumpkin.

### Resources:

<http://www.starfall.com/n/holiday/halloween/play.htm?f>

\*Or you can go to [www.starfall.com](http://www.starfall.com) and click on the pumpkin on the right.

<http://www.homeschooled-kids.com/mrpumpkinhead.html>

[http://www.cubpack81.com/images/carve\\_pumpkin.swf](http://www.cubpack81.com/images/carve_pumpkin.swf)

### Procedure:

1. Have each child go to [www.starfall.com](http://www.starfall.com).
2. Instruct them to click on the pumpkin on the right side of the page.
3. Students will then practice using the mouse while creating their own pumpkin (picking their pumpkin, eyes, nose, mouth).
4. When students have completed a few pumpkins, they may wish to try another site which practices clicking on the objects and dragging them to the pumpkin face: <http://www.homeschooled-kids.com/mrpumpkinhead.html>
5. Students can also practice carving a pumpkin which glows when complete: [http://www.cubpack81.com/images/carve\\_pumpkin.swf](http://www.cubpack81.com/images/carve_pumpkin.swf)

## Lesson 2- Publisher and "All About Me"

Objective: Students will use Publisher to write about themselves and their favorite things in first grade.

### Resources:

Publisher Program

Template created in program

### Preparation:

Have the above lesson open on each child's computer.

Procedure:

1. Begin by talking with students on how they feel about their year so far in first grade. (What is their favorite thing to do at school, what they have learned, what friend have they made, etc.)
2. Show students the template and model for students how to fill in with your favorite things.
3. Allow students time to complete the template.
4. Let children share out their completed work.

Lesson 3 - PowerPoint

Objective

Students will use basic features of Microsoft PowerPoint while giving a book report.

Resources:

PowerPoint

Procedure:

1. Students will be using PowerPoint to create a book report from a recent book they read.
2. Open a blank PowerPoint.
3. Show students how to type in a slide (by typing a title). This can be the title of their book. The subtitle can be their name.
4. Demonstrate how to add a new slide by Insert New Slide or clicking on the button. This slide can be a three sentence (beginning, middle, end) summary about their book.
5. Have students add a new slide and add a picture that represents something from their book (character, setting, etc.)---Insert>Picture>Clipart

\*\*More advanced students can change the fonts and slide design (appearance) of their PowerPoint.

***Source: This whole lesson idea and activity was taken from Netsmartz.org. The wording was somewhat adapted but the idea and directions were taken directly from Netsmartz.org.***

### Tips for Internet Safety

- € Never give out personal information (name, address, school name, telephone number).



⊘ Never write to someone who has made you uncomfortable or sad.

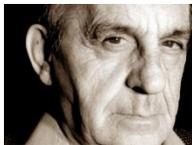


⊘ Do not meet someone you met online or have them visit you.

⊘ Tell your parents or teacher if you read anything that makes you uncomfortable.



⊘ Remember that people are not always who they say they are online.



**"I can be a good Digital Citizen"**

I can follow the rules posted.

I can follow the directions of the adult in charge.

I can be respectful towards others.

I can respect the equipment and area.

I can use the Internet at school, but only for school work and only with my teacher's permission.

I can only go to sites on the Internet that are approved by my teacher.

I can only play games on the Internet that are educational and approved by my teacher.

I can turn off my monitor and tell my teacher immediately if I see something on my computer that is not appropriate.

I can open, edit and save my files on the district server, but not files belonging to others.

I can follow the rules of copyright that I have been taught at school.

I can only print or download with my teacher's permission.

I cannot share my personal information with anyone through the Internet.

**Pacing Guide  
Technology  
Priority Standards K-3**

Standard 1: Digital Citizenship

- Students practice responsible, legal, safe and ethical use of information resources and technology.

Standard 2: Technology Operations and Concepts

- Students demonstrate a sound understanding of technology concepts, systems, and operations and use computers and other technologies for productivity, problem solving and learning across all content areas.

Standard 3: Research and Information fluency

- Students locate, access, evaluate, synthesize and use information effectively and efficiently to conduct research, solve problems and manage projects throughout all content areas.

Standard 4: Literature Appreciation and Independent Learning

- Students read widely and use a variety of digital media resources for personal growth, independent learning and enjoyment

Standard 5: Communication and Innovation

- Students interpret, evaluate, communicate and work collaboratively to create innovative products using digital and visual media.

Prioritized Standards/Pacing Guide:

Standard 1 Digital Citizenship: 4 weeks

Standard 2 Technology Operations and Concepts 6 weeks with 1 week buffer

Standard 3 Research and Information Fluency 6 weeks with 1 week buffer

Standard 4 Literature Appreciation and Independent Learning 7 weeks with 1 week buffer

Standard 5 Communication and Innovation 7 weeks with 1 week buffer