

Identifier	Poplar - Grade 8 - World Language	Introduced	Completed
8 WL 1	CONVERSATION		
8 WL 1.01	Talk and write about activities of daily life, using memorized phrases, short sentences, numbers, date, time, and other basic thematic vocabulary.		
8 WL 1.02	Give and follow simple oral and written instructions and commands using visual cues when appropriate.		
8 WL 1.03	Recognize commonly used verbs and phrases in discussions about past and future events.		
8 WL 1.04	Participate in structured conversations on a variety of topics, including state of being and feelings.		
8 WL 1.05	Make simple oral and written requests.		
8 WL 1.06	Tell and write a simple narrative about a personal experience or event in the present tense.		
8 WL 1.07	Restate in the present tense, with assistance, what someone else has said.		
8 WL 1.08	Recognize the standard rules of usage and grammar.		
8 WL 1.09	Demonstrate accuracy in the imitation of modeled words.		
8 WL 1.10	Demonstrate occasional creativity in production of language.		
8 WL 1.11	Ask and respond to basic questions.		
8 WL 1.12	Use appropriate expressions and gestures of courtesy.		
8 WL 2	SPEAKING AND WRITING		
8 WL 2.01	Recognize a sound with its corresponding letter or symbol.		
8 WL 2.02	Comprehend written and spoken numbers, dates, times, and other basic thematic vocabulary.		
8 WL 2.03	Read and comprehend phrases, short sentences, brief written directions, and simple narratives.		
8 WL 2.04	Write numbers, dates, times and other basic thematic vocabulary.		
8 WL 3	INFORMATION, CONCEPTS AND IDEAS		
8 WL 3.01	Engage in a conversation responding to personal questions.		
8 WL 3.02	Use familiar thematic words and phrases, by performing skits, shows and dialogues.		
8 WL 4	CULTURAL PRACTICES AND PERSPECTIVES		
8 WL 4.01	Identify the manner in which important traditions, holidays, and events are celebrated in the culture.		
8 WL 4.02	Recognize various forms of communications in the culture, including gestures, body language, dance, art, and music.		
8 WL 4.03	Identify the important people, holidays, geographys, and history of the culture.		
8 WL 5	CULTURAL PRODUCTS AND OUTLOOKS		
8 WL 5.01	Recognize certain unique products of the culture.		
8 WL 5.02	Understand the messages found in highly contextualized materials, including signs and posters.		
8 WL 5.03	Identify the artistic achievements and contributions of the culture.		
8 WL 6	CROSS CULTURAL KNOWLEDGE AND UNDERSTANDING		
8 WL 6.01	Use the foreign language to read, write, and discuss familiar topics studied in other subject areas.		
8 WL 7	NATURE OF LANGUAGE		
8 WL 7.01	Recognize cognates, adopted words and expressions and word families.		
8 WL 7.02	Demonstrate that languages have important sound distinctions that must be mastered in order to communicate meaning.		
8 WL 7.03	Analyze and compare the writing systems of both languages.		
8 WL 7.04	Compare and use language and grammatical patterns.		
8 WL 8	CULTURE CONCEPTS		
8 WL 8.01	Understand cultural differences and similarities between the culture and the pupil's culture by demonstrating that there are culturally specific phrases and idioms that do not translate directly from one language to another.		
8 WL 9	OUTREACH		
8 WL 9.01	Report about the use of the foreign language outside the classroom.		
8 WL 10	ACQUISITION		
8 WL 10.01	Plan a real or imaginary trip to a country in which the foreign language is spoken and collect information concerning travel to that country and careers that require the use of that foreign language.		

Identifier	Poplar - Grade 8 - Native Language	Introduced	Completed
8 NL 1	HERITAGE		
8 NL 1.01	Explain and dramatize family roles.		
8 NL 1.02	Explain and dramatize extended family roles.		
8 NL 1.03	Describe and explain clan roles.		
8 NL 1.04	Describe and explain band roles.		
8 NL 1.05	Explain and dramatize tribal roles.		
8 NL 1.06	Explain and dramatize extended tribal roles.		
8 NL 1.07	Describe and explain aspects of community membership.		
8 NL 1.08	Describe and explain aspects of extended community membership.		
8 NL 1.09	Describe and explain tribal artifacts.		
8 NL 2	ALPHABET AND NUMBERS		
8 NL 2.01	Review the Dakota alphabet.		
8 NL 2.02	Pronounce Dakota consonants.		
8 NL 2.03	Memorize Dakota consonants.		
8 NL 2.04	Pronounce Dakota vowels.		
8 NL 2.05	Memorize Dakota vowels.		
8 NL 2.06	Write basic sight words.		
8 NL 2.07	Review Dakota numbers.		
8 NL 2.08	Pronounce Dakota numbers 1-100.		
8 NL 2.09	Write Dakota numbers 1-100.		
8 NL 3	LANGUAGE		
8 NL 3.8.1	LANGUAGE: VOCABULARY		
8 NL 3.8.1.01	Pronounce kinship terms.		
8 NL 3.8.1.02	Illustrate kinship terms.		
8 NL 3.8.1.03	Pronounce parts of the body vocabulary.		
8 NL 3.8.1.04	Illustrate parts of the body vocabulary.		
8 NL 3.8.1.05	Pronounce seasons.		
8 NL 3.8.1.06	Illustrate seasons.		
8 NL 3.8.1.07	Pronounce weather conditions.		
8 NL 3.8.1.08	Illustrate weather conditions.		
8 NL 3.8.1.09	Pronounce food vocabulary.		
8 NL 3.8.1.10	Illustrate food vocabulary.		
8 NL 3.8.1.11	Pronounce days of the week.		
8 NL 3.8.1.12	Illustrate days of the week.		
8 NL 3.8.1.13	Pronounce months of the year.		
8 NL 3.8.1.14	Illustrate months of the year.		
8 NL 3.8.1.15	Pronounce directions.		
8 NL 3.8.1.16	Illustrate directions.		
8 NL 3.8.1.17	Pronounce animal vocabulary.		
8 NL 3.8.1.18	Illustrate animal vocabulary.		
8 NL 3.8.1.19	Pronounce colors.		
8 NL 3.8.1.20	Illustrate colors.		
8 NL 3	LANGUAGE		
8 NL 3.8.2	LANGUAGE: COMPOSITION		
8 NL 3.8.2.01	Identify basic Dakota sentence structure.		
8 NL 3.8.2.02	Read basic Dakota sentences.		
8 NL 3.8.2.03	Recite basic Dakota sentences.		
8 NL 3.8.2.04	Write basic Dakota sentences.		
8 NL 4	LITERATURE		
8 NL 4.8	LITERATURE: SOUND OF FLUTES AND OTHER INDIAN LEGENDS		
8 NL 4.8.01	Read the text.		
8 NL 4.8.02	Discuss the text.		
8 NL 4.8.03	Illustrate the text.		
8 NL 5	HISTORY		
8 NL 5.8	HISTORY: SIOUX LEADERS		

Identifier	Poplar - Grade 8 - Native Language	Introduced	Completed
8 NL 5.8.01	Research the life and times of Struck by the Ree		
8 NL 5.8.02	Research the life and times of Inkpaduta		
8 NL 5.8.03	Research the life and times of Kicking Bear		
8 NL 6	ORATORY		
8 NL 6.01	Recite Kincking Bear's speech: "I Bring You Word from Your Fathers"		

Identifier	Poplar - Grade 8 - Computer and Technology	Introduced	Completed
8 CT 1	PROBLEM SOLVING		
8 CT 1.1	Differentiate design/problem-solving methods and components of technology using accurate terminology.		
8 CT 1.2	Select and evaluate appropriate designs requiring optimization and making trade-offs.		
8 CT 1.3	Select and apply a design/problem-solving method to reach a desired outcome.		
8 CT 2	PRODUCTIVITY TOOLS		
8 CT 2.1	Demonstrate proficiency and accuracy in keyboarding skills.		
8 CT 2.2	Create a document using advanced formatting techniques that demonstrate the ability to import a graphic, type, edit, and print.		
8 CT 2.3	Create a database, define fields, enter data for multiple records, and print reports based on sort and query.		
8 CT 2.4	Generate a spreadsheet including labels, values, formulas, and functions; create a chart to visually represent data. Print a spreadsheet showing formulas.		
8 CT 2.5	Create a multipage multimedia presentation using text, graphics, and sound to effectively communicate a concept.		
8 CT 2.6	Organize files on a computer disk, drive, server, or other storage device.		
8 CT 2.7	Explain the advantages of connectivity with various systems to share information and resources.		
8 CT 2.8	Employ the use of electronic communication.		
8 CT 3	RESEARCH TOOLS		
8 CT 3.1	Select a research topic or a statement of a problem identifying its elements, its scope, and the expected outcomes using technology tools.		
8 CT 3.2	Generate a list of keywords for a research topic or problem and conduct a search of electronic-based sources.		
8 CT 3.3	Select and evaluate information from a variety of remote resources for a research topic or problem exploring hyperlinks.		
8 CT 3.4	Use an organizational format to arrange information for presentation or decision making.		
8 CT 3.5	Check collected information for reliability, authenticity, and timeliness, citing sources of copyrighted materials in papers, projects, and multimedia presentations.		
8 CT 3.6	Generate a bibliography.		
8 CT 4	TOOLS AND PROCESSES		
8 CT 4.1	Explain how technology skills and tools enhance productivity in creating projects, building prototypes and modeling (e.g., measuring, shaping, forming, and fastening materials).		
8 CT 4.2	Use tools, instrumentation, equipment, materials, and processes to make designs, simulations, and prototypes.		
8 CT 4.3	Compare and contrast the safe use of technology tools, hand and power tools, processes, and materials in diverse computer and technology applications.		
8 CT 4.4	Demonstrate an understanding of the operation and maintenance of technology tools such as hand tools, power tools, lasers, hydraulics, pneumatics, electronics, hardware, software, CNC machines, computers, robotics, and fiber optics.		
8 CT 5	SYSTEMS		
8 CT 5.1	Interpret resources that are essential and those that must be used effectively to produce a desired outcome; an output from one system may be input to another system.		
8 CT 5.2	Differentiate among various systems, explain capabilities and limitations, and identify the ways in which they are controlled to produce a desired outcome (e.g., limitations of the components of a computer system).		
8 CT 5.3	Use a system to achieve a desired outcome in the areas of construction, communication, manufacturing, energy, power, transportation, and biotechnology.		
8 CT 6	IMPLICATIONS ON SOCIETY		
8 CT 6.1	Practice legal and ethical behaviors when using information and technology. Discuss the consequences of misuse on society and the environment.		
8 CT 6.2	Evaluate the effect technology has on society and the environment.		
8 CT 6.3	Examine the role of technology in the workplace and explore careers that use technology.		
8 CT 6.4	Explain how people can control the technologies they develop and use, and why people are responsible for the effects these have on society, the environment, and careers.		

Identifier	Poplar - Grade 8 - Health	Introduced	Completed
8 H 1	HEALTH PROMOTION / DISEASE PREVENTION		
8 H 1.01	Explain the impact of personal health behaviors on the functioning of body systems.		
8 H 1.02	Describe how growth and development relate to personal health decisions.		
8 H 1.03	Describe how age, gender, physical activity, lifestyle and heredity affect nutrient needs.		
8 H 1.04	Analyze the physiological and psychological effects of drug usage.		
8 H 1.05	Demonstrate knowledge and strategies for personal safety.		
8 H 1.06	Describe ways to reduce risk factors and increase resiliency related to adolescent health.		
8 H 1.07	Identify laws and regulations made to protect the health of the community.		
8 H 1.08	Identify personal actions that contribute to the deterioration of the environment.		
8 H 1.09	Explain the differences between strain and sprain and describe the treatment for each.		
8 H 1.10	List sexually-transmitted diseases by name and tell the sources, symptoms, and treatment of each.		
8 H 1.11	Demonstrate understanding that improvement of locomotor skills depends on individual effort on ones own time.		
8 H 1.12	Demonstrate interest in developing personal physical fitness.		
8 H 2	HEALTH INFORMATION / ACCESSING INFORMATION		
8 H 2.01	Differentiate health concerns as personal responsibility or professional responsibility.		
8 H 2.02	Identify characteristics of scientifically valid health information.		
8 H 2.03	Demonstrate the Emergency Action Steps.		
8 H 2.04	Demonstrate rescue breathing.		
8 H 2.05	Demonstrate abdominal thrusts.		
8 H 2.06	Demonstrate CPR.		
8 H 2.07	Demonstrate understanding of and comply with safety rules while in activities, including care of weights and weight room.		
8 H 3	HEALTH ENHANCEMENT / SELF MANAGEMENT		
8 H 3.01	Apply conflict resolution techniques including peer mediation within the school environment.		
8 H 3.02	Analyze the school environment for personal safety and security.		
8 H 3.03	Use appropriate methods of response to negative risk-taking behaviors including suicide, alcohol, tobacco, and other drugs.		
8 H 3.04	Describe and follow rules prohibiting possession of weapons at school and in the community.		
8 H 3.05	Demonstrate compliance with school safety procedures including emergency drills.		
8 H 3.06	Evaluate the role others play in stress.		
8 H 3.07	Perform advanced first aid procedures.		
8 H 3.08	Explain why each individual is responsible for one's own decision to use or not use chemicals.		
8 H 3.09	Demonstrate improvement of basic skills and strategies during participation in games.		
8 H 3.10	Demonstrate balance and coordination during involvement in activities.		
8 H 3.11	Strive to improve personal best.		
8 H 3.12	Demonstrate social skills appropriate to group activities.		
8 H 3.13	Demonstrate appropriate use of activities-related vocabulary.		
8 H 3.14	Demonstrate understanding of standards – skill levels, rules, team play – controlling team activities.		
8 H 3.15	Identify and develop a range of game-specific defensive and offensive strategies.		
8 H 4	INFLUENCES		
8 H 4.01	Analyze how different cultures enrich and challenge health practices.		
8 H 4.02	Evaluate the impact of technology on health and disease prevention.		
8 H 4.03	Critique a variety of consumer influences that affect health decisions.		
8 H 4.04	Demonstrate proper treatment for victims of drug / alcohol overdose.		
8 H 4.05	List specific chemicals and tell their immediate, short-term, and long-term effects of chemical use.		
8 H 4.06	List the effects of alcohol on the brain.		
8 H 5	INTERPERSONAL COMMUNICATION		
8 H 5.01	Role play decision-making and problem-solving skills, which enhance interpersonal relationships.		
8 H 5.02	Explore the causes of conflict in school and community and demonstrate refusal and negotiation skills.		
8 H 5.03	Explain and demonstrate effective assertive communication skills.		
8 H 5.04	List personal needs in social relationships.		

Identifier	Poplar - Grade 8 - Health	Introduced	Completed
8 H 6	DECISION MAKING / GOAL SETTING		
8 H 6.01	Apply a decision-making process to a significant health issue or problem.		
8 H 6.02	Develop a personal health plan that addresses personal strengths, needs, and health risks.		
8 H 6.03	Compare and contrast the short- and long-term impact of health decisions on the individual and society.		
8 H 6.04	Determine contacts for assistance with health issues.		
8 H 6.05	Identify stressors and stress management techniques.		
8 H 6.06	Know and follow rules controlling behavior in physical education areas.		
8 H 7	PERSONAL AND COMMUNITY HEALTH		
8 H 7.01	Identify and research a community health issue and develop a plan of action.		
8 H 7.02	List resources available through community health and crime prevention agencies.		

Identifier	Poplar - Grade 8 - Music	Introduced	Completed
8 Mus 1	RHYTHM		
8 Mus 1.01	Identify and explain meter signatures.		
8 Mus 1.02	Identify and perform music with changing meters.		
8 Mus 1.03	Identify and perform music with mixed meters.		
8 Mus 1.04	Identify and properly perform a variety of patterns: dotted, tied, syncopated, even and uneven		
8 Mus 2	HARMONY / TEXTURE		
8 Mus 2.01	Perform rhythms and sing melodies in unison.		
8 Mus 2.02	Sing 3-part songs.		
8 Mus 2.03	Perform counter melodies.		
8 Mus 2.04	Perform rhythms and sing melodies with accompaniment.		
8 Mus 2.05	Perform rhythms and sing melodies without accompaniment.		
8 Mus 2.06	Identify and perform partner songs.		
8 Mus 2.07	Identify and perform chorales.		
8 Mus 3	MELODY		
8 Mus 3.01	Identify high and low registers.		
8 Mus 3.02	Identify and trace melodic contour.		
8 Mus 3.03	Recognize and identify musical sequences.		
8 Mus 3.04	Recognize musical phrasing.		
8 Mus 3.05	Recognize and identify patterns in music.		
8 Mus 3.06	Develop understanding and sense of pitch.		
8 Mus 4	FORM		
8 Mus 4.01	Identify and describe theme and variation.		
8 Mus 4.02	Identify verse and refrain.		
8 Mus 4.03	Identify and perform antiphonal forms.		
8 Mus 4.04	Identify and perform tutti passages.		
8 Mus 4.05	Identify and describe AABA form.		
8 Mus 4.06	Describe and perform D. C. al Fine.		
8 Mus 4.07	Describe and perform D. S. al Fine.		
8 Mus 4.08	Describe and perform D. C. al Coda.		
8 Mus 4.09	Identify and perform multiple endings.		
8 Mus 5	TONE COLOR		
8 Mus 5.01	Recognize, identify, and produce vocal tones.		
8 Mus 5.02	Recognize, identify, and produce instrumental tones.		
8 Mus 5.03	Understand and demonstrate the concept of bright tone.		
8 Mus 5.04	Understand and demonstrate the concept of dark tone.		
8 Mus 6	TONALITY		
8 Mus 6.01	Identify, describe, and perform whole-tone scales.		
8 Mus 6.02	Identify and describe tonal center.		
8 Mus 6.03	Identify and describe chords.		
8 Mus 6.04	Identify, describe, and demonstrate modulation.		
8 Mus 7	EXPRESSIVE QUALITIES		
8 Mus 7.01	Identify and produce dynamic variation.		
8 Mus 7.02	Identify and imitate musical styles.		
8 Mus 7.03	Identify tempo and describe rates of tempo.		
8 Mus 7.04	Apply interpretive skills to performances.		
8 Mus 7.05	Define and demonstrate accelerando (Accel.).		
8 Mus 7.06	Define and demonstrate ritardando (Rit.).		
8 Mus 7.07	Define and demonstrate relative durations of notes and rests.		
8 Mus 7.08	Define and perform ad libitum.		
8 Mus 7.09	Creatively expand on the qualities of music performed.		
8 Mus 8	CAREERS		
8 Mus 8.01	Explore the work of a music composer as a career.		
8 Mus 8.02	Explore the work of a music performer as a career.		
8 Mus 8.03	Explore the work of a music teacher as a career.		
8 Mus 8.04	Explore the work of a music conductor as a career.		

Music

Identifier	Poplar - Grade 8 - Music	Introduced	Completed
8 Mus 8.05	Explore the world of work in music-related fields.		
8 Mus 9	PERFORMANCE		
8 Mus 9.01	Participate in at least one concert.		
8 Mus 9.02	View a live musical performance.		
8 Mus 9.03	Perform as a soloist or in a small ensemble.		
8 Mus 9.04	Participate in a music festival.		
8 Mus 9.05	Describe and demonstrate (practice) concert etiquette.		
8 Mus 10	MUSIC HISTORY		
8 Mus 10.01	Examine the history of music by period.		
8 Mus 11	CULTURE		
8 Mus 11.01	Experience music and musical expression from around the world.		
8 Mus 12	MUSIC APPRECIATION AND CRITICISM		
8 Mus 12.01	Evaluate music and musical performances of all types.		
8 Mus 12.02	Listen to and evaluate solos and ensembles.		
8 Mus 12.03	Develop music appreciation and skills for life.		

Identifier	Popler - Grade 8 - Physical Education	Introduced	Completed
8 PE 1	LEARNING AND DEVELOPMENT OF MOTOR SKILLS		
8 PE 1.01	Describe a strategy for a sport utilizing appropriate vocabulary.		
8 PE 1.02	Describe and apply the advanced elements (i.e., speed) of movement forms and game strategies (i.e., softball game situation).		
8 PE 1.03	Evaluate movement forms for skill improvement (i.e., checklists, rubrics).		
8 PE 1.04	Recognize physiological benefits of exercise during and after physical activity.		
8 PE 2	MOVEMENT FORMS		
8 PE 2.01	Refine locomotor and nonlocomotor movements in a sport setting.		
8 PE 2.02	Refine previously learned manipulative skills.		
8 PE 2.03	Demonstrate the elements of more advanced manipulative skills (i.e., overhand serve).		
8 PE 2.04	Explain how scientific principles (i.e., force and speed) apply to weight transfer and balance movements.		
8 PE 3	MOVEMENT AS COMMUNICATION		
8 PE 3.01	Identify and demonstrate basic dance steps, positions, and patterns from two different theatrical styles and/or traditional styles of dance.		
8 PE 3.02	Observe and describe (i.e., breakdown/analyze movements) the actions and qualities of movement in a dance sequence using appropriate dance vocabulary.		
8 PE 3.03	Accurately transfer a rhythmic pattern from the aural, verbal and/or visual to the kinesthetic (i.e., perform simple rhythmic dance sequences).		
8 PE 3.04	Perform traditional and/or theatrical style dances of different time periods or cultures and describe differences in steps and movement styles.		
8 PE 4	INDIVIDUAL FITNESS		
8 PE 4.01	Design a personal health-related fitness program based on an accurately assessed fitness profile.		
8 PE 4.02	Understand and apply principles of training/conditioning (i.e., threshold, overload, and specificity) to regular fitness activities.		
8 PE 4.03	Identify and/or participate in a variety of health-related fitness activities in both school and community.		
8 PE 4.04	Compare safe and unsafe exercises and demonstrate safe exercise alternatives.		
8 PE 5	SOCIAL INTERACTION		
8 PE 5.01	Analyze potential consequences when confronted with a behavior choice.		
8 PE 5.02	Work cooperatively within a group to achieve goals in cooperative or competitive situations.		
8 PE 5.03	Demonstrate behavior which is supportive and inclusive in physical activity settings.		
8 PE 5.04	Demonstrate a multicultural physical activity to others (i.e., dance, games, and sports).		

Identifier	Poplar - Grade 8 - Theater	Introduced	Completed
8 Th 1	THEATRICAL COMPONENTS		
8 Th 1.01	Write a script with appropriate format (i.e., acts, scenes), simple stage directions, cast of characters, and technical needs.		
8 Th 1.02	Direct actors or be directed by others using stage direction vocabulary.		
8 Th 1.03	Identify and describe the roles and responsibilities of stage production personnel.		
8 Th 1.04	Analyze and convey the playwright's intention.		
8 Th 1.05	Design and produce publicity for a production (e.g., posters, flyers).		
8 Th 1.06	Work collaboratively and safely to design and construct a box set for a production.		
8 Th 1.07	Design and create props, costumes, and make-up for characters with attention to age, culture, and overall interpretation of a script.		
8 Th 1.08	Identify appropriate sound and lighting effects for any dramatized event (e.g., interior, exterior).		
8 Th 1.09	Create appropriate sound effects and suggest lighting for a dramatized event.		
8 Th 2	ROLE OF THE PERFORMER		
8 Th 2.01	Analyze a character to determine actions, intentions, and biography.		
8 Th 2.02	Demonstrate acting skills utilizing appropriate focus/concentration, breathing and vocal techniques, memory and sensory recall, and physical movement.		
8 Th 2.03	Create and sustain a believable character for stage.		
8 Th 3	VIEWING A PERFORMANCE / PERFORMER		
8 Th 3.01	Evaluate the established elements of theater found in a dramatized performance.		
8 Th 3.02	Analyze the emotional impact of the visual, aural, and kinesthetic elements of a performance.		
8 Th 3.03	Identify examples of high and low comedy and tragedy.		
8 Th 4	VIEWING A PERFORMANCE / PERFORMER IN CONTEXT		
8 Th 4.01	Explain how theater reveals information about other historical periods and cultures.		
8 Th 4.02	Identify the sources of conflict between characters in a dramatized event.		
8 Th 5	CONNECTIONS BETWEEN THE ARTS AND ACADEMIC DISCIPLINES		
8 Th 5.01	Identify and explain how the choices of visual arts, dance, and music enhance the interpretation of a dramatic event.		
8 Th 5.02	Explain the roots of theater in Western civilization.		
8 Th 5.03	Explain how advancements in the sciences have enhanced dramatized events (e.g., special effects, sound that surrounds the audience).		

Identifier	Poplar - Grade 8 - Visual Arts	Introduced	Completed
8 VA 1	KNOWLEDGE		
8 VA 1.01	Compare and contrast the use of media, techniques, and processes in works of art.		
8 VA 1.02	Analyze one's own selection and use of media, techniques, and processes to elicit intended responses.		
8 VA 1.03	Use and explain why various media, techniques, and processes are used to produce works of art that communicate ideas and experiences.		
8 VA 1.04	Identify contour and gestural lines and explain their uses.		
8 VA 1.05	Identify 1- and 2-point perspective.		
8 VA 1.06	Properly measure and place facial features in a portrait.		
8 VA 1.07	List important characteristics of a still life.		
8 VA 1.08	Recognize warm and cool colors.		
8 VA 1.09	Properly draw and label a color wheel.		
8 VA 1.10	Define monochromatic, analogous, and complimentary colors.		
8 VA 1.11	Define the color properties of value, shade, tint, and hue.		
8 VA 1.12	Define two-dimensional and three-dimensional.		
8 VA 1.13	Identify additive and subtractive qualities of sculptures.		
8 VA 1.14	List the basic methods of shaping clay.		
8 VA 1.15	Name the three stages of completion of a ceramic piece.		
8 VA 1.16	Describe the importance of the relationship between lettering styles and their emotional effects on the viewer or consumer		
8 VA 1.17	Recognize the elements and principles of design in ones own work and that of others.		
8 VA 1.18	Differentiate between abstract and realistic art.		
8 VA 1.19	Identify symmetry and asymmetry and formal and informal balance in art works.		
8 VA 1.20	Identify the qualities of positive and negative space in art works.		
8 VA 1.21	Describe the stages in print making.		
8 VA 1.22	Name three types of print making.		
8 VA 1.23	Define relief print making.		
8 VA 1.24	Name five artists studied during the course.		
8 VA 1.25	Name five major time periods in the history of art		
8 VA 1.26	Name three elements of art.		
8 VA 1.27	Name three principles of art.		
8 VA 1.28	Successfully mat and display ones own art works.		
8 VA 2	APPLICATION		
8 VA 2.01	Analyze and evaluate the effects of visual characteristics in works of art.		
8 VA 2.02	Analyze and evaluate a variety of artworks to determine purposes and/or functions.		
8 VA 2.03	Discuss why visual characteristics, purposes, and/or functions may be effective in works of art.		
8 VA 2.04	Explain how one's own artwork employs various visual characteristics to communicate.		
8 VA 3	CONTENT		
8 VA 3.01	Explain the origins of specific subject matter, symbols, and ideas.		
8 VA 3.02	Plan and produce works of art that use a range of subject matter, symbols, and ideas from varied times and places to communicate meaning.		
8 VA 3.03	Analyze the degree to which subject matter, symbols, and ideas are successfully used to communicate meaning.		
8 VA 4	CONTEXT		
8 VA 4.01	Categorize and discuss visual characteristics of selected works of art in relationship to a variety of historical and cultural contexts.		
8 VA 4.02	Describe the purpose and discuss the meaning of specific art objects within varied cultures, times, and places.		
8 VA 4.03	Research a culture and create an artwork that demonstrates how historical and cultural factors influence visual characteristics.		
8 VA 5	INTERPRETATION		
8 VA 5.01	Interpret artwork based on various characteristics such as themes, styles, purposes, and subject matter.		

Identifier	Poplar - Grade 8 - Visual Arts	Introduced	Completed
8 VA 5.02	Differentiate among degrees of merit in various works of art.		
8 VA 5.03	Analyze and generate new meaning of their artwork and the work of others.		
8 VA 5.04	Develop and explain a personal position of aesthetic and critical analysis of an artwork.		
8 VA 6	CROSS-CURRICULAR		
8 VA 6.01	Explain how the basic principles of art are similar to principles of other disciplines (e.g., contrast, balance, dominance).		
8 VA 6.02	Research and analyze the relationships between the visual arts and other arts in terms of basic principles and subject matter (e.g., rhythm and movement).		
8 VA 6.03	Create works of art reflecting principles common to the arts and multiple disciplines.		

Identifier	Poplar - Grade 8 - Language Arts/Reading	Introduced	Completed
8 ELA 1	LITERATURE		
8 ELA 1.01	Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.		
8 ELA 1.02	Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.		
8 ELA 1.03	Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.		
8 ELA 1.04	Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.		
8 ELA 1.05	Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.		
8 ELA 1.06	Analyze how differences in the points of view of the characters and the audience or reader create such effects as suspense or humor.		
8 ELA 1.07	Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.		
8 ELA 1.09	Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works, including describing how the material is rendered new.		
8 ELA 1.10	Read and comprehend literature, including stories, dramas, and poems independently and proficiently.		
8 ELA 2	INFORMATIONAL TEXT		
8 ELA 2.01	Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.		
8 ELA 2.02	Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.		
8 ELA 2.03	Analyze how a text makes connections among and distinctions between individuals, ideas, or events.		
8 ELA 2.04	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.		
8 ELA 2.05	Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.		
8 ELA 2.06	Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.		
8 ELA 2.07	Evaluate the advantages and disadvantages of using different mediums to present a particular topic or idea.		
8 ELA 2.08	Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.		
8 ELA 2.09	Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.		
8 ELA 2.10	Read and comprehend nonfiction independently and proficiently.		
8 ELA 4	WRITING		
8 ELA 4.01	Write arguments to support claims with clear reasons and relevant evidence.		
8 ELA 4.02	Write informative/ explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.		
8 ELA 4.03	Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.		
8 ELA 4.04	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.		
8 ELA 4.05	With some guidance and support, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.		
8 ELA 4.06	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.		

Identifier	Poplar - Grade 8 - Language Arts/Reading	Introduced	Completed
8 ELA 4.07	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.		
8 ELA 4.08	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.		
8 ELA 4.09	Draw evidence from literary or informational texts to support analysis, reflection, and research.		
8 ELA 4.10	Write routinely over extended time frames and shorter time frames for a range of discipline-specific tasks, purposes, and audiences.		
8 ELA 5	SPEAKING AND LISTENING		
8 ELA 5.01	Engage effectively in a range of collaborative discussions with diverse partners, building on others' ideas and expressing their own clearly.		
8 ELA 5.02	Analyze the purpose of information presented in diverse media and formats and evaluate the motives behind its presentation.		
8 ELA 5.03	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.		
8 ELA 5.04	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume and clear pronunciation.		
8 ELA 5.05	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.		
8 ELA 5.06	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.		
8 ELA 6	LANGUAGE		
8 ELA 6.01	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.		
8 ELA 6.02	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.		
8 ELA 6.03	Use knowledge of language and its conventions when writing, speaking, reading, or listening.		
8 ELA 6.04	Determine or clarify the meaning of unknown and multiple-meaning words or phrases, choosing flexibly from a range of strategies.		
8 ELA 6.05	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.		
8 ELA 6.06	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.		

Identifier	Poplar - Grade 8 - Mathematics	Introduced	Completed
8 M 1	MATHEMATICAL PRACTICES		
8 M 1.01	Makes sense of problems and persevere in solving them.		
8 M 1.02	Reason abstractly and quantitatively.		
8 M 1.03	Construct viable arguments and critique the reasoning of others.		
8 M 1.04	Model with mathematics.		
8 M 1.05	Use appropriate tools strategically.		
8 M 1.06	Attend to precision.		
8 M 1.07	Look for and make use of structure.		
8 M 1.08	Look for and express regularity in repeated reasoning.		
8 M 2	RATIOS AND PROPORTIONAL RELATIONSHIPS		
8 M 2.01	Analyze proportional relationships and use them to solve real-world and mathematical problems.		
8 M 2.02	Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.		
8 M 2.03	Recognize and represent proportional relationships between quantities.		
8 M 2.04	Use proportional relationships to solve multistep ratio and percent problems within cultural contexts.		
8 M 3	NUMBER SYSTEM		
8 M 3.01	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.		
8 M 3.02	Know that there are numbers that are not rational, and approximate them by rational numbers.		
8 M 4	EXPRESSIONS AND EQUATIONS		
8 M 4.01	Use properties of operations to generate equivalent expressions.		
8 M 4.02	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.		
8 M 4.03	Work with radicals and integer exponents.		
8 M 4.04	Understand the connections between proportional relationships, lines, and linear equations.		
8 M 4.05	Analyze and solve linear equations and pairs of simultaneous linear equations		
8 M 5	GEOMETRY		
8 M 5.01	Draw, construct, and describe geometrical figures and describe the relationships between them.		
8 M 5.02	Understand congruence and similarity using physical models, transparencies, or geometry software.		
8 M 5.03	Understand and apply the Pythagorean Theorem.		
8 M 5.04	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.		
8 M 5.05	Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.		
8 M 6	FUNCTIONS		
8 M 6.01	Define, evaluate, and compare functions.		
8 M 6.02	Use functions to model relationships between quantities.		
8 M 7	STATISTICS AND PROBABILITY		
8 M 7.01	Use random sampling to draw inferences about a population.		
8 M 7.02	Draw informal comparative inferences about two populations.		
	Investigate chance processes and develop, use, and evaluate probability models.		
8 M 7.03	Investigate patterns of association in bivariate data.		

Identifier	Poplar - Grade 8 - Social Studies		Introduced	Completed
8 SS 1	CIVICS			
8 SS 1.1.01	Rules and Law	Explain the difference between the rule of law and the rule of man (such as divine right of monarchs, dictatorships).		
8 SS 1.1.02	Rules and Law	Describe the significance of the Declaration of Independence and the U.S. Constitution as foundations of U.S. democracy.		
8 SS 1.1.03	Rules and Law	Explain popular sovereignty and the need for citizen involvement at all levels of U.S. government.		
8 SS 1.1.04	Rules and Law	Describe how the U.S. Constitution serves as a device for preserving national principles and as a vehicle for change, including knowledge of the formal process of amending the U.S. Constitution.		
8 SS 1.2.01	US Government	Explain the functions of the three branches of government (executive, legislative, and judicial) as found in the U.S. Constitution.		
8 SS 1.2.02	US Government	Explain the historic compromises that created a two-house Congress and identify the responsibilities of each.		
8 SS 1.2.03	US Government	Discuss enumerated and implied powers of the U.S. Congress.		
8 SS 1.2.04	US Government	Describe the duties of the President, such as presenting a budget proposal.		
8 SS 1.2.05	US Government	List the ways the Supreme Court determines policy, including judicial review, interpreting laws, and overruling or revising its previous decisions.		
8 SS 1.2.06	US Government	Describe the trial process, including the selection and responsibilities of jurors.		
8 SS 1.2.07	US Government	Explain the system of checks and balances in the design of the U.S. Constitution.		
8 SS 1.3.01	National and State Government	Give examples of governmental powers (such as the power to tax, declare war, and issue drivers' licenses) that are distributed between the state and national governments.		
8 SS 1.3.02	National and State Government	Define "federalism."		
8 SS 1.3.03	National and State Government	Explain how the supremacy clause of the U.S. Constitution defines the relationship between state and national governments.		
8 SS 1.4.01	Political Process	Describe the election process.		
8 SS 1.4.02	Political Process	Provide examples of how political parties changed.		
8 SS 1.4.03	Political Process	Identify the impact of interest groups on the political process.		
8 SS 1.4.04	Political Process	Identify the influence of the media in forming public opinion.		
8 SS 1.4.05	Political Process	Identify propaganda and persuasion in political advertising and literature.		
8 SS 1.4.06	Political Process	Provide examples of contemporary public issues that may require public solutions.		
8 SS 1.5.01	Citizenship	Identify the rights, privileges, and responsibilities associated with U.S. citizenship, including voting; holding office; jury duty; or military, community, or public service.		
8 SS 1.5.02	Citizenship	Explain the significance of mottoes and symbols, including E Pluribus Unum, national anthem, flag, Statue of Liberty, Great Seal, oath of office, and Pledge of Allegiance.		
8 SS 1.5.03	Citizenship	Explain the necessity of the Bill of Rights for a democratic society.		
8 SS 1.5.04	Citizenship	Identify examples of conflict resolution that respect individual rights at school and in the community, within the United States.		
8 SS 1.6.01	State and Local Government	Compare the organization and purpose of state, local, and tribal government.		
8 SS 1.6.02	State and Local Government	Describe the juvenile, civil, and criminal court systems.		
8 SS 1.7.01	Political and Economic Systems	Define the world's major political systems, including monarchy, totalitarian dictatorship, presidential system, and communism.		
8 SS 1.7.02	Political and Economic Systems	Define the world's major economic systems, including capitalism, mixed economy, socialism, and command economy.		
8 SS 1.8.01	International Relations	Identify nations that play a significant role in U.S. foreign policy.		
8 SS 1.8.02	International Relations	Define foreign policy and describe ways nations interact diplomatically, including treaties, trade, humanitarian aid, and military intervention.		
8 SS 1.8.03	International Relations	Describe the purpose of the United Nations.		
8 SS 1.8.04	International Relations	List and describe nongovernmental international organizations, such as the World Bank, Amnesty International, and the International Red Cross.		
8 SS 2	ECONOMICS			
8 SS 2.1.01	Economic Way of Thinking	Use the concept of opportunity cost to evaluate the tradeoffs when choices occur.		
8 SS 2.1.02	Economic Way of Thinking	Explain that self-interest is a motivational factor when people respond to incentives.		
8 SS 2.1.03	Economic Way of Thinking	Identify the additional benefits and the additional costs that result from choosing a little more or a little less.		
8 SS 2.1.04	Economic Way of Thinking	Evaluate career paths by comparing costs and benefits.		
8 SS 2.2.01	Measuring US Economic Performance	Explain gross domestic product (GDP) and how it is used to describe a country's economic output.		
8 SS 2.2.02	Measuring US Economic Performance	Given data on population and GDP for several countries, determine their per capita GDP, and compare with the U.S.		

Identifier	Poplar - Grade 8 - Social Studies		Introduced	Completed
8 SS 2.2.03	Measuring US Economic Performance	Use the consumer price index (CPI) to compare the buying power of the U.S. dollar in one year with its buying power in another year.		
8 SS 2.2.04	Measuring US Economic Performance	Identify the unemployment rate as the percentage of people in the labor force who are not working, but who are actively pursuing work.		
8 SS 2.2.05	Measuring US Economic Performance	Distinguish between a high rate and a low rate of unemployment for the U.S. economy over time.		
8 SS 2.2.06	Measuring US Economic Performance	Explain why riskier loans command higher interest rates than safer loans.		
8 SS 2.2.07	Measuring US Economic Performance	Distinguish between high and low interest rates for the U.S. economy over time.		
8 SS 2.2.08	Measuring US Economic Performance	Identify career fields that are experiencing growth and career fields that are experiencing decline.		
8 SS 2.3.01	Functioning of Markets	Give examples of markets in which people benefit from trade.		
8 SS 2.3.02	Functioning of Markets	Explain how supply and demand function to determine market prices.		
8 SS 2.3.03	Functioning of Markets	Explain why buyers demand less yet sellers supply more when prices go up.		
8 SS 2.3.04	Functioning of Markets	Explain why buyers demand more yet sellers supply less when prices go down.		
8 SS 2.3.05	Functioning of Markets	Identify instances in which people might pay interest or receive interest.		
8 SS 2.3.06	Functioning of Markets	Explain the factors that should be considered when making individual purchasing decisions, given changes in prices.		
8 SS 2.4.01	Private US Economic Institutions	Explain the purposes and functions of financial institutions (e.g., to channel funds from savers to borrowers).		
8 SS 2.4.02	Private US Economic Institutions	Explain the purposes and functions of labor unions (e.g., collective bargaining).		
8 SS 2.4.03	Private US Economic Institutions	Explain the advantages and disadvantages of each of the three primary forms of business organizations: sole proprietorship, partnership, and corporation.		
8 SS 2.4.04	Private US Economic Institutions	Explain why not-for-profit organizations are tax exempt.		
8 SS 2.4.05	Private US Economic Institutions	Compare the rewards and risks of saving and borrowing money with several types of financial institutions.		
8 SS 2.4.06	Private US Economic Institutions	Investigate careers associated with financial institutions, labor unions, for-profit business organizations, and not-for-profit organizations.		
8 SS 2.5.01	Money	Illustrate how prices stated in money terms help people compare the value of products.		
8 SS 2.5.02	Money	Describe the transition from the use of commodities as money to the use of modern forms of money.		
8 SS 2.5.03	Money	Identify pros and cons of paying with cash versus using credit.		
8 SS 2.6.01	US Economy as a Whole	Explain ways in which households, schools, or community groups allocate resources.		
8 SS 2.6.02	US Economy as a Whole	Explain how consumer and producer reactions to price changes affect resource allocation.		
8 SS 2.6.03	US Economy as a Whole	Explain how the current utilization of a productive resource affects the availability of that resource in the future.		
8 SS 2.6.04	US Economy as a Whole	Explain the circular flow of economic activity.		
8 SS 2.6.05	US Economy as a Whole	Identify factors that can affect an individual's likelihood of being unemployed.		
8 SS 2.6.06	US Economy as a Whole	Explain that the wage an individual earns is affected by his or her productivity and by the market value of the goods or services he or she produces.		
8 SS 2.6.07	US Economy as a Whole	Identify a career path of interest and explain how the associated earnings are affected by the market.		
8 SS 2.7.01	Evolving Economy	Explain how investment improves standards of living by increasing productivity.		
8 SS 2.7.02	Evolving Economy	Describe the advantages and disadvantages of being an entrepreneur.		
8 SS 2.7.03	Evolving Economy	Illustrate how competition among sellers decreases prices, while competition among buyers increases prices.		
8 SS 2.7.04	Evolving Economy	Give examples of how specialization is facilitated by trade.		
8 SS 2.7.05	Evolving Economy	Give examples of ways investment can improve students' performance in school, sports, etc.		
8 SS 2.8.01	Role of Government in a Market Economy	Give examples of the kinds of goods and services that government provides.		

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8 SS 2.8.02	Role of Government in a Market Economy	Give examples of activities that benefit participants, yet harm nonparticipants.		
8 SS 2.8.03	Role of Government in a Market Economy	Identify methods by which government redistributes income.		
8 SS 2.8.04	Role of Government in a Market Economy	Give examples of ways government protects property.		
8 SS 2.8.05	Role of Government in a Market Economy	Describe how paying sales, property, and income taxes affects the amount of money an individual has available for spending.		
8 SS 2.9.01	International Economy	Explain how governments use tariffs or quotas to restrict trade.		
8 SS 2.9.02	International Economy	Describe how economic interdependence among countries affects standards of living in those countries.		
8 SS 2.9.03	International Economy	Compute prices of U.S. products in terms of other countries' currencies.		
8 SS 2.9.04	International Economy	Identify goods that would not be readily available in U.S. stores if there were no international trade.		
8 SS 3	GEOGRAPHY			
8 SS 3.1.01	Geographic Skills	Identify and define geographic problems and issues by asking geographic questions.		
8 SS 3.1.02	Geographic Skills	Use a variety of research skills, including field work and computer resources, to collect geographic information.		
8 SS 3.1.03	Geographic Skills	Create and prepare various forms of maps, graphs, diagrams, tables, or charts to organize geographic information.		
8 SS 3.1.04	Geographic Skills	Evaluate and analyze information obtained from a variety of geographic sources.		
8 SS 3.1.05	Geographic Skills	Make generalizations by developing and presenting combinations of geographic information to answer geographic questions.		
8 SS 3.2.01	World in Spatial Terms	Use map elements including scale, latitude and longitude, and projection, to identify and locate physical and human features in Montana, the U.S., and regions of the world.		
8 SS 3.2.02	World in Spatial Terms	Compare and contrast the characteristics and purposes of several types of maps, map projections, and other geographic representations.		
8 SS 3.2.03	World in Spatial Terms	Use maps, graphic representations, aerial photographs, satellite images, and computer resources to compare Earth's physical and human systems.		
8 SS 3.2.04	World in Spatial Terms	Construct maps and charts to display information about human and physical features.		
8 SS 3.2.05	World in Spatial Terms	Compare and contrast maps of similar areas for purpose, accuracy, content, and design.		
8 SS 3.2.06	World in Spatial Terms	Make and defend a spatial decision using basic geographic vocabulary and concepts.		
8 SS 3.3.01	Places and Regions	Describe the relationship between physical and human features, such as landforms and political boundaries.		
8 SS 3.3.02	Places and Regions	Relate how places and regions are important to the expression of cultural identity.		
8 SS 3.3.03	Places and Regions	Compare how cultural characteristics affect different points of view with regard to places and regions.		
8 SS 3.3.04	Places and Regions	Describe ways in which technology affects how cultural groups use places and regions.		
8 SS 3.3.05	Places and Regions	Explain the role regions have played in selected historical events.		
8 SS 3.3.06	Places and Regions	Describe how and why regions change over time.		
8 SS 3.3.07	Places and Regions	Apply the concept of region to examine current events.		
8 SS 3.4.01	Physical Systems	Explain how the physical processes within each of the four basic systems (atmosphere, lithosphere, hydrosphere, and biosphere) influence Earth's surface.		
8 SS 3.4.02	Physical Systems	Explain how natural hazards alter Earth's environments.		
8 SS 3.4.03	Physical Systems	Describe the interdependence among soil, climate, plant life, and animal life within ecosystems.		
8 SS 3.4.04	Physical Systems	Compare and contrast the biodiversity and productivity of various ecosystems on Earth.		
8 SS 3.4.05	Physical Systems	Formulate a hypothesis about the changing nature of an ecosystem and use appropriate research skills to draw conclusions.		
8 SS 3.5.01	Human Systems	Describe the characteristics of different populations through the use of key demographic concepts.		
8 SS 3.5.02	Human Systems	Define the reasons for human migration and settlement and explain the effects on places and cultures.		
8 SS 3.5.03	Human Systems	Describe how history has been affected by the movement of people, goods, and ideas.		
8 SS 3.5.04	Human Systems	Identify the different patterns of migration and settlement in developing and developed countries.		
8 SS 3.5.05	Human Systems	Describe the factors that influence the location and distribution of economic activities.		
8 SS 3.5.06	Human Systems	Identify a regional or international economic issue and explain it from a spatial perspective.		
8 SS 3.5.07	Human Systems	Compare the elements of economic development and quality of life between developing and developed countries.		

Identifier	Poplar - Grade 8 - Social Studies		Introduced	Completed
8 SS 3.5.08	Human Systems	Compare and contrast changes in cultural, political, and economic organizations over time.		
8 SS 3.5.09	Human Systems	Compare how conflict and cooperation among people contribute to political, economic, and cultural divisions on Earth's surfaces.		
8 SS 3.5.10	Human Systems	Identify international alliances and organizations that influence conflict and cooperation among independent nations.		
8 SS 3.6.01	Environment and Society	Describe and predict the regional or global impact of changes in the physical environment.		
8 SS 3.6.02	Environment and Society	Compare and contrast the opportunities and constraints that the physical environment places on human activity.		
8 SS 3.6.03	Environment and Society	Explain the role of technology in the human modification of the physical environment.		
8 SS 3.6.04	Environment and Society	Describe the patterns of change caused by human modification of the physical environments.		
8 SS 3.6.05	Environment and Society	Describe how humans prepare for and react to natural hazards.		
8 SS 3.6.06	Environment and Society	Identify and locate examples of renewable and nonrenewable natural resources.		
8 SS 3.6.07	Environment and Society	Select a resource and evaluate different viewpoints regarding its use.		
8 SS 3.7.01	Geographic Applications	Explain how different characteristics of people, places, and resources have affected events and conditions in the past.		
8 SS 3.7.02	Geographic Applications	Select a current event and relate it to the physical and human characteristics of place.		
8 SS 3.7.03	Geographic Applications	Examine a contemporary issue using geographic knowledge, skills, and perspectives.		
8 SS 3.7.04	Geographic Applications	Describe several future outcomes for a geographic issue and defend one possible solution.		
8 SS 4	HISTORY			
8 SS 4.1.01	Chronology	Describe how a current event is presented by multiple sources.		
8 SS 4.1.02	Chronology	Create a tiered time line.		
8 SS 4.2.01	History Skills	Frame historical questions that examine multiple viewpoints.		
8 SS 4.2.02	History Skills	Evaluate sources of historical information based on bias, credibility, cultural context, reliability, and time period.		
8 SS 4.2.03	History Skills	Read and use informational tools, including charts, diagrams, graphs, maps, political cartoons, photographs, and tables.		
8 SS 4.3.01	Prehistory to 400 CE	Explain the characteristics and environments of hunter-gatherer.		
8 SS 4.3.02	Prehistory to 400 CE	Identify significant characteristics of early agricultural societies, including farming and domestication of animals.		
8 SS 4.3.03	Prehistory to 400 CE	Locate ancient and classical civilizations in time and place, including China, Egypt, Greece, India, Mesopotamia, and Rome.		
8 SS 4.3.04	Prehistory to 400 CE	Describe achievements made by ancient and classical civilizations, including the Americas, China, Egypt, Greece, India, Mesopotamia, and Rome.		
8 SS 4.3.05	Prehistory to 400 CE	Describe the lifestyles of Montana's people.		
8 SS 4.4.01	1 CE to 1400	Describe the Viking exploration of North America.		
8 SS 4.4.02	1 CE to 1400	Describe contributions of and locate the Mayan, Aztec, and Incan civilizations.		
8 SS 4.4.03	1 CE to 1400	Describe the origin, traditions, customs, and spread of western and eastern world religions, including Buddhism, Christianity, Hinduism, Islam, and Judaism.		
8 SS 4.4.04	1 CE to 1400	Identify the characteristics of European feudalism.		
8 SS 4.5.01	1200 to 1750	Define the Renaissance in terms of science and fine arts.		
8 SS 4.5.02	1200 to 1750	Describe the lifestyles of Montana's Native American cultures.		
8 SS 4.5.03	1200 to 1750	Describe Native North American cultural regions, such as Southwest, Southeast, Northeast, Northwest, California, Great Basin, Plains, Plateau, Arctic, and Sub-Arctic.		
8 SS 4.5.04	1200 to 1750	Describe motivations for Scandinavian and European explorations, including all-water routes to Asia, trade, and religion.		
8 SS 4.5.05	1200 to 1750	Explain interactions among Native Americans, Europeans, and Africans.		
8 SS 4.5.06	1200 to 1750	Compare the lifestyles of Native Americans with those of the colonists.		
8 SS 4.5.07	1200 to 1750	Explain where and why colonies were established in the Americas by European nations and how those colonies were governed.		
8 SS 4.5.08	1200 to 1750	Describe lifestyles in the New England, Middle, and Southern colonies.		
8 SS 4.5.09	1200 to 1750	Describe the African slave trade.		
8 SS 4.6.01	1700 to 1865	Describe major inventions of the Industrial Revolution, including steam engine and textile machines.		
8 SS 4.6.02	1700 to 1865	Describe the effect of laws and taxes enacted by the British on the American colonies, including Stamp Act, Intolerable Acts, and Quartering Act.		
8 SS 4.6.03	1700 to 1865	Explain the major ideas expressed in the Declaration of Independence, including equality; right to change government; and life, liberty, and the pursuit of happiness.		
8 SS 4.6.04	1700 to 1865	Describe key people and events of the American Revolution, including King George III, George Washington, Lexington and Concord, Battle of Saratoga, and Valley Forge.		
8 SS 4.6.05	1700 to 1865	Identify the Articles of Confederation.		

Identifier	Poplar - Grade 8 - Social Studies		Introduced	Completed
8 SS 4.6.06	1700 to 1865	Explain why the Constitution was written.		
8 SS 4.6.07	1700 to 1865	Identify the principles of the Bill of Rights.		
8 SS 4.6.08	1700 to 1865	Define capitalism and free market economy.		
8 SS 4.6.09	1700 to 1865	Describe the early development of the United States government, including Washington's cabinet, Marbury v. Madison, and political parties.		
8 SS 4.6.10	1700 to 1865	Describe contributing factors in the development of a national identity, such as the cotton gin, Erie Canal, the factory system, immigration and nativism, Monroe Doctrine, railroads, telegraph, and War of 1812.		
8 SS 4.6.11	1700 to 1865	Identify key people and events in the social reform movements of antebellum United States, including Dorothea Dix, Horace Mann, Sojourner Truth, and Seneca Falls Declaration.		
8 SS 4.6.12	1700 to 1865	Recognize the development of an emerging United States culture, including contributions from literature, language development, poetry, and music.		
8 SS 4.6.13	1700 to 1865	Describe Manifest Destiny and the expansion of the United States, including Lewis and Clark and the Louisiana Purchase, Trail of Tears, the Battle of the Alamo, Treaty of Guadalupe-Hidalgo, Oregon and California Trails, Spanish Trail, Santa Fe Trail, Central Overland Trail, Mormon Trail, Donner Party, and California gold rush.		
8 SS 4.6.14	1700 to 1865	Describe the contributions of the explorers and settlers in preterritorial Montana and their influences on the future.		
8 SS 4.6.15	1700 to 1865	Describe the influences on the political and economic development of preterritorial Montana.		
8 SS 4.6.16	1700 to 1865	Define abolition and identify the key people and events of the movement, including Frederick Douglass, Harriet Tubman, Underground Railroad, and Sojourner Truth.		
8 SS 4.6.17	1700 to 1865	Identify the causes, key people, events, and outcome of the Civil War, including states' rights and slavery, President Lincoln, Emancipation Proclamation, Vicksburg and Gettysburg, Gettysburg Address, and Generals Grant and Lee.		
8 SS 4.6.18	1700 to 1865	Explain the events that led to Montana statehood.		
8 SS 4.7.01	1860 to 1920	Identify the 13th, 14th, and 15th Amendments to the Constitution.		
8 SS 4.7.02	1860 to 1920	Identify the Black Codes and Jim Crow Laws.		
8 SS 4.7.03	1860 to 1920	Discuss the interactions between settlers and Native Americans during the westward expansion, including Ghost Dance/Wounded Knee and Little Big Horn.		
8 SS 4.7.04	1860 to 1920	Describe the contributions of Native Americans in Montana and the United States.		
8 SS 4.7.05	1860 to 1920	Describe the western frontier, including communication (pony express and telegraph), farming and water issues, mining, ranching, and transportation.		
8 SS 4.7.06	1860 to 1920	Describe effects of industrialization and new technologies on the transformation of the United States, including steel industry, mass production, mechanized assembly line, and communication.		
8 SS 4.7.07	1860 to 1920	Identify American industrialists and their contributions, including Andrew Carnegie, Henry Ford, and John D. Rockefeller.		
8 SS 4.7.08	1860 to 1920	Identify immigrant and native groups involved in mining, ranching, railroads, and commerce in Montana and the United States.		
8 SS 4.7.09	1860 to 1920	Describe the goals and accomplishments of labor unions in Montana and the United States.		
8 SS 4.7.10	1860 to 1920	Describe the women's suffrage movement and the 19th Amendment.		
8 SS 4.7.11	1860 to 1920	Describe United States expansion, including Alaska, Hawaii, Panama Canal, and Spanish-American War.		
8 SS 4.7.12	1860 to 1920	Identify causes, outcome, and consequences of World War I, including Sarajevo, alliances and nationalism, weapons and tactics, and Treaty of Versailles.		
8 SS 4.8.01	1920 to 1945	Define totalitarianism.		
8 SS 4.8.02	1920 to 1945	Identify scientific and technological advancements and their impacts, including airplane, radio, automobile, and household appliances.		
8 SS 4.8.03	1920 to 1945	Explain how literature, music, and visual arts were a reflection of the time.		
8 SS 4.8.04	1920 to 1945	Describe the causes and effects of the Great Depression and the New Deal on life in the United States and Montana, including stock market crash, family life, and government programs.		
8 SS 4.8.05	1920 to 1945	Identify causes, effects, and outcome of World War II, including legacy of World War I, Pearl Harbor, Allies, Axis powers and leaders, atomic bomb, and United Nations.		
8 SS 4.8.06	1920 to 1945	Identify key elements of the Holocaust, including "Aryan supremacy," Kristallnacht, "Final Solution," and concentration and death camps.		
8 SS 4.8.07	1920 to 1945	Identify the effects of World War II on the home front in the United States and Montana, including end of the Great Depression, internment camps, rationing, propaganda, and "Rosie the Riveter."		
8 SS 4.9.01	1945 to 1990	Identify the Cold War, including Marshall Plan, Berlin Blockade, and NATO.		
8 SS 4.9.02	1945 to 1990	Identify the effects of the Cold War on the United States, including arms race and nuclear testing, McCarthyism, space race, and Cuban Missile Crisis.		
8 SS 4.9.03	1945 to 1990	Explain why the United Nations was involved in the Korean War and the outcome of its involvement.		
8 SS 4.9.04	1945 to 1990	Discuss how science and technology changed life in the United States after World War II, including television, electronics and computers, and medical advances.		
8 SS 4.9.05	1945 to 1990	Summarize the changes in the United States' demographics.		
8 SS 4.9.06	1945 to 1990	Describe the impact of the United States military in Montana.		

Identifier	Poplar - Grade 8 - Social Studies		Introduced	Completed
8 SS 4.9.07	1945 to 1990	Identify the major issues, events, and people of the modern Civil Rights movement in the United States and Montana, including Rosa Parks, Martin Luther King Jr., Brown v. Board of Education, voting rights, integration, Grant Sawyer, and César Chávez.		
8 SS 4.9.08	1945 to 1990	Identify the causes and effects of the Vietnam War, including Tet Offensive, Gulf of Tonkin Resolution, antiwar movement, draft and lottery, and POWs and MIAs.		
8 SS 4.9.09	1945 to 1990	Identify the significance to United States political culture of the following: Watergate, Iranian hostage crisis, Iran-Contra Affair.		
8 SS 4.9.10	1945 to 1990	Identify key people and events that contributed to the end of the Cold War, including recognition of China, détente, disarmament, and Strategic Defense Initiative.		
8 SS 4.9.11	1945 to 1990	Describe the significance of the breakup of the USSR, including fall of the Berlin Wall.		
8 SS 4.9.12	1945 to 1990	Describe the effects of tourism on Montana.		
8 SS 4.9.13	1945 to 1990	Identify examples of arts, music, literature, and the media in United States society.		
8 SS 4.10.01	1990 to Present	Describe scientific and technological developments, including personal computers, Internet, satellites, and medical advances.		
8 SS 4.10.02	1990 to Present	Describe major world, national, and local issues, including ethnic and religious conflicts, environmental issues, gaming, health issues, and water and resource allocation.		
8 SS 4.10.03	1990 to Present	Identify the causes and effects of the Persian Gulf War.		
8 SS 4.10.04	1990 to Present	Identify the role of the media in the changing political climate.		
8 SS 4.10.05	1990 to Present	Identify how literature, music, and the visual arts are a reflection of the time.		

Identifier	Poplar - Grade 8 - Science		Introduced	Completed
8 S 1	PHYSICAL SCIENCE			
8 S 1.1.01	Forces and Motion	Investigate and describe that multiple forces acting on an object along a straight line affect the motion of an object.		
8 S 1.1.02	Forces and Motion	Describe the force (gravity) which makes objects fall and planets move in their orbits.		
8 S 1.1.03	Forces and Motion	Investigate and describe that certain physical principles are used in the design and function of simple machines.		
8 S 1.1.04	Forces and Motion	Investigate and describe that buoyancy changes the apparent weight of an object immersed in a fluid.		
8 S 1.1.05	Forces and Motion	Investigate and explain that electric current produces magnetic forces, and moving magnets produce electric forces in conductors.		
8 S 1.2.01	Structure and Properties of Matter	Use simple models to explain observed properties of matter (e.g., use a particle model to account for the states of matter).		
8 S 1.2.02	Structure and Properties of Matter	Separate substances based on their physical and chemical properties (e.g., color, solubility, chemical reactivity, melting point, boiling point).		
8 S 1.2.03	Structure and Properties of Matter	Use models or drawings to explain how atoms may join together to form molecules or large groups of molecules.		
8 S 1.2.04	Structure and Properties of Matter	Explain that all atoms are made up of protons, neutrons, and electrons.		
8 S 1.2.05	Structure and Properties of Matter	Explain that liquids, solids, and gases are systems of particles.		
8 S 1.2.06	Structure and Properties of Matter	Explain that various elements combine in a multitude of ways to produce all known living and nonliving substances.		
8 S 1.3.01	Energy and Matter - Interactions and Forms	Interactions and Forms: Investigate and describe how heat moves from one object to another at different rates, depending on what the objects are made of and whether they are touching each other.		
8 S 1.3.02	Energy and Matter - Interactions and Forms	Interactions and Forms: Investigate and describe how all phase changes are accompanied by changes in energy.		
8 S 1.3.03	Energy and Matter - Interactions and Forms	Interactions and Forms: Investigate and describe how waves transfer energy and move at different speeds in different materials.		
8 S 1.3.04	Energy and Matter - Interactions and Forms	Interactions and Forms: Investigate, create, and describe parallel, series, and combination circuits.		
8 S 1.3.05	Energy and Matter - Interactions and Forms	Interactions and Forms: Investigate and describe how energy may be transferred into or out of a system or object in many ways and readily changes forms.		
8 S 1.3.06	Energy and Matter - Interactions and Forms	Interactions and Forms: Identify the energy involved in a particular process as potential (energy of position and stored chemical energy) or kinetic (energy of motion).		
8 S 1.4.01	Chemical Reaction	Investigate and describe how in chemical reactions, the total mass is conserved and the elements involved do not change into other elements.		
8 S 1.4.02	Chemical Reaction	Investigate and describe how the rate of a chemical reaction can be influenced by variables such as temperature, pH, and light.		
8 S 1.4.03	Chemical Reaction	Investigate and describe how materials may give off heat or light when they react chemically with each other.		
8 S 1.4.04	Chemical Reaction	Predict common properties of elements using the periodic table.		
8 S 1.5.01	Nuclear Energy and Electromagnetic Energy	Investigate and describe how light interacts with matter by moving through the matter, being absorbed by matter, or being scattered by the matter.		
8 S 1.5.02	Nuclear Energy and Electromagnetic Energy	Describe some applications of radioactive isotopes including using nuclear energy to produce heat.		
8 S 1.5.03	Nuclear Energy and Electromagnetic Energy	Compare and contrast between high and low level nuclear wastes and their associated hazards.		
8 S 1.5.04	Nuclear Energy and Electromagnetic Energy	Investigate and describe how the sun produces energy in a range of wavelengths within the electromagnetic spectrum.		
8 S 1.5.05	Nuclear Energy and Electromagnetic Energy	Compare and contrast the nuclear processes that occur in the sun and stars as well as in nuclear reactors.		
8 S 1.5.06	Nuclear Energy and Electromagnetic Energy	Explain how nuclear reactions convert small amounts of matter into a relatively large amount of energy.		
8 S 2	LIFE SCIENCE			
8 S 2.1.01	Structure and Function	Explain how disease is a breakdown in structures or functions of an organism due to intrinsic system failures or damage caused by infection.		
8 S 2.1.02	Structure and Function	Investigate and describe how multicellular living things have tissues, organs, and organ systems that are specialized to perform life functions.		
8 S 2.1.03	Structure and Function	Investigate and describe how cells, grow, divide, and take in nutrients, which they use to provide energy for cellular functions.		
8 S 2.1.04	Structure and Function	Investigate and describe how most organisms are composed of a single cell and others are multicellular.		
8 S 2.1.05	Structure and Function	Investigate and describe how plants have specialized structures and systems for a variety of functions.		
8 S 2.1.06	Structure and Function	Explain how information used to guide cellular functions is stored in DNA.		

Identifier	Poplar - Grade 8 - Science		Introduced	Completed
8 S 2.2.01	Internal and External Influences on Organisms	Explain how behavior may be innate or learned.		
8 S 2.2.02	Internal and External Influences on Organisms	Explain how an organism's behavior is based on experience and on the species' evolutionary history.		
8 S 2.2.03	Internal and External Influences on Organisms	Investigate and describe how behavior is one kind of response an organism can make to an internal or environmental stimulus.		
8 S 2.2.04	Internal and External Influences on Organisms	Explain how various viruses, bacteria, fungi, and parasites may infect the human body and interfere with normal body functions.		
8 S 2.3.01	Heredity and Diversity	Explain how heredity is the passage of genetic instructions from one generation to another.		
8 S 2.3.02	Heredity and Diversity	Classify organisms on the basis of similar characteristics, and explain the basis for such a classification system.		
8 S 2.3.03	Heredity and Diversity	Explain how new varieties of cultivated plants and domestic animals have resulted from selective breeding for particular traits.		
8 S 2.3.04	Heredity and Diversity	Explain how genetic information coded in DNA is passed through sexual or asexual reproduction.		
8 S 2.3.05	Heredity and Diversity	Explain how some patterns of inheritance can be explained by pairs of genes that separate when sex cells are formed.		
8 S 2.3.06	Heredity and Diversity	Identify that the basic level of biological classification is the species, which comprises all organisms that can mate with each other and produce fertile offspring.		
8 S 2.3.07	Heredity and Diversity	Explain how changes in the genes of sex cells can affect offspring.		
8 S 2.4.01	Evolution - Process of Biological Change	Explain that millions of species of animals, plants, and microorganisms are alive today.		
8 S 2.4.02	Evolution - Process of Biological Change	Investigate and describe how biological evolution provides a scientific explanation for the differences and many similarities between species.		
8 S 2.4.03	Evolution - Process of Biological Change	Investigate and describe how biological adaptations include changes that enhance survival and reproductive success in a particular environment.		
8 S 2.4.04	Evolution - Process of Biological Change	Investigate and describe how unity among organisms is found in similarities of internal structures, chemical processes, and modern evidence of common ancestry.		
8 S 2.4.05	Evolution - Process of Biological Change	Explain how extinction of a species occurs when the adaptive characteristics of a species are insufficient to allow it to survive environmental change.		
8 S 3	EARTH AND SPACE SCIENCES			
8 S 3.1.01	Earth Structures and Composition	Investigate and describe how rocks and minerals have different properties and characteristics.		
8 S 3.1.02	Earth Structures and Composition	Investigate and describe how the combination of constructive and destructive forces result in the formation of landforms.		
8 S 3.1.03	Earth Structures and Composition	Explain, using models, how Earth is layered with a crust, both continental and oceanic; hot, convecting mantle; and dense, metallic core.		
8 S 3.1.04	Earth Structures and Composition	Investigate and describe how soils have properties of color, texture, and capacity to retain water and provide nutrients for life.		
8 S 3.1.05	Earth Structures and Composition	Explain how the atmosphere is a mixture of particular gases, whose properties vary with elevation.		
8 S 3.1.06	Earth Structures and Composition	Explain that earthquakes, landslides, volcanoes, and floods are geologic phenomena.		
8 S 3.2.01	Earth Models	Describe how positions on Earth's surface can be located using latitude and longitude.		
8 S 3.2.02	Earth Models	Compare a variety of map types, and locate Montana and Montana features on each.		
8 S 3.2.03	Earth Models	Use a color-coded map to compare and contrast various geological features such as temperature, population density, geology, or precipitation.		
8 S 3.2.04	Earth Models	Identify the time of day in various places throughout the world, given the local time of day.		
8 S 3.3.01	Earth History	Explain how some changes on Earth's surface are due to slow processes and others due to rapid processes.		
8 S 3.3.02	Earth History	Investigate and describe how fossils provide important evidence of how life and environmental conditions have changed throughout geologic time.		
8 S 3.3.03	Earth History	Explain how Earth's processes we observe today are similar to those that occurred in the past.		
8 S 3.4.01	Cycles of Matter and Energy	Investigate and describe how the sun is the major source of energy for phenomena on Earth's surface (e.g., growth of plants, winds, ocean currents, and the water cycle).		
8 S 3.4.02	Cycles of Matter and Energy	Explain how global patterns of atmospheric movement, topography, and proximity to bodies of water influence local weather, and seasons are caused by variations in the amount of the sun's energy hitting the surface due to the tilt of Earth's axis.		

Identifier	Poplar - Grade 8 - Science		Introduced	Completed
8 S 3.4.03	Cycles of Matter and Energy	Explain how water, which covers the majority of Earth's surface, circulates through the crust, oceans, and atmosphere.		
8 S 3.4.04	Cycles of Matter and Energy	Simulate and describe how clouds, latitude, altitude, topographical features, and proximity to large bodies of water affect weather and climate.		
8 S 3.4.05	Cycles of Matter and Energy	Investigate and describe some changes that are reversible and others that are not.		
8 S 3.4.06	Cycles of Matter and Energy	Explain that the energy that Earth receives over geologic time approximately equals the energy that it loses.		
8 S 3.4.07	Cycles of Matter and Energy	Describe the relationships among geothermal and tectonic processes.		
8 S 3.5.01	Solar System and Universe	Investigate and describe the size, composition, and surface features of the planets in our solar system.		
8 S 3.5.02	Solar System and Universe	Investigate and describe how seasons, eclipses, moon phases, and tides are caused by the effects of relative motion and positions of the sun, Earth, and moon.		
8 S 3.5.03	Solar System and Universe	Explain that billions of galaxies form most of the visible mass in the universe.		
8 S 3.5.04	Solar System and Universe	Explain how various tools (e.g., optical and radio telescopes, unmanned robotic spacecraft) allow us to investigate objects in the sky that are too distant, faint, or bright to observe directly from Earth.		
8 S 3.5.05	Solar System and Universe	Investigate and describe the laws of motion and gravity and their development.		
8 S 4	ENVIRONMENTAL SCIENCES			
8 S 4.1.01	Ecosystems	Investigate and describe how living and nonliving components of ecosystems interact in various ways.		
8 S 4.1.02	Ecosystems	Characterize organisms in any ecosystems by their function.		
8 S 4.1.03	Ecosystems	Investigate and describe how the major energy source in most ecosystems is sunlight which is converted by producers into chemical energy.		
8 S 4.1.04	Ecosystems	Describe how geographically distinct ecosystems on Earth have similarities and differences.		
8 S 4.2.01	Natural Resources	Investigate and describe the identifying characteristics of renewable and nonrenewable resources.		
8 S 4.2.02	Natural Resources	Explain how some natural resources are limited in their abundance and/or accessible location (e.g., water in the desert).		
8 S 4.2.03	Natural Resources	Investigate and describe the location and distribution of various natural resources.		
8 S 4.2.04	Natural Resources	Investigate and describe how organisms alter their local environment through their use of natural resources.		
8 S 4.2.05	Natural Resources	Describe how unintended consequences of technologies can cause resource depletion and environmental degradation, but technology can also increase resource availability, mitigate environmental degradation, and make new resources economical.		
8 S 4.3.01	Conservation	Analyze different conservation options for Montana's resources.		
8 S 4.3.02	Conservation	Investigate and describe how in some ecosystems, populations of organisms are in dynamic equilibrium, and in other ecosystems they are not.		
8 S 4.3.03	Conservation	Evaluate how changes in environments can be beneficial or harmful.		
8 S 4.3.04	Conservation	Investigate and describe how actions which might affect Montana's environment can be evaluated in terms of trade-offs that may have regional, national, or global effects.		
8 S 5	THE NATURE AND HISTORY OF SCIENCE			
8 S 5.1.01	Scientific, Historical, and Technological Perspectives	Explain that scientific investigations involve the use of logic, respect for the rules of evidence, openness to criticism, and public reporting of methods and procedures.		
8 S 5.1.02	Scientific, Historical, and Technological Perspectives	Explain that scientific inquiry done in a school setting is similar to what scientists do.		
8 S 5.1.03	Scientific, Historical, and Technological Perspectives	Explain, using examples, that ancient peoples provided knowledge about the natural world that is still regarded as valid today, even though that knowledge may not have originated by scientific methods.		
8 S 5.1.04	Scientific, Historical, and Technological Perspectives	Explain that scientists may work in teams and some may work alone, but all communicate extensively with each other.		
8 S 5.1.05	Scientific, Historical, and Technological Perspectives	Explain that scientific inquiry and technological design have similarities and differences. Scientists propose explanations for questions about the natural world and engineers propose solutions relating to human problems, needs, and aspirations.		
8 S 5.1.06	Scientific, Historical, and Technological Perspectives	Explain that scientific knowledge is revised through a process of incorporating new evidence gained through continual investigation.		
8 S 5.1.07	Scientific, Historical, and Technological Perspectives	Identify and describe how science is subject to strengths and limitations related to other human social and intellectual activities.		

Identifier	Poplar - Grade 8 - Science		Introduced	Completed
8 S 5.2.01	Reasoning and Critical Response Skills	Identify and evaluate critically the use of statistics, data, and graphs.		
8 S 5.2.02	Reasoning and Critical Response Skills	Give examples of human activities with their associated benefits, costs, and risks.		
8 S 5.2.03	Reasoning and Critical Response Skills	Analyze and describe a system for efficiency, optimal function, and possible sources of malfunction.		
8 S 5.2.04	Reasoning and Critical Response Skills	Critically evaluate information to distinguish between fact and opinion when responding to information.		
8 S 6	SCIENTIFIC INQUIRY: PROCESSES AND SKILLS			
8 S 6.1.01	Systems, Models, Risk, and Predictions	Investigate and describe how different models can be used to demonstrate the same thing.		
8 S 6.1.02	Systems, Models, Risk, and Predictions	Use a model to predict change (e.g., stream table).		
8 S 6.1.03	Systems, Models, Risk, and Predictions	Identify and illustrate natural cycles within systems (e.g., water, planetary motion, climate, geological changes).		
8 S 6.1.04	Systems, Models, Risk, and Predictions	Analyze data from two groups, comparing both their middles and ranges.		
8 S 6.1.05	Systems, Models, Risk, and Predictions	Use a systematic approach to thinking critically about risks and benefits.		
8 S 6.2.01	Scientific Values and Attitudes	Explain why it is important to keep honest, clear, and accurate records.		
8 S 6.2.02	Scientific Values and Attitudes	Explain that hypotheses are valuable even if they turn out to be incorrect, if they lead to fruitful investigations.		
8 S 6.2.03	Scientific Values and Attitudes	Describe how different explanations can often be given for the same evidence, and it is not always possible to tell which one is correct.		
8 S 6.3.01	Communication Skills	Write clear, step-by-step instructions for a procedure.		
8 S 6.3.02	Communication Skills	Organize information in tables and graphs and describe the relationships they reveal.		
8 S 6.3.03	Communication Skills	Discuss scientific topics by paraphrasing, asking for clarification or elaboration, and expressing alternative positions using available multimedia resources.		
8 S 6.4.01	Scientific Applications of Mathematics	Explain that quantities can vary in proportion to one another (e.g., the ratio of mass to volume in the calculation of density).		
8 S 6.4.02	Scientific Applications of Mathematics	State the purpose of each step in a calculation.		
8 S 6.4.03	Scientific Applications of Mathematics	Estimate probabilities of outcomes in familiar situations.		
8 S 6.4.04	Scientific Applications of Mathematics	Select and use the appropriate SI unit for a particular measurement (e.g., meters for length, seconds for time, and kilograms for mass).		
8 S 6.4.05	Scientific Applications of Mathematics	Judge whether repeated measurements and computations of quantities are reasonably precise and accurate.		
8 S 6.4.06	Scientific Applications of Mathematics	Make predictions based on all known data from similar conditions.		
8 S 6.5.01	Laboratory Skills and Safety	Use instruments and laboratory safety equipment properly.		
8 S 6.5.02	Laboratory Skills and Safety	Handle and dispose of chemicals according to established standards.		
8 S 6.5.03	Laboratory Skills and Safety	Choose appropriate common materials for making and repairing simple mechanical constructions.		
8 S 6.5.04	Laboratory Skills and Safety	Keep an organized record of scientific investigations.		
8 S 6.5.05	Laboratory Skills and Safety	Use appropriate technology in laboratory procedures for measuring, recording, and analyzing data (e.g., computers, graphing calculators, and probes).		
8 S 6.5.06	Laboratory Skills and Safety	Design a controlled experiment.		