

SUMMARY & OBJECTIVES	LEARNING ACTIVITIES (selected)	ASSESSMENTS	CURRICULUM STANDARDS			
			National Core Arts Standards & NAfME (PreK-8)	National Curriculum Standards for Social Studies (Early Grades)	Common Core Standards (K-5) & Next Generation Science Standards (K-5)	Social and Emotional Learning Competencies (SEL)
<p>SUMMARY</p> <p>At the start of Unit I, students will learn how Ragnar first discovered that he could make lip-blown sounds and comprehend the possible impact of these sounds on hearers. Students will consider other prehistoric sounds and objects that might have been used for sound production, and produce lip-blown sounds of their own. They will also explore the question, "who was the first trumpeter?"</p> <p>Key Word:</p> <ul style="list-style-type: none"> Resonate <hr/> <p>OBJECTIVES</p> <p>Students will:</p> <ul style="list-style-type: none"> Learn about possible methods and examples of sound production in prehistoric times Understand the nature of lip-blown instruments—their characteristics and how they work Identify naturally occurring objects which might have been used for sound production Produce sounds using a variety of lip-blown objects Contemplate the impact of lip-blown sounds on hearers (both animal and human) in prehistoric times Consider other possible uses for lip-blown instruments across the globe 	<p>Students should read, or listen online (www.hearragnar.com), to UNIT I: The First Trumpeter and answer the following question:</p> <p>Q. What kinds of sounds did prehistoric people hear in daily life? A. Sounds of nature such as birds and animals, wind, rain, thunder, insects, etc.</p> <p>Now, ask students to imagine a place where they could only hear the sounds of nature. Draw attention to the absence of modern sounds such as the hum of electricity, machines, ring tones, televisions, cars and sirens.</p> <p>Act out for the students Ragnar's interaction with a bone trumpet or other simple trumpet using these sounds, eventually making the bone resonate with lip vibration. Point out that this sound would have been very different from the sounds prehistoric people heard in nature.</p> <p>Ask for volunteers to play a bone trumpet or something similar and be sure to clean it between each use. Explain that unlike the sound of the voice, which can go up and down, the bone can only play one note, and students will need to create exactly the right vibration with the lips to make it happen.</p> <p>Now, compare the problems that Ragnar had in getting the bone to resonate twice in a row to learning how to play a musical instrument in general: it often takes many attempts—and trying many different ways—to make the sound happen consistently. Musicians develop their skills through experimentation and repetition.</p>	<p>FORMATIVE</p> <p>Knowledge: Student Short-Answer Quiz</p> <ol style="list-style-type: none"> What is a lip-blown instrument and how do you make a sound on it? What types of materials can lip-blown instruments be made of? How do you make different notes on a lip-blown instrument? Name some lip-blown instruments that are used in bands and orchestras today. Name some lip-blown instruments that were used by people from the past (2000+ years ago) What do you think people from the past used lip-blown instruments for? 	<p>MUSIC</p> <p>Connecting: Anchor Standard #1 I Relate musical (artistic) ideas and works with varied context to deepen understanding.</p> <p>Enduring Understanding Understanding connections to varied contexts and daily life enhances musicians' creating, performing, and responding.</p> <p>Essential Question How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music? See <i>MU:Cn1 I.0.2a</i></p> <p>Demonstrate understanding of relationships between music, and other arts, other disciplines, varied contexts and daily life.</p> <p>See also: <i>MU:Cn1 I.0.3a</i> <i>MU:Cn1 I.0.4a</i> <i>MU:Cn1 I.0.5a</i></p> <hr/> <p>VISUAL ARTS</p> <p>Creating: Anchor Standard #1 Generate and conceptualize artistic ideas and work.</p> <p>Enduring Understanding Creativity and innovative thinking are essential life skills that can be developed.</p> <p>Essential Question(s) What conditions, attitudes, and behaviors support creative and innovative thinking? What factors prevent or encourage people to take creative risks? How does collaboration expand the creative process?</p>	<p>TIME, CONTINUITY, AND CHANGE #2 Through the study of the past and its legacy, learners examine the institutions, values, and beliefs of people in the past, acquire skills in historical inquiry and interpretation, and gain an understanding of how important historical events and developments have shaped the modern world.</p> <p>Questions for Exploration: What questions are important to ask about the past? What happened in the past? How do we know about the past? How was life in the past similar to and different from life today?</p> <p>Knowledge: The learners will understand: The study of the past is the story of communities, nations, and the world; Key concepts such as: past, present, future, similarity, difference, and change; That historical events occurred in times that differed from our own, but often have lasting consequences for the present and future.</p> <p>Processes: Learners will be able to:</p> <ul style="list-style-type: none"> Use a variety of sources to learn about the past; Describe how people in the past lived, and research their values and beliefs; <p>Products: Learners demonstrate understanding by: Constructing timelines that indicate an understanding of a sequence of events; Writing stories and descriptions about life in the past.</p> <p>See also "People, Places, and Environments" #3 and "Culture" #1</p>	<p>ENGLISH LANGUAGE ARTS (grade 4) Reading: Literature & Informational Text 4.1-3 – Key Ideas and Details; 4.4-6 – Craft and Structure; 4.7-9 – Integration of Knowledge and Ideas</p> <p>Reading: Foundational Skills 4.3a – Phonetics and Word Recognition; 4.4 (a) (b) (c) – Fluency.</p> <p>Language 4.3 - Knowledge of Language; 4.4 - Vocabulary Acquisition and Use</p> <p>Speaking & Listening 4.1 - Comprehension and Collaboration; 4.4 - Presentation of Knowledge and Ideas</p> <p>Writing 4.3 - Text Types and Purposes</p> <hr/> <p>MATH N/A</p> <hr/> <p>SCIENCE (grades K-4) Earth and Human Activity ESS3-1 - Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.</p> <p>Waves and Their Applications in Technologies for Information Transfer PS4-1 - Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. PS4-4 - Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.</p>	<p>Self-Awareness The ability to accurately recognize one's own emotions, thoughts, and values and how they influence behavior. The ability to accurately access one's strengths and limitations, with a well grounded sense of confidence, optimism, and a "growth mindset."</p> <p><i>Students will be able to...identify their interests and strengths, and build on those.</i></p> <p>Social Awareness The ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures. The ability to understand social and ethical norms for behavior and to recognize family, school, and community resources and supports.</p> <p><i>Students will be able to...put themselves in another's shoes, see the other person's point of view, and understand the other person's thoughts and feelings and why they might feel that way.</i></p> <p>Self-Management The ability to successfully regulate one's emotions, thoughts, and behaviors in difficult situations—effectively managing stress, controlling impulses, and motivating oneself. The ability to set and work toward personal and academic goals.</p> <p><i>Students will be able to...motivate oneself. Students will be able to monitor and sustain progress toward goal achievement, using motivational strategies and celebrating success.</i></p>

CHAPTER I HOW TO PLAY A BISON HORN

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			National Core Arts Standards & NAfME (PreK-8)	National Curriculum Standards for Social Studies (Early Grades)	Common Core Standards (K-5) & Next Generation Science Standards (K-5)	Social and Emotional Learning Competencies (SEL)
<p>SUMMARY</p> <p>In Chapter I, students will find out how Ragnar turns a broken bison horn into a lip-blown instrument that amplifies sound due to its shape. Students will learn the role that posture, embouchure formation, and breathing play in sound production.</p> <p>Key Words:</p> <ul style="list-style-type: none"> • Aperture • Embouchure • Inhale • Posture <hr/> <p>OBJECTIVES</p> <p>Students will:</p> <ul style="list-style-type: none"> • Understand how tubes of different lengths create higher and lower sounds • Learn how a conical shape amplifies sound • Experience how correct posture facilitates efficient use of the respiratory system • Identify the characteristics of embouchure • Perform the sequence of events necessary for sound production • Learn about safety & hygiene issues related to playing lip-blown instruments 	<p>Ask students to read, or listen online to Chapter I: How to Play a Bison Horn. Demonstrate lip vibration into tubes of different lengths, and discuss why shorter ones sound higher than longer ones.</p> <p>Now ask students why they think the bison horn sound was so much louder than the bone trumpet. Explain that the shape of the horn, gradually expanding throughout its length, helps the sound to travel more efficiently, making it sound louder than the bone trumpet.</p> <p>Ask students to read Reality Check! and explain that in order to become good at playing, they will need to experiment with things like posture, embouchure, and breathing to learn what works best for them.</p> <p>Complete the Learning Activities associated with How to Make a Sound!, including: Get Ready: Check Your Posture, Get Set: Check Your Embouchure, and Play! Count, Breathe, and Blow!</p> <p>Discuss Practice Tips!, especially the importance of finding a "practice cave" to help reduce distractions.</p>	<p>FORMATIVE</p> <p>Skills: Unit I Assessment Rubric</p> <p>Posture</p> <p>Embouchure</p> <p>Breathing</p> <p>Sound Production</p> <p>Articulation</p> <p>Harmonic Series</p> <p>Pitch Accuracy</p> <p>Music Making</p>	<p>MUSIC</p> <p>Creating Anchor Standard #1 Generate musical ideas for various purposes and contexts.</p> <p>Enduring Understanding The creative ideas, concepts, and feelings that influence musicians' work emerge from a variety of sources.</p> <p>Essential Question How do musicians generate creative ideas? See <i>MU:CrI.1.2a-5a</i></p> <p>Rehearse, Evaluate, Refine Anchor Standard #5 Evaluate and refine personal... performances, individually or in collaboration with others.</p> <p>Enduring Understanding To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criterion.</p> <p>Essential Question How do musicians improve the quality of their performance? See <i>MU:Pr5.1.2b-5b</i></p> <p>Connecting Anchor Standard #1 I Relate musical ideas...with varied context to deepen understanding.</p> <p>Enduring Understanding Understanding connections to varied contexts and daily life enhances musicians' creating...</p> <p>Essential Question How do...other contexts, and daily life inform creating and performing, and responding to music? See: <i>MU:ChI.1.0.2a-5a</i></p> <hr/> <p>VISUAL ARTS N/A</p>	<p>TIME, CONTINUITY, AND CHANGE #2 Through the study of the past and its legacy, learners examine the institutions, values, and beliefs of people in the past, acquire skills in historical inquiry and interpretation, and gain an understanding of how important historical events and developments have shaped the modern world.</p> <p>Questions for Exploration: What questions are important to ask about the past? What happened in the past? How do we know about the past? How was life in the past similar to and different from life today?</p> <p>Knowledge: The learners will understand: The study of the past is the story of communities, nations, and the world; Key concepts such as: past, present, future, similarity, difference, and change; That historical events occurred in times that differed from our own, but often have lasting consequences for the present and future.</p> <p>Processes: Learners will be able to:</p> <ul style="list-style-type: none"> • Use a variety of sources to learn about the past; • Describe how people in the past lived, and research their values and beliefs; <p>Products: Learners demonstrate understanding by: Constructing timelines that indicate an understanding of a sequence of events; Writing stories and descriptions about life in the past.</p> <p>See also: "People, Places, and Environments" #3 and "Culture" #1</p>	<p>ENGLISH LANGUAGE ARTS (grade 4) Reading: Literature & Informational Text 4.1-3 – Key Ideas and Details; 4.4-6 – Craft and Structure; 4.7-9 – Integration of Knowledge and Ideas</p> <p>Reading: Foundational Skills 4.3a – Phonetics and Word Recognition; 4.4 (a) (b) (c) – Fluency.</p> <p>Language 4.3 - Knowledge of Language; 4.4 - Vocabulary Acquisition and Use</p> <p>Speaking & Listening 4.1 - Comprehension and Collaboration; 4.4. - Presentation of Knowledge and Ideas</p> <p>Writing 4.3 - Text Types and Purposes</p> <hr/> <p>MATH N/A</p> <hr/> <p>SCIENCE (grades K-2) Waves and Their Applications in Technologies for Information Transfer PS4-1 - Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. PS4-4 - Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.</p>	<p>Self-Awareness The ability to accurately recognize one's own emotions, thoughts, and values and how they influence behavior. The ability to accurately access one's strengths and limitations, with a well grounded sense of confidence, optimism, and a "growth mindset."</p> <p><i>Students will be able to... identify their interests and strengths, and build on those. Demonstrate interest in trying new things.</i></p> <p>Responsible Decision-Making The ability to make constructive choices about personal behavior and social interactions based on ethical standards, safety concerns, and social norms. The realistic evaluation of consequences of various actions, and a consideration of the well-being of oneself and others.</p> <p><i>Consider ethical standards, safety concerns, and social norms as they impact decision-making.</i></p>

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<p>SUMMARY</p> <p>In Chapter 2, students will learn about Ragnar’s newly found uses for his bison horn and why it became necessary for him to practice the technical aspects of playing as well as the calls and signals themselves in order to provide a reliable form of communication. Students will also learn about the caves where Paleolithic people lived and the role that art and sound probably played in them. This leads to the introduction of the “Practice Cave” pages in each chapter, where students learn how to play, either by listening to their teacher or by using online resources.</p> <p>Key Words:</p> <ul style="list-style-type: none"> • Articulation • Improvise • Pitch <hr/> <p>OBJECTIVES</p> <p>Students will:</p> <ul style="list-style-type: none"> • Understand the importance of regular practice with repetition • Draw connections between making a space resonate and making a horn resonate by buzzing their lips • Explore other ways that caves might have been used as a part of prehistoric sound production • Identify places suitable for their own practice • Practice long note and articulation exercises, improvisations, and assigned pieces 	<p>Ask students to read, or listen online to Chapter 2: Practice, Practice, Practice! Discuss key words articulation and improvise as they relate to Ragnar practicing in his practice cave.</p> <p>Ask students to improvise a signal to warn people of danger and use the learning activities to illustrate why it was important for Ragnar to practice until he could play his signals the same way every time. Explain that it is also important to practice basic skills such as long notes and articulation in order to become proficient at a lip-blown instrument in just the same way that basic skills need to be practiced in various sports.</p> <p>Review key words resonate and pitch and read Reality Check! and Did you Know? Ask students to vocalize until they hear a strong resonance or an echo in various spaces, and relate to the way in which a pitch can resonate in a simple tube, horn, or trumpet.</p> <p>Introduce students to the elements of the Practice Cave and show them how to locate corresponding For Music Readers pages that provide the music in notation. Show students how to access online resources at practicecave.com, and then complete the Learning Activities associated with Long Note Exercises, Articulation Exercises, Improvise, and Play Along pieces.</p> <p>Refer back regularly to How to Make a Sound (TE p. 28–29) and review Get Ready (Posture), Get Set, (Embouchure) and Play! (Count Breathe, and Blow!) to help students establish healthy playing habits.</p>	<p>FORMATIVE</p> <p>Skills: Unit 1 Assessment Rubric</p> <p>Posture</p> <p>Embouchure</p> <p>Breathing</p> <p>Sound Production</p> <p>Articulation</p> <p>Harmonic Series</p> <p>Pitch Accuracy</p> <p>Music Making</p>	<p>MUSIC</p> <p>Creating Anchor Standard #1 Generate musical ideas for various purposes and contexts.</p> <p>Enduring Understanding The creative ideas, concepts, and feelings that influence musicians’ work emerge from a variety of sources.</p> <p>Essential Question How do musicians generate creative ideas? See <i>MU:Cr.1.1.2a-5a</i></p> <p>Rehearse, Evaluate, Refine Anchor Standard #5 Evaluate and refine personal... performances, individually or in collaboration with others.</p> <p>Enduring Understanding To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criterion.</p> <p>Essential Question How do musicians improve the quality of their performance? See <i>MU:Pr.5.1.2b-5b</i></p> <hr/> <p>VISUAL ARTS</p> <p>Connecting Anchor Standard #1 I Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding.</p> <p>Enduring Understanding People develop ideas and understandings or society, culture, and history through their interactions with and analysis of art.</p> <p>Essential Question(s) How does art help us understand the lives of people of different times, places, and cultures?</p>	<p>TIME, CONTINUITY, AND CHANGE #2 Through the study of the past and its legacy, learners examine institutions, values, and beliefs</p> <p>Questions for Exploration: What questions are important to ask about the past? What happened in the past? How do we know about the past? How was life in the past similar to and different from life today?</p> <p>Knowledge: The Learners will understand: The study of the past is the story of communities, nations, and the world; Concepts such as: past, present, future, similarity, difference, and change; That historical events occurred in times that differed from our own, but have lasting consequences for the present and future</p> <p>Processes: Learners will be able to:</p> <ul style="list-style-type: none"> • Use a variety of sources to learn about the past; • Describe how people in the past lived, and research their values and beliefs; <p>Products: Learners demonstrate understanding by: presenting findings in oral, written, visual or electronic formats</p> <p>See also: “People, Places, and Environments” #3 and “Culture” #1</p>	<p>ENGLISH LANGUAGE ARTS (grade 4) Reading: Literature & Informational Text 4.1-3 – Key Ideas and Details; 4.4-6 – Craft and Structure; 4.7-9 – Integration of Knowledge and Ideas</p> <p>Reading: Foundational Skills 4.3a – Phonetics and Word Recognition; 4.4 (a) (b) (c) – Fluency.</p> <p>Language 4.3 – Knowledge of Language; 4.4 – Vocabulary Acquisition and Use</p> <p>Speaking & Listening 4.1 – Comprehension and Collaboration; 4.4. – Presentation of Knowledge and Ideas</p> <p>Writing 4.3 – Text Types and Purposes</p> <hr/> <p>MATH N/A</p> <hr/> <p>SCIENCE (grades K-2) Waves and Their Applications in Technologies for Information Transfer PS4-1 – Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. PS4-4 – Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.</p>	<p>Self-Awareness The ability to accurately recognize one’s own emotions, thoughts, and values and how they influence behavior. The ability to accurately access one’s strengths and limitations, with a well grounded sense of confidence, optimism, and a “growth mindset.”</p> <p><i>Students will be able to... identify their interests and strengths, and build on those. Demonstrate interest in trying new things.</i></p> <p>Relationship Skills The ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups. The ability to communicate clearly, listen well, cooperate with others, resist inappropriate social pressure, negotiate conflict constructively, and seek and offer help when needed.</p> <p><i>Students will be able to... give and receive constructive feedback. Contribute to the achievement of group goals.</i></p>

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<p>SUMMARY</p> <p>In Chapter 3, students will learn about the use of early musical instruments for hunting and think about possible origins of rhythmic and melodic music. They will discuss the ability of lip-blown instruments of increasing length to play more notes (overtones) and learn about the harmonic series of the natural trumpet. As students begin to experiment with variables associated with navigating the harmonic series, they will learn how to articulate in both a detached and connected (staccato and legato) manner, enabling them to play song-like and march-like music.</p> <p>Key Words:</p> <ul style="list-style-type: none"> • Melodic • Rhythmic <hr/> <p>OBJECTIVES</p> <p>Students will:</p> <ul style="list-style-type: none"> • Understand why Ragnar’s bison horn was important to the well-being of his group • Learn how to play loudly • Consider how and why the stick trumpet could play two notes • Experiment with the variables associated with moving between notes of the harmonic series • Contemplate the origins of rhythmic and melodic music • Learn how to play (articulate) in a march-like and song-like manner 	<p>After reading or listening online to Chapter 3: Stumbling on H2, ask students how Ragnar’s horn made the bison stampe. Then demonstrate making a loud sound and ask students to repeat. Ask students if their sound loud enough to frighten a herd of bison and discuss other musical instruments that have their origins in hunting.</p> <p>Discuss the key word rhythmic as it relates to Ragnar’s story. Ask students to imagine carrying a heavy load through a forest playing their trumpets. Use this activity to help prepare students to improvise music for marching home.</p> <p>Discuss the fact that the stick trumpet could play two notes and have students look over What’s a Natural Trumpet? and It’s All Greek to Me!, pointing out that longer trumpets play more notes.</p> <p>Discuss the key word melodic as it relates to Ragnar’s story, and discuss how melodic music is different from marching music.</p> <p>Go over variables associated with navigating the harmonic series and let students try each one in classtime.</p> <p>Complete activities under Practice Cave including: Long Note, Harmonic Note, and Articulation Exercises, as well as Improvise and Play Along pieces as indicated.</p> <p>Use online Listen & Play sound files in the classroom to help students learn how to use them at home.</p>	<p>SUMMATIVE</p> <p>Skills: Unit 1 Assessment Rubric</p> <p>Posture</p> <p>Embouchure</p> <p>Breathing</p> <p>Sound Production</p> <p>Articulation</p> <p>Harmonic Series</p> <p>Pitch Accuracy</p> <p>Music Making</p> <p>Skills: UNIT 1 Student Self-Evaluation</p> <p>Long Note Exercises</p> <p>Articulation Exercises</p> <p>Harmonic Note Exercises</p> <p>Make Music!</p>	<p>MUSIC</p> <p>Creating Anchor Standard #1 Generate musical ideas for various purposes and contexts.</p> <p>Enduring Understanding The creative ideas, concepts, and feelings that influence musicians’ work emerge from a variety of sources.</p> <p>Essential Question How do musicians generate creative ideas? See <i>MU:Cr.1.1.2a-5a</i></p> <p>Creating Anchor Standard #2 Organize and develop artistic ideas and work.</p> <p>Enduring Understanding Musicians’ creative choices are influenced by their expertise, context, and expressive intent.</p> <p>Essential Question How do musicians make creative decisions? See <i>MU:Cr.2.1.2a-4a</i></p> <hr/> <p>VISUAL ARTS</p> <p>Creating: Anchor Standard #1 Generate and conceptualize artistic ideas and work.</p> <p>Enduring Understanding Creativity and innovative thinking are essential life skills that can be developed.</p> <p>Essential Question(s) What conditions, attitudes, and behaviors support creative and innovative thinking? What factors prevent or encourage people to take creative risks? How does collaboration expand the creative process?</p>	<p>PEOPLE, PLACES, AND ENVIRONMENTS</p> <p>This theme helps learners to develop their spatial views and perspectives of the world, and to understand the relationships between people, places, and environments. Learners examine where people, places, and resources are located, why they are there, and why this matters. They explore the effects of the environment on human activities, and the impact of these activities on the environment. This area of study is crucial to informed civic decision-making about human-environmental relationships.</p> <p>Questions for Exploration: Why do people move? What are the physical and human characteristics of place? How do people change the environment, and how does the environment influence human activity?</p> <p>Knowledge: Physical changes in community, state, and region, such as seasons, climate, and weather; and their effect on plants and animals.</p> <p>Processes: Learners will be able to: Investigate relationships among people, places, and environments in the school community, state, region, and world through the use of atlases, data bases, charts, graphs, maps and geospatial technologies.</p> <p>Products: Learners demonstrate understanding by: Creating illustrations and composing answers to geographic questions about people, places, and environments.</p> <p>See also: “Culture” #1 and “Time, Continuity and Change” #2</p>	<p>ENGLISH LANGUAGE ARTS (grade 4) Reading: Literature & Informational Text 4.1-3 – Key Ideas and Details; 4.4-6 – Craft and Structure; 4.7-9 – Integration of Knowledge and Ideas</p> <p>Reading: Foundational Skills 4.3a – Phonetics and Word Recognition; 4.4 (a) (b) (c) – Fluency.</p> <p>Language 4.3 – Knowledge of Language; 4.4 – Vocabulary Acquisition and Use</p> <p>Speaking & Listening 4.1 – Comprehension and Collaboration; 4.4 – Presentation of Knowledge and Ideas</p> <p>Writing 4.3 – Text Types and Purposes</p> <hr/> <p>MATH (grade 3) Numbers and operations - Fractions NFA.3A & NFA.3B - Develop understanding of fractions as numbers</p> <hr/> <p>SCIENCE (grades K-4) Matter and Its Interactions PS1-1 - Develop a model to describe that matter is made of particles too small to be seen.</p> <p>Energy PS3.2 - Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat and electric currents.</p>	<p>Social Awareness The ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures. The ability to understand social and ethical norms for behavior and to recognize family, school, and community resources and supports.</p> <p><i>Students will be able to...put themselves in another’s shoes, see the other person’s point of view, and understand the other person’s thoughts and feelings and why they might feel that way.</i></p> <p>Self-Management The ability to successfully regulate one’s emotions, thoughts, and behaviors in difficult situations-effectively managing stress, controlling impulses, and motivating oneself. The ability to set and work toward personal and academic goals.</p> <p><i>Students will be able to...motivate oneself. Students will be able to monitor and sustain progress toward goal achievement, using motivational strategies and celebrating success.</i></p> <p>Relationship Skills The ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups. The ability to communicate clearly, listen well, cooperate with others, resist inappropriate social pressure, negotiate conflict constructively, and seek and offer help when needed.</p> <p><i>Students will be able to...give and receive constructive feedback. Contribute to the achievement of group goals.</i></p>

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<p>SUMMARY</p> <p>By using the story of the Battle of Jericho as its starting point, this Unit opener charts the transition from the Paleolithic to the Neolithic periods and the beginnings of the Bronze Age. It investigates the development of early civilizations and the key role played by the discovery of bronze and other metals, and the ability of people to work with them. It demonstrates the changing importance of lip-blown instruments as religion and warfare become central in the lives of ancient peoples.</p> <p>Key Terms & Concepts:</p> <ul style="list-style-type: none"> • Neolithic • Bronze Age • Civilization <hr/> <p>OBJECTIVES</p> <p>Students will:</p> <ul style="list-style-type: none"> • Recount the story of the battle of Jericho • Describe the changes in living patterns between the Paleolithic and Neolithic periods • Identify the characteristics of “civilization” • Explain why the sound of the ram’s horn was so important to the Hebrews • Locate the position of Ragnar’s story on the historical timeline and explain how lip-blown instruments evolved during the Bronze Age. • Review and practice previously assigned exercises and pieces and/or work to improve scores on Unit I Student Self-Evaluation forms. 	<p>After reading or listening to Unit II: A Blast From the Ancient Past, ask students the following questions:</p> <p>Q. What were the things that Ragnar heard or saw around him that were different from the moment he disappeared in Winter is Coming?</p> <p>A. Walking with a thousand people; no trees or grass, just sand (desert); a great wall; shiny objects like spears (metal weapons); white and brightly colored cloth.</p> <p>Explain that large groups of people, man-made structures, metal objects and manufactured cloth are some of the characteristics of the next period of human history (the Neolithic period) and that Ragnar found himself in a famous biblical story about the Hebrews entering the city of Jericho. Find Jericho on a map and show that unlike Ragnar’s home, the terrain around the city was a desert.</p> <p>Q. What kind of horn was Ragnar holding, and why did he blow it?</p> <p>A. He was holding a ram’s horn, and he blew it because he was terrified by the angry-looking men shouting at him. Ragnar thought he might frighten them off, as this was one of the ways he used his bison horn in his prehistoric life.</p>	<p>SUMMATIVE: REVIEW & RECORD</p> <p>Skills: Unit I Assessment Rubric</p> <p>Posture</p> <p>Embouchure</p> <p>Breathing</p> <p>Sound Production</p> <p>Articulation</p> <p>Harmonic Series</p> <p>Pitch Accuracy</p> <p>Music Making</p> <p>Skills: UNIT I Student Self-Evaluation</p> <p>Long Note Exercises</p> <p>Articulation Exercises</p> <p>Harmonic Note Exercises</p> <p>Make Music!</p>	<p>MUSIC</p> <p>Connecting: Anchor Standard #1 I Relate musical (artistic) ideas and works with varied context to deepen understanding.</p> <p>Enduring Understanding Understanding connections to varied contexts and daily life enhances musicians’ creating, performing, and responding.</p> <p>Essential Question How do the other arts, other disciplines, contexts, and daily life inform creating, performing, and responding to music? See <i>MU:Cn11.0.2a</i></p> <p>Demonstrate understanding of relationships between music, and other arts, other disciplines, varied contexts and daily life.</p> <p>See also: <i>MU:Cn11.0.3a</i> <i>MU:Cn11.0.4a</i> <i>MU:Cn11.0.5a</i></p> <hr/> <p>VISUAL ARTS</p> <p>Creating: Anchor Standard #1 Generate and conceptualize artistic ideas and work.</p> <p>Enduring Understanding Creativity and innovative thinking are essential life skills that can be developed.</p> <p>Essential Question(s) What conditions, attitudes, and behaviors support creative and innovative thinking? What factors prevent or encourage people to take creative risks? How does collaboration expand the creative process?</p>	<p>TIME, CONTINUITY, AND CHANGE #2</p> <p>Through the study of the past and its legacy, learners examine the institutions, values, and beliefs of people in the past, acquire skills in historical inquiry and interpretation, and gain an understanding of how important historical events and developments have shaped the modern world.</p> <p>Questions for Exploration: What questions are important to ask about the past? What happened in the past? How do we know about the past? How was life in the past similar to and different from life today?</p> <p>Knowledge: The learners will understand: The study of the past is the story of communities, nations, and the world; Key concepts such as: past, present, future, similarity, difference, and change; That historical events occurred in times that differed from our own, but often have lasting consequences for the present and future.</p> <p>Processes: Learners will be able to:</p> <ul style="list-style-type: none"> • Use a variety of sources to learn about the past; • Describe how people in the past lived, and research their values and beliefs; <p>Products: Learners demonstrate understanding by: Constructing timelines that indicate an understanding of a sequence of events; Writing stories and descriptions about life in the past.</p> <p>See also “People, Places, and Environments” #3 and “Culture” #1</p>	<p>ENGLISH LANGUAGE ARTS (grade 4) Reading: Literature & Informational Text 4.1-3 – Key Ideas and Details; 4.4-6 – Craft and Structure; 4.7-9 – Integration of Knowledge and Ideas</p> <p>Reading: Foundational Skills 4.3a – Phonetics and Word Recognition; 4.4 (a) (b) (c) – Fluency.</p> <p>Language 4.3 - Knowledge of Language; 4.4 - Vocabulary Acquisition and Use</p> <p>Speaking & Listening 4.1 - Comprehension and Collaboration; 4.4 - Presentation of Knowledge and Ideas</p> <p>Writing 4.3 - Text Types and Purposes</p> <hr/> <p>MATH N/A</p> <hr/> <p>SCIENCE (grades K-4)</p> <p>Waves and Their Applications in Technologies for Information Transfer PS4-1 - Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. PS4-4 - Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.</p>	<p>Self-Awareness The ability to accurately recognize one’s own emotions, thoughts, and values and how they influence behavior. The ability to accurately access one’s strengths and limitations, with a well grounded sense of confidence, optimism, and a “growth mindset.”</p> <p><i>Students will be able to...identify their interests and strengths, and build on those.</i></p> <p>Social Awareness The ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures. The ability to understand social and ethical norms for behavior and to recognize family, school, and community resources and supports.</p> <p><i>Students will be able to...put themselves in another’s shoes, see the other person’s point of view, and understand the other person’s thoughts and feelings and why they might feel that way.</i></p> <p>Self-Management The ability to successfully regulate one’s emotions, thoughts, and behaviors in difficult situations-effectively managing stress, controlling impulses, and motivating oneself. The ability to set and work toward personal and academic goals.</p> <p><i>Students will be able to...motivate oneself. Students will be able to monitor and sustain progress toward goal achievement, using motivational strategies and celebrating success.</i></p>

CHAPTER 4 THE SHOFAR CALL

SUMMARY & OBJECTIVES	LEARNING ACTIVITIES (selected)	ASSESSMENTS	CURRICULUM STANDARDS			
			National Core Arts Standards & NAfME (PreK-8)	National Curriculum Standards for Social Studies (Early Grades)	Common Core Standards (K-5) & Next Generation Science Standards (K-5)	Social and Emotional Learning Competencies (SEL)
<p>SUMMARY</p> <p>In Chapter 4, students will learn how Ragnar was taught the various parts of the <i>shofar</i> call—its meaning and significance—by one of the six priests at the Battle of Jericho. They will also learn about the many uses of the <i>shofar</i> throughout history, how the sounds of the <i>shofar</i> were passed down from generation to generation over thousands of years, and how we know what we know about the <i>shofar</i> calls. They will learn to play the different parts of the <i>shofar</i> call, as well as continuing their regular musical exercises in the Practice Cave.</p> <p>Key Terms & Concepts</p> <ul style="list-style-type: none"> • Hebrews/Jewish People • Expressive Intent <hr/> <p>OBJECTIVES</p> <p>Students will:</p> <ul style="list-style-type: none"> • Discover the various meanings of the parts of the <i>shofar</i> call • Think about the various uses of the <i>shofar</i> and its importance to the Hebrew people • Contemplate how the <i>shofar</i> call has been passed on over three millennia and whether it has changed over time. • Practice more advanced long note, articulation, and harmonic note exercises • Learn how to play each part of the <i>shofar</i> call—individually, and in sequence—demonstrating expressive intent 	<p>After reading or listening online to Chapter 4: The Shofar Call, explain some of the meanings of each part of the <i>shofar</i> call (Key Point No. 1) and then ask the following questions:</p> <p>Q. How do you think hearing the sound of the <i>shofar</i> made the Hebrews feel after the battle was over? A. Thankful; grateful; joyous; happy; protected; safe.</p> <p>Ask students to read Reality Check! (SE p. 33) and ask them to list some of the ways the Hebrews used the <i>shofar</i>. A. For battle, religious ceremony, warning, to call people together, show joy or sadness.</p> <p>Explain that the <i>shofar</i> call was not written down until a thousand years after the Battle of Jericho, but that it is still being played in synagogues around the world to this day.</p> <p>Q. How do you think the Jewish people still know how to play the <i>shofar</i> call today? A. It was passed down from person to person (in the way the priest taught Ragnar in the story) and from generation to generation.</p> <p>Explain that this way of learning music is called aural tradition (learning by listening), as opposed to oral tradition (learning through spoken language), and that even today, no one actually learns the <i>shofar</i> call by looking at music.</p>	<p>FORMATIVE</p> <p>Skills: Unit II Assessment Rubric</p> <p>Posture</p> <p>Embouchure</p> <p>Breathing</p> <p>Sound Production</p> <p>Articulation</p> <p>Harmonic Series</p> <p>Pitch Accuracy</p> <p>Music Making</p> <p>Skills: UNIT II Student Self-Evaluation</p> <p>Long Note Exercises</p> <p>Harmonic Note Exercises</p> <p>Articulation Exercises</p> <p>Make Music!</p>	<p>Creating Anchor Standard #2</p> <p>Select and develop musical ideas for defined purposes and contexts.</p> <p>Enduring Understanding</p> <p>Musicians' creative choices are influenced by their expertise, context, and expressive intent.</p> <p>Essential Question</p> <p>How to musicians make creative decisions?</p> <p>See <i>MU:Cr.2.1.2a-5a</i></p> <p>Evaluate and Refine Anchor Standard #3</p> <p>Evaluate and refine selected musical ideas to create musical work(s) that meet appropriate criteria.</p> <p>Enduring Understanding</p> <p>Musicians' evaluate and refine their work through openness to new ideas, persistence, and the application of appropriate criterion.</p> <p>Essential Question</p> <p>How do musicians improve the quality of their creative work?</p> <p>See <i>MU:Cr.3.1.2a-4a</i></p> <hr/> <p>VISUAL ARTS</p> <p>N/A</p>	<p>PEOPLE, PLACES, AND ENVIRONMENTS</p> <p>This theme helps learners to develop their spatial views and perspectives of the world, and to understand the relationships between people, places, and environments. Learners examine where people, places, and resources are located, why they are there, and why this matters. They explore the effects of the environment on human activities, and the impact of these activities on the environment. This area of study is crucial to informed civic decision-making about human-environmental relationships.</p> <p>Questions for Exploration:</p> <p>Why do people move? What are the physical and human characteristics of place? How do people change the environment, and how does the environment influence human activity?</p> <p>Knowledge:</p> <p>Physical changes in community, state, and region, such as seasons, climate, and weather; and their effect on plants and animals.</p> <p>Processes:</p> <p>Learners will be able to:</p> <p>Investigate relationships among people, places, and environments in the school community, state, region, and world through the use of atlases, data bases, charts, graphs, maps and geospatial technologies.</p> <p>Products:</p> <p>Learners demonstrate understanding by:</p> <p>Creating illustrations and composing answers to geographic questions about people, places, and environments.</p> <p>See also: "Culture" #1 and "Time, Continuity and Change" #2</p>	<p>ENGLISH LANGUAGE ARTS</p> <p>(grade 4)</p> <p>Reading: Literature & Informational Text</p> <p>4.1-3 – Key Ideas and Details; 4.4-6 – Craft and Structure; 4.7-9 – Integration of Knowledge and Ideas</p> <p>Reading: Foundational Skills</p> <p>4.3a – Phonetics and Word Recognition; 4.4 (a) (b) (c) – Fluency.</p> <p>Language</p> <p>4.3 - Knowledge of Language; 4.4 - Vocabulary Acquisition and Use</p> <p>Speaking & Listening</p> <p>4.1 - Comprehension and Collaboration; 4.4. - Presentation of Knowledge and Ideas</p> <p>Writing</p> <p>4.3 - Text Types and Purposes</p> <hr/> <p>MATH</p> <p>(grade 3)</p> <p>Numbers and operations - Fractions</p> <p>NFA.3A & NFA.3B - Develop understanding of fractions as numbers</p> <hr/> <p>SCIENCE</p> <p>(grades K-4)</p> <p>N/A</p>	<p>Social Awareness</p> <p>The ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures. The ability to understand social and ethical norms for behavior and to recognize family, school, and community resources and supports.</p> <p><i>Students will be able to...put themselves in another's shoes, see the other person's point of view, and understand the other person's thoughts and feelings and why they might feel that way.</i></p> <p>Relationship Skills</p> <p>The ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups. The ability to communicate clearly, listen well, cooperate with others, resist inappropriate social pressure, negotiate conflict constructively, and seek and offer help when needed.</p> <p><i>Students will be able to...give and receive constructive feedback. Contribute to the achievement of group goals.</i></p>

SUMMARY & OBJECTIVES	LEARNING ACTIVITIES (selected)	ASSESSMENTS	CURRICULUM STANDARDS			
			National Core Arts Standards & NAfME (PreK-8)	National Curriculum Standards for Social Studies (Early Grades)	Common Core Standards (K-5) & Next Generation Science Standards (K-5)	Social and Emotional Learning Competencies (SEL)
<p>SUMMARY</p> <p>In Chapter 5, students will travel with Ragnar to Egypt and learn about Egyptian civilization and the Egyptian trumpet, the <i>šnb</i>. They will learn about the physical and musical characteristics of the <i>šnb</i>, why it can play more “harmonic” notes than the instruments Ragnar had previously played, and its symbolic significance. In the Practice Cave, students will advance their playing by practicing moving between three harmonic notes, playing triplet march and fanfare figures, and song-like music.</p> <p>Key Terms & Concepts</p> <ul style="list-style-type: none"> • Conical • Bore • Bell Flare <hr/> <p>OBJECTIVES</p> <p>Students will:</p> <ul style="list-style-type: none"> • Consider the characteristics of ancient Egypt, including its geography, trade, and social organization. • Learn about the physical and musical characteristics of the Egyptian <i>šnb</i> and think about why it could produce more notes than Ragnar’s previous trumpets • Contemplate the significance of the <i>šnb</i> for the ancient Egyptians after learning its uses, importance, and symbolism • Practice moving between three harmonic notes, playing triplet march and fanfare figures, and song-like music 	<p>After reading or listening online to Chapter 5: The Pharaoh’s Trumpeters, as the following:</p> <p>Q. What were the things that Ragnar heard or saw that might have been new to him?</p> <p>A. Stories about armies and chariots; the Nile river (likely the largest, longest river that Ragnar had encountered to date); boats; the pyramids; the pharaoh; large crowds; farming.</p> <p>Discuss key words conical, bore, and bell flare, using the natural trumpet to illustrate each feature, and ask the following:</p> <p>Q. What were some of the characteristics of the <i>šnb</i> that were new to Ragnar? Why did one of the traders say that the <i>šnb</i> shines like the sun? What other instruments had Ragnar played previously that were conical in shape?</p> <p>A. Whereas the animal horns, sticks, and bones were uneven in shape and had a dull surface, the <i>šnb</i> was longer, with a perfect conical bore and a wide bell flare. It had a shiny metal surface, which made it reflect light. Ragnar had seen metal weapons in Jericho, but the Egyptian <i>šnb</i> was the first metal lip-blown instrument he had encountered. Both the Bison horn and the <i>shofar</i> are also somewhat conical in shape.</p> <p>Q. What was the purpose of the decorated wooden cores (stoppers) that were found inside the trumpets?</p> <p>A. We don’t know for certain, but they could have been used to protect the trumpets or to silence the sound (see Key Point #6).</p>	<p>Skills: Unit II Assessment Rubric</p> <p>Posture</p> <p>Embouchure</p> <p>Breathing</p> <p>Sound Production</p> <p>Articulation</p> <p>Harmonic Series</p> <p>Pitch Accuracy</p> <p>Music Making</p> <p>Skills: UNIT II Student Self-Evaluation</p> <p>Long Note Exercises</p> <p>Articulation Exercises</p> <p>Harmonic Note Exercises</p> <p>Make Music!</p>	<p>Creating Anchor Standard #1 Generate musical ideas for various purposes and contexts.</p> <p>Enduring Understanding The creative ideas, concepts, and feelings that influence musicians’ work emerge from a variety of purposes and contexts.</p> <p>Essential Question How to musicians generate creative ideas? <i>See MU:Cr.1.3a-5a</i></p> <p>Evaluate and Refine Anchor Standard #3 Evaluate and refine selected musical ideas to create musical work(s) that meet appropriate criteria.</p> <p>Enduring Understanding Musicians’ evaluate and refine their work through openness to new ideas, persistence, and the application of appropriate criterion.</p> <p>Essential Question How do musicians improve the quality of their creative work? <i>See MU:Cr3.1.2a-4a</i></p> <hr/> <p>VISUAL ARTS</p> <p>Creating: Anchor Standard #1 Generate and conceptualize artistic ideas and work.</p> <p>Enduring Understanding Creativity and innovative thinking are essential life skills that can be developed.</p> <p>Essential Question (s) What conditions, attitudes, and behaviors support creative and innovative thinking? What factors prevent or encourage people to take creative risks? How does collaboration expand the creative process?</p>	<p>PEOPLE, PLACES, AND ENVIRONMENTS This theme helps learners to develop their spatial views and perspectives of the world, and to understand the relationships between people, places, and environments. Learners examine where people, places, and resources are located, why they are there, and why this matters. They explore the effects of the environment on human activities, and the impact of these activities on the environment. This area of study is crucial to informed civic decision-making about human-environmental relationships.</p> <p>Questions for Exploration: Why do people move? What are the physical and human characteristics of place? How do people change the environment, and how does the environment influence human activity?</p> <p>Knowledge: Physical changes in community, state, and region, such as seasons, climate, and weather; and their effect on plants and animals.</p> <p>Processes: Learners will be able to: Investigate relationships among people, places, and environments in the school community, state, region, and world through the use of atlases, data bases, charts, graphs, maps and geospatial technologies.</p> <p>Products: Learners demonstrate understanding by: Creating illustrations and composing answers to geographic questions about people, places, and environments.</p> <p>See also: “Culture” #1 and “Time, Continuity and Change” #2</p>	<p>ENGLISH LANGUAGE ARTS (grade 4) Reading: Literature & Informational Text 4.1-3 – Key Ideas and Details; 4.4-6 – Craft and Structure; 4.7-9 – Integration of Knowledge and Ideas</p> <p>Reading: Foundational Skills 4.3a – Phonetics and Word Recognition; 4.4 (a) (b) (c) – Fluency.</p> <p>Language 4.3 – Knowledge of Language; 4.4 – Vocabulary Acquisition and Use</p> <p>Speaking & Listening 4.1 – Comprehension and Collaboration; 4.4 – Presentation of Knowledge and Ideas</p> <p>Writing 4.3 – Text Types and Purposes</p> <hr/> <p>MATH (grade 3) N/A</p> <hr/> <p>SCIENCE (grades 3-5) Engineering Design</p> <p>ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time or cost. ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.</p>	<p>Social Awareness The ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures. The ability to understand social and ethical norms for behavior and to recognize family, school, and community resources and supports.</p> <p><i>Students will be able to...put themselves in another’s shoes, see the other person’s point of view, and understand the other person’s thoughts and feelings and why they might feel that way.</i></p> <p>Self-Management The ability to successfully regulate one’s emotions, thoughts, and behaviors in difficult situations—effectively managing stress, controlling impulses, and motivating oneself. The ability to set and work toward personal and academic goals.</p> <p><i>Students will be able to...motivate oneself. Students will be able to monitor and sustain progress toward goal achievement, using motivational strategies and celebrating success.</i></p>

ENDNOTES

UNIT II

¹ Joshua 5:13 - 6:27; Michael David Coogan, Marc Zvi Brettler, Carol A. (Carol Ann) Newsom, and Pheme Perkins, *The New Oxford Annotated Bible: With the Apocrypha*. Fully rev. 4. ed. (New York: Oxford University Press, 2010), HB 315, 323-324.

² “These Vintage Threads Are 30,000 Years Old.” Heard on *All Things Considered*, National Public Radio, *September 10, 2009*.

<https://www.npr.org/templates/transcript/transcript.php?storyId=112726804>

³ Jackson J. Spielvogel, *Western Civilization*, Eighth Edition, (Boston: Wadsworth, 2012), 4-6.

⁴ Jeremy Montagu, *The Shofar: Its History and Use*, (Lanham: Rowman & Littlefield, 2015), 49-59. Sol Finesinger nicely summarizes the sound of the *shofar* by observing that, “like any other sound [it] is produced primarily for its effect upon its hearers. It may be either to attract them to those producing it, or it may frighten and repel them.” Sol. B. Finesinger, “The Shofar,” *Hebrew Union College Annual*, Vol. 8/9 (1931-32), pp. 193-228, 193. See also Frederick Martens, “The Influence of Music in World History,” *The Music Quarterly*, Vol. 11, No.2 (Apr., 1925), pp. 196-218, 203; J. Alberto Soggin, “The Conquest of Jericho Through Battle: Note on a Lost Biblical Tradition,” *Eretz-Israel: Archaeological, Historical and Geographical Studies*, Harry M Orlinsky Volume, 1982, pp. 215-217; William R. Trotter, “The Music of War,” *Military History* Vol. 22.3 (June 2005) pp. 58-64. Finally, it is worth noting (as students may ask) that some scientists have claimed that huge sound waves are strong enough to move walls. “Biblical Story Rerun in a Laboratory,” *Current Events*, Vol. 84, 10, (Jan 22, 1999), pp. 12-13.

⁵ Montagu, *The Shofar*; Finesinger, “The Shofar”; David Wulstan, “The Sounding of the Shofar,” *The Galpin Society Journal*, Vol. 26 (May, 1973), pp. 29-46 ; John Wallace and Alexander McGrattan, *The Trumpet*, The Yale Music Instrument Series, (New Haven and London: Yale University Press, 2011), 7.

⁶ Numbers 10:1-10; Coogan et al. *The New Oxford Annotated Bible*, HB 200-201. There is sometimes confusion about references in the Old Testament to horns since it is unclear whether it is referring to the *shofar* or *hassrah*. However, scholars have argued that the *hassrah* was first used primarily in rituals and peaceful marshalling, and the *shofar* used for military purposes. Later on (in the last century or so BCE) the roles were reversed, and the *shofar* became used for ceremonial purposes. See Finesinger, 212; Wulstan, 31; Wallace and McGrattan, 7, Montagu, 53.

⁷ Spielvogel, 4-32.

⁸ *The Epic of Gilgamesh* was written in cuneiform c. 2,000 BCE. See Andrew George, Trans. *The Epic of Gilgamesh: the Babylonian Epic Poem and Other Texts in Akkadian and Sumerian*, (London: Penguin Books, 1999).

⁹ The Old Testament is the Hebrew Bible, written and compiled between c.1400-450 BCE. See Michael David Coogan, *The Old Testament: A Very Short Introduction*, (Oxford; New York: Oxford University Press, 2008); John Kenneth Riches, *The Bible: A Very Short Introduction*, (Oxford; New York: Oxford University Press, 2000); Coogan et al., *The New Oxford Annotated Bible*, HB 1-1373.

¹⁰ The *Rig Veda* is a collection of sacred Hindu hymns, written c.1900 BCE. See Wendy Doniger O’Flaherty, ed., *The Rig Veda: An Anthology*, Penguin Classics, (Harmondsworth: Penguin,

1981); Kim Knott, *Hinduism: A Very Short Introduction*, (Oxford: New York: Oxford University Press, 2000).

¹¹ Wallace and McGrattan, 5-35.

¹² Sabine Katharina Klaus, Mark Olencki, Barry Bauguess, and National Music Museum (U.S.). *Trumpets and Other High Brass: A History Inspired By the Joe R. and Joella F. Utey Collection*, Vol. I, (Vermillion, S.D.: National Music Museum, 2012); Jeremy Montagu, *Horns and Trumpets of the World: An Illustrated Guide*. New York and Plymouth: Rowman & Littlefield, 2014.

ENDNOTES

Chapter 4

¹ Jeremy Montagu, *The Shofar: Its History and Use*, (Lanham: Rowman & Littlefield, 2015), 20-26.

² John Wallace and Alexander McGrattan, *The Trumpet*, The Yale Music Instrument Series, (New Haven and London: Yale University Press, 2011), 6-7.

³ Exodus 1- 40; Michael David Coogan, Marc Zvi Brettler, Carol A. (Carol Ann) Newsom, and PHEME PERKINS, *The New Oxford Annotated Bible: With the Apocrypha*. Fully rev. 4. ed. (New York: Oxford University Press, 2010), HB 82-141.

⁴ Montagu, 12-13, 16.

⁵ David Wulstan, "The Sounding of the Shofar," *The Galpin Society Journal*, Vol. 26 (May, 1973), pp. 29-46, 38.

⁶ Jackson J. Spielvogel, *Western Civilization*, Eighth Edition, (Boston: Wadsworth, 2012), 33-54.

⁷ Psalms 98.6; Coogan et al., *The New Oxford Annotated Bible*, HB 861. Amos 3:6; Coogan et al., *The New Oxford Annotated Bible*, HB 1307. For the most comprehensive list of Biblical, Talmudic and Post-Talmudic sources see Montagu, 121-153.

⁸ Montagu, xvii, 4.

⁹ Exodus 32; Coogan et al. *The New Oxford Annotated Bible*, HB 128-130.

ENDNOTES

Chapter 5

¹ John Wallace and Alexander McGrattan, *The Trumpet*, The Yale Music Instrument Series, (New Haven and London: Yale University Press, 2011), 9-10.

² Plutarch, *Moralia, Volume II: The Dinner of the Seven Wise Men*, Translated by Frank Cole Babbitt, Loeb Classical Library 222 (Cambridge, MA: Harvard University Press, 1928), 373.

³ Hans Hickman, *La Trompette dans L'Égypte Ancienne*, 1946; facsimile reprint (Nashville, Tenn.: The Brass Press, 1976), 30-31; Percival R. Kirby, "The Trumpets of Tut-Ankh-Amen and their Successors," *The Journal of the Anthropological Institute of Great Britain and Ireland*, Vol. 77, No.1 (1947), 35; Jeremy Montagu, *Horns and Trumpets of the World: An Illustrated Guide* (New York and Plymouth: Rowman & Littlefield, 2014), 71-4.

⁴ The original BBC Broadcast can be heard on YouTube.

⁵ Lisa Manniche, *Musical Instruments from the Tomb of Tut'unckhamên* (Oxford: Griffith Institute, 1976), 7-9.

⁶ Peter Holmes, "An Iron-age Band or a Roman Folly?" *Liranimus I*, Proceedings of the Portuguese National Association for Musical Instruments, Conference 2012, Vol. 1, 67- 109.

⁷ Altenberg acknowledged that the invention of the trumpet has also been attributed to others, including the Etruscans and the goddess Minerva. Johann Ernst Altenberg, *Essay on an Introduction to the Heroic and Musical Trumpeters' and Kettledrummers' Art: For the Sake of a Wider Acceptance on the Same, Described Historically, Theoretically, and Practically and Illustrated with Examples*, 1795, Reprint, Translated by Edward H. Tarr (Nashville: Brass Press, 1974), 3.

⁸ Lisa Manniche, *Music and Musicians in Ancient Egypt*, (London: British Museum Press, 1991), 57-58.

⁹ Curt Sachs, *The History of Musical Instruments* (New York: Dover Publications, 2006), 100. Sachs was later cited by Wallace and McGratten (2011). Sachs did not provide the original citation from Eustathius, other than to say that it was in Eustathius's translation of *The Iliad*. Gwyn Griffiths, "Osiris," in *The Oxford Encyclopedia of Ancient Egypt*, ed. Donald B. Redford, 3 vols (Oxford: Oxford University Press, 2001), vol. 2, 617-19.

¹⁰ Gwyn Griffiths, "Osiris," in *The Oxford Encyclopedia of Ancient Egypt*, ed. Donald B. Redford, 3 vols (Oxford: Oxford University Press, 2001), vol. 2, 617-19.