

Science

Based on the Science Ohio Model Competency-Based program.³

Kindergarten

The student will:

1. Given a set of pictures that tell a story, demonstrate understanding of observable patterns by explaining the meaning and sequence of the pictures.
2. Demonstrate an awareness of changes over time by describing an event or process that he/she has observed.
3. When presented with a new situation, ask "What if..." and "Why..." questions related to his/her understanding of the scientific concept in the situation.
4. Construct a recognizable simple model of a real object using familiar materials.
5. Describe the subtle differences between routines that have occurred on different day (e.g., meals, traffic, play).
6. Given several similar items which vary in size, contrast the objects using the terms long/short, big/small, and others.
7. Observe and describe familiar patterns and cycles (e.g., day/night, seasons, geometric patterns).
8. Presented with an unfamiliar occurrence or setting, make accurate observations without exaggeration.
9. Given an object or organism or a facsimile, be able to describe it in such detail that another learner may identify the object or organism from the description.

First Grade

The student will:

1. Given a situation in which a physical change is evident, observe and describe the physical change.
2. Follow a simple set of instructions to construct a useful item (e.g., bird feeder, and doorstep).
3. Given a set of familiar objects, design and describe categories and use them to organize the set.
4. Presented with unfamiliar situations or phenomena, ask questions related to cause and effect.
5. Given a familiar but unordered sequence of pictures that represent a physical change, describe the sequence using terms such as before, during, and after.
6. Use a classification system that he/she has previously developed to classify a new set of items, citing modifications of the systems as necessary.
7. Observe events in which the causes of the effects are not observable (e.g., magnets, static electricity, illness, respiration rate, wind), and ask questions about their effects.
8. Given a simple question regarding natural phenomena, suggest several places to find information that may lead to answers to the questions.

³ Sheppard, E., Wilson, K., et al. *Science Ohio Model Competency-Based program*. Columbus, OH: State Board of Education, 1994.

9. Provided with a suggested familiar organism, describe or draw a picture of a simple home for the organism and describe its contributions to meeting the needs of the organism.
10. Provided with a familiar object, describe the potential safe uses of the object.

Second Grade

The student will:

1. Observe living organisms (animals or plants) in the classroom and make several predictions related to their behavior or response to a stimulus.
2. Given the results of a simple investigation, suggest several new questions to investigate.
3. Discuss the basic needs of living things and describe the ways that organisms meet these needs.
4. Given a season of the year or local weather conditions, predict how different organisms will react.
5. Given an array of comparative scales and objects appropriate to the scales, contrast objects and suggest improvements in the scale being used.
6. Shown a natural event, ask several questions related to what happened and what may have caused it to occur.
7. Use an electronic instrument to record an event.
8. Select and use appropriate materials and tools to construct a useful device.
9. Compare the mass, dimensions, and volume of familiar objects and organisms using nonstandard measures.

Third Grade

The student will:

1. Decide what information is necessary to make a simple weather report, collect the information, and make the report.
2. Given a collection of evidence resulting from an event, seek clarification, and propose an explanation for the event
3. Describe an episode (e.g., storms, rolling and bouncing balls, hatching eggs, falling maplecopters) in terms of its duration and timing.
4. Use whole number counts and measures to compare and classify familiar objects.
5. Given several opportunities to observe, use both quantitative and qualitative descriptions to explain the attributes and behaviors of an object or organism.
6. Choose a sense-extending device to gather information from observations of an object, event, or organism.
7. Given a diverse collection of living and non-living things, distinguish between living and non-living things and provide justification for this classification.

Fourth Grade

The student will:

1. Given a repetitive pattern in nature (e.g., sound waves, seasons, phases of the moon, tree growth rings), describe the duration and timing of the pattern.

2. Discuss the impact of human activity in selected natural environments.
3. Given a diverse but familiar set of objects, prepare a simple key for another learner to use to distinguish between objects in the set.
4. Identify an example of an improbable, illogical event in a selected story and point out contradictions.
5. Given a series of related events, analyze the series and predict the next likely event.
6. Given a set of counts of objects or observations, construct a graphic representation and use it to make simple comparisons.
7. Create and follow a simple procedure to carry out an investigation.
8. Propose reasons why observations made by another learner may be different than hers/his.
9. Given a collection of working devices (e.g., scissors, shovel, crowbar, wheel, can-opener, bottle-opener), explain the function of a selected device and comment on its safe use.

Fifth Grade

The student will:

1. Using sense-extending devices, describe an object or organism not easily observed in terms of its attributes and behaviors.
2. Given data from a simple mechanical or biological system, describe how changing one component impacts the other components of the system.
3. Propose 'What if....?' questions regarding a simple physical change, design and test his/her questions, and cite and justify appropriate safety precautions.
4. Choose a simple technological device and describe the advantages and disadvantages to the user.
5. Given a question about a natural phenomenon, propose several sources of information that may assist in addressing questions about the phenomenon.
6. Choose and use appropriate tools to assemble and disassemble a simple mechanism or model.
7. Given data on the performance of consumer products, choose and defend their choice of a product based on performance data.
8. Trace the transmission, transformation, and conservation of various forms of energy in a simple system (e.g., food web, bicycle, kite, scissors, human body).

Sixth Grade

The student will:

1. Predict and test the effects of influences on the motion of selected objects (e.g., rubber band-powered vehicles, hygrometers, sailboats, tropisms, flowing water).
2. Provided with examples of patterns in natural phenomena (e.g., period of a pendulum, variation in populations, the spread of disease, Logo fractals, position of the moon, reflection, refraction, interference patterns), design and perform an investigation to document the constancy of the pattern.
3. Identify a community problem (e.g., recycling, water quality, animal and plant overpopulation and competition, extinction, urban growth, soil conservation,

- transportation issues, physical recreation opportunities) and propose a solution for that problem using information collected to support their proposal.
4. Given a collection of data presented in tabular or graphic form, make inferences to explain the events or phenomena from which the data was collected.
 5. Given the observations of witnesses and related evidence, identify the impact of different perspectives on explanations of an event.
 6. Presented with different versions of a historical event in science or technology, discuss the impact of scientific and social context at the time of the event.
 7. Given a set of data and a set of attendant conclusions, verify or refute the accuracy of the conclusions.

Seventh Grade

The student will:

1. Analyze and critique the science presented in the media (e.g., periodicals, advertisements, literary works, cinema, and public documents).
2. The learner will design and use procedures to test the suitability of various materials for different purposes.
3. Choose and use appropriate technologies to collect observations regarding a complex system (e.g., the atmosphere or an ecosystem) and use the observations to make predictions about the effects of changes made in various components of the system.
4. Presented with data on the consumption pattern of a resource in the local community, propose (e.g., written proposal, persuasive materials, videos) a strategy to manage the resource more efficiently and economically.
5. Construct, test, and trouble-shoot a set of procedures for younger learners to use to investigate a common natural phenomenon.
6. Given a set of data on an event or phenomenon, summarize the data in several meaningful ways (e.g., graphs, tables, narratives, and models).
7. Use scientific terminology appropriate to their developmental level to make predictions in a complex system (e.g., weather, ecosystems, inertial, energy).

Eighth Grade

The student will:

1. Presented with a structure or series of events (e.g., amusement park rides, changes of phase, porosity, permeability, toxicity, hazardous waste removal, enzymes, oxidation and reduction, threshold limits), analyze features related to the constancy and rates of change represented.
2. Construct a simple working model (e.g., Rube Goldberg apparatus, simple vehicles, energy conservation systems, stream tables, terraria, aquaria) of a macro-scale phenomenon.
3. Presented with data on the motion of several objects (e.g., celestial bodies, freely falling objects, projectile motion, vehicular motion), construct a visual representation that can be used to predict the motions of the objects at subsequent times.
4. Given a learner-identified issue of local community importance (e.g., air pollution, pesticides, chemical exposure, radon, abandoned hazardous waste sites, transmission

lines, landfills), collect information and observations and take action on a decision made regarding the issue.

5. Provided with several objects or organisms and the appropriate key, identify the organisms or objects.
6. Given data collected by self and others regarding changes over long time frames (e.g., corrosion, succession, erosion, glaciation), construct a model of the changes that have occurred.
7. Create a blueprint, sketch, or map (e.g., street, topographic, electric field, magnetic field, acoustical, thermal) for other learners to use and follow directions using a blueprint, sketch, or map provided by other persons.

Ninth Grade

The student will:

1. Presented with appropriate charts, graphs, and other representations of changes in a dynamic system (e.g., rates of reaction, absorption and emission, homeostasis, momentum, energy, ecological balance in nature, carrying capacity, energy cells, climate, displacement and velocity) describe the type and rate of change represented.
2. Test a physical or mathematical model of a pattern, structure, or behavior (e.g., energy content of foods, gas laws, conservation of energy and momentum, home energy consumption, planetary motion, earthquakes, circuit laws, genetic probabilities).
3. Collect data on variability in a dynamic system (e.g., metabolic data, resistance to infection, spectra from various sources, reflection and refraction with various materials, moisture capacity of the air, planetary orbits, changing strategies for energy production and use, the Bernoulli principle, the Doppler effect) and explain how the system remains predictably constant.
4. Access primary and secondary data from remote sources (e.g., weather satellites, radio telemetry, seismographs, radar, and sonar) and make inferences and predictions that are possible from that data.
5. Given a learner-identified potential hazard (e.g., ground water contamination, air pollution, disposal of hazardous wastes), the learner will design an investigation of the hazard, collect data in the form of surveys and empirical data as a member of a research team, and present the results of the investigation.
6. The learner will compare and contrast diverse structures and their associated functions (e.g., geological formations, chemical structures, engineered structures, ecosystems, and subatomic structures).
7. Presented with different versions of a historical event in science or technology (e.g., Wallace and Darwin and natural selection, Edison and Tesla and electric current, Lyell and Wegener and geological theories), the learner will discuss the impact of social and scientific context at the time of the event.

Tenth Grade

The student will:

1. Presented with data representing the change over a period of time (e.g., earth spin changes and equinox procession, pendulum motion, stream bed and delta building,

- thermal cooling and heating, influences on life cycles) construct a testable hypothesis regarding the nature of the change and conduct an experiment to test it.
2. Identify and discuss structure/function relationships in complex systems (e.g., physiological systems, biotechnological systems, aeronautical systems, energy production and transmission systems, communications systems, transportation systems, waste management systems) with appropriate community and field experts.
 3. Provided with data (e.g., linear motion, population fluctuations, solubility, pH, diversity of life over geologic time, inverse square law, rates of reactions) in graphic form, transform the data into another form that is useful in understanding the phenomenon.
 4. Given performance data on several consumer products, analyze the effectiveness and efficiency of the products and recommend improvements to the manufacturer.
 5. Demonstrate skill in the use and interpretation of data from various technologies (e.g., blood pressure apparatus, graphing calculators, high-power microscopy, computer-based interfaced sensors and software, analog and digital instruments, telescopes, weather instruments, satellite telemetry, Vernier scale instruments, oscilloscopes).
 6. Demonstrate an understanding of the kinetic model of matter by describing its effects on the interactions and transformations in living and nonliving systems (e.g., adiabatic changes, endothermic and exothermic processes and organisms, diffusion and osmosis, changes of phase, water, carbon and nitrogen cycles).
 7. Given a set of data on the behavior of mechanical and electromagnetic waves and their interactions with matter (e.g., absorption, transmission, reflection, refraction, diffusion, polarization), prepare and present an evaluation of the strengths and limitations of the wave and particle models to explain these behaviors and interactions.

Eleventh Grade

The student will:

1. Collect and interpret data utilizing various sources and techniques on an event or phenomenon that occurs over a period of time (e.g., continental drift, mountain building, weather patterns, radioactive dating, Doppler shift of stellar emissions, structural fatigue in physical systems, population shifts).
2. Given a collection of data (e.g., motion of objects, populations of organisms, observed characteristics of objects and organisms, astronomical data, behavioral patterns, environmental and habitat changes) propose an organizational structure for a database of the information that is useable by other learners.
3. Given a set of learner-collected data concerning the transformations of matter and energy (e.g., thermoelectric effect, heat pumps and refrigeration, energy and materials transport in cell processes, matter to energy transformation through nuclear radiation, rock cycle, consumer uses of electricity), construct a model which adequately represents the transformation.
4. Design an investigation of a natural phenomenon (e.g., soil structure, curvilinear motion, and competition among living things, reproductive strategies in various organisms) and organize a research team to perform, summarize, and present the results of the investigation to an appropriate audience.

5. Provided with an example of a living area or workplace, propose practices to minimize potential hazards and risks to inhabitants.
6. Develop an evidence-based position regarding a scientific issue (e.g., genetic engineering, communicable diseases, resource management, funding for cutting-edge technology) and present a persuasive argument in a written or oral format.
7. Demonstrate an understanding of the concept of entropy by applying the concept to describe the effects of interactions and transformations on the structure and function of living and nonliving systems.

Twelfth Grade

The student will:

1. Given contradictory observations of a phenomenon (e.g., diversity of plant coloration in a local area, analysis of collision events, micromechanics of corrosion, patterns of ocean tides, energy flows in an electrochemical system, energy relationships in cells), present a complete proposal for testing an hypothesis including clear statement of the, appropriate hypotheses, complete scientific procedures, data collection methods, analysis protocols and communication plans as a member.
2. Demonstrate understanding of a model of a concept or phenomenon (e.g., micromolecular structure of DNA, speciation, the photoelectric effect, quantum-mechanical model of matter, and energy, genetics and growth, interactions in fault structures, the special and general theory of relativity) by translating between physical, verbal, and mathematical presentations, expressing the essential components of the models, interactions between components, and limitations of the model.
3. Demonstrate the use of a standard classification system to accurately predict properties, interactions, and analyze data (e.g., use the Standard Model to predict allowable interactions and observable properties of fundamental particles, use the IUPAC system to analyze the structure of organic crystals, use the H-R Diagram to analyze the relative age of observed stars, use the periodic table to predict properties and interactions among and between various elements, use a biological classification system to predict the genetic correlation between groups of organisms, use EM spectra to predict levels of hazard associated with exposure to various EM regions over time).
4. Construct and present a summary of human impacts on the environment when provided with data collected from the area.
5. Implement a plan for the management of a system over a period of one month or more (e.g., a solar powered structure, a marine aquarium, a robot, his/her body, an automobile, a compost system, a swimming pool) that is based upon learner-collected information and data.
6. Relate the impact of historical scientific discoveries to the issues confronting contemporary society (e.g., vaccinations, plastics, xerography, polarizing filters, military technologies, nuclear energy, earthquakes, anesthesia, antiseptics) using a persuasive presentation of a fully-developed position.
7. Demonstrate an understanding of the overarching organization in the universe (e.g., relativity, entropy, chaos, grand unification theories) by applying an organizer to describe interactions and transformations in living and nonliving systems.

Social Studies

Based on Social Studies, Ohio's Model Competency-Based Program⁴

Kindergarten

The student will:

1. When asked to describe events about family, school, or neighborhood, classify the events as past, present, or future.
2. When discussing people, indicate at least two different roles people have in the community.
3. Identify similarities or differences in stories or music of at least two other cultures.
4. Given a want, identify a good or service that will satisfy that want.
5. Identify at least two individuals who are helpful to people.
6. Given the opportunity, work independently to accomplish a task.

First Grade

The student will:

1. After listening to an historical narrative, identify what happened in the beginning, the middle, and the end.
2. Given a change in the community, indicate how members of the community are affected.
3. Given a map, identify a common physical or human feature found in at least two places around the world.
4. Given a want, identify choices people make to satisfy that want when a particular good or service is not available.
5. Given a rule in a particular setting, identify why that rule is needed.
6. Exhibit citizenship traits as evidenced in part by:
 - a. being trustworthy.
 - b. demonstrating accountability for actions.
 - c. displaying self-direction.
 - d. showing pride in his/her accomplishments.

Second Grade

The student will:

1. After examining an historical artifact, document, identify something that is known about the item and raise questions based on his/her examination.
2. Given photographs of people from various cultures, identify ways in which they are similar and different

⁴ Lane, J., Ubbelohde, C. et al, *Social Studies, Ohio's Model Competency-Based Program*. Columbus, OH: State Board of Education, 1994.

3. Given stories about how different groups of Americans and people from other countries have faced similar problems, compare how the people attempted to solve their problems.
4. Given a good or service, identify ways that people may obtain it.
5. Given a task, explain how a group can be organized to accomplish the task.
6. Given a task, work within a group to accomplish the task.

Third Grade

The student will:

1. Given a set time period and a narrative about the community, record changes that occurred.
2. Given the population of the local community, describe cultural groups that live there
3. Given a map of the local community, locate physical and human features.
4. Given a consumer decision, itemize the costs and benefits of alternative choices, including opportunity cost.
5. Given an example of a local governmental activity, describe how the activity addresses a purpose or purposes of government.
6. Work with others to govern a group activity, as evidenced in part by the capacity to:
 - a. help create rules.
 - b. select leaders.
 - c. follow directions and rules.

Fourth Grade

The student will:

1. Select an individual or event from Ohio's history and explain the significance of that individual or event for Ohio's development.
2. Identify various kinds of cultural groups that have lived or live in Ohio and describe their contributions to the development of the state.
3. Choose a foreign nation and provide examples of political and economic ties Ohio has with that nation.
4. Locate places on a map by using a grid location system and a direction finder.
5. Identify and classify the factors of production needed to produce a given good or service.
6. Given an example of a state governmental activity, describe how the activity addresses a purpose or purposes of government.
7. Given a series of statements about public issues or policies, identify whether each is a statement of fact or opinion.

Fifth Grade

The student will:

1. Identify significant individuals from the past in North America and explain their contributions to the cultural heritage of the United States.
2. After reading about individuals who represent a cultural group, draw inferences about the experiences, problems, and opportunities the group encountered in the past.

3. Given a choice among changes in landforms, climate, natural vegetation, or resources, discuss the positive or negative consequences of a change occurring in one of the choices.
4. Given maps of North America, identify and compare physical and cultural regions.
5. Select an example of producers and consumers exchanging goods or services and indicate the benefits of the exchange for each group.
6. Given examples of political activity, discuss how they illustrate characteristics of American democracy.
7. Analyze information on civic issues by organizing key ideas with their supporting facts.

Sixth Grade

The student will:

1. Identify a significant individual from a different region of the world and discuss cause and effect relationships surrounding a major event in the individual's life.
2. After selecting two societies, compare the roles of women, religious ideas, and class structures in those societies.
3. Given a world map, identify physical and cultural regions and show relationships among regions.
4. Given information about global resource distribution, use the information to make generalizations about why nations engage in international trade.
5. Given characteristics of government, classify the characteristics as typical of a monarchical, democratic, or dictatorial type of government.
6. Identify and analyze alternatives through which civic goals can be achieved by working with others to choose the best alternative.

Seventh Grade

The student will:

1. Given significant developments in history through 1490, explain their contribution to our cultural heritage.
2. Given information about three cultures from different continents, identify common characteristics as well as differences.
3. Cite examples of interdependence between regions.
4. Discuss how countries address problems presented by the uneven distribution of resources.
5. Select a society and present evidence of a development of democratic ideas or individual rights.
6. Cooperate in reaching group goals by identifying and analyzing alternatives through which the goals can be achieved and by helping to choose the best alternative.

Eighth Grade

The student will:

1. Given an historical narrative, select significant changes which occurred during the time period of the narrative, discuss the importance of those changes, and place the

changes on a time line while raising questions about possible cause and effect relationships.

2. Given significant developments in history from 1490 to 1815, explain their contributions to the cultural heritage of the United States.
3. Given information about cultures on three different continents between 1490 and 1815, select and compare two of the following:
 - a. art, literature, and music.
 - b. science and technology.
 - c. philosophical and religious ideas.
4. Select and explain the significance of political, economic, or ideological connections between different parts of the world.
5. Given a level of government, identify a service typically provided by that level and a tax typically used to support government at that level.
6. Given the United States Constitution, select a portion of the document and explain the events, issues, ideas, and/or documents that influenced the development of the selected portion.
7. Given a citizen concern, identify the level and branch of government responsible for addressing the concern.
8. Given a set of criteria, evaluate the actions of public officials.

Ninth Grade

The student will:

1. Given significant events in history between 1815 and 1919; ascertain whether or not "lessons" of the past pertain to similar situations in modern times.
2. Given information about cultures on three different continents between 1815 and 1919, select and compare at least three of the following:
 - a. art, literature, and music.
 - b. customs, traditions, and social developments.
 - c. philosophical and religious ideas.
 - d. relationship to the environment.
 - e. science and technology.
3. Select and discuss the contributions of a cultural group or a representative individual to American society.
4. Given the time period between 1815 and 1919, cite and explain at least one example each of social, economic, and political interdependence.
5. Given access to background information, compare the efforts of the United States government with governments in other nations to promote competition, to protect national economic interests, or to regulate economic activity.
6. Given a list of reforms enacted in the United States between 1815 and 1919; identify two and explain how they helped to make the United States government more democratic.
7. Given selected narratives, determine whether they include examples of propaganda and describe the propaganda techniques being used.

Tenth Grade

The student will:

1. Given significant events since 1919, analyze their influence on current situations.
2. Given competing narratives, compare the significant differences in the interpretations presented and explain why she/he prefers one to the other, prefers both, or prefers neither by evaluating the strengths of the arguments contained in the narratives.
3. Given the interpretations of the United States as a "melting pot" versus a "salad bowl", determine which interpretation makes the most sense to him/her or develop his/her own interpretation and support one view with evidence from the experiences of several cultures in the United States.
4. Given specific past or present events, explain how events in one region of the world can affect other regions or even have global implications.
5. Given arguments for and against free trade, create and compare the implications of two scenarios:
 - a. one in which barriers to free trade are enacted, and
 - b. one in which free trade is practiced.
6. Given a condition of inflation or unemployment, indicate strategies the government may use to counteract the condition and explain how the strategies would be appropriate.
7. Analyze governmental actions with respect to individual rights and explain the importance of individual rights and responsibilities in a free society.
8. Given significant issues facing the United States today, identify several ways citizens can impact these issues.

Eleventh Grade

The student will:

1. Given a series of related historical events or a single historical event, project how other choices made in those instances would have different consequences for today.
2. Given examples of prejudice, identify ways to deal with their manifestations.
3. Use an historical or current event to illustrate the intended or unintended impact of technology on the environment.
4. Given an allotted income, a savings plan, and a list of expenses, prepare a personal or family budget and analyze the opportunity costs or tradeoffs involved in budget decisions.
5. Given a good or service, indicate factors influencing demand for and supply of the good or service.
6. Analyze governmental actions in terms of the fundamental principles of American democracy and evaluate the extent to which the actions reflect the principles.
7. Given a question concerning public policy, outline a plan, along with its costs and benefits, to participate in the governmental process and advance the interests of a particular group.

Twelfth Grade

The student will:

1. Given an issue, demonstrate an ability to solve problems by being able conduct research, develop alternative strategies, determine the strategy most likely to result in a successful resolution, communicate with appropriate people, act on the strategy determined to resolve the issue, and evaluate the impact of the strategy undertaken.
2. Given an issue, demonstrate the ability to use knowledge and skills from appropriate social studies disciplines in researching and developing solutions to the issue.
3. Given an issue, demonstrate an ability to consider various perspectives when researching and developing solutions to the issue.
4. Given an issue, propose alternative solutions to problems associated with the issue.

Comprehensive Arts

*Based on the Foreign Languages: Ohio's Model Competency-Based Program.*⁵

Kindergarten

The student will:

1. Create/perform arts forms using a variety of materials, tools, structures, and subjects and reflect on the process.
2. Collect information through observation and questioning to describe similarities and differences in natural and human-made forms, sounds, and events.
3. Classify arts forms within a personal, cultural, or historical context.
4. Collect information through observation and questioning to describe the various uses and preferences for the arts in daily experiences.
5. Describe and interpret the subject matter and/or sensory and structural qualities in arts forms within the human-made and natural environments.
6. Choose criteria for evaluating art forms and apply the criteria to selected arts forms, including their own.

First Grade

The student will:

1. Investigate materials, tools, structures, processes and subjects to discover how they are used by artists and the learner to create arts forms.
2. Discover their own cultural heritage by analyzing and comparing examples of arts forms from various cultures and historical periods.
3. Create and evaluate arts forms that represent a response to the environment based on the development of personal criteria.
4. Provide an explanation for preferences and choices to gain an understanding of the influences impacting choice.
5. Discover the interdependence of the natural and human-made environment by analyzing where living and non-living forms effectively exist together.
6. Develop criteria for evaluating arts forms and assess selected works using that criteria.
7. Identify various uses of the arts in daily experiences and describe characteristics that make the arts forms suitable for a specific use.

Second Grade

The student will:

1. Make informed choices in using materials, tools, techniques, procedures, structures, processes, and subject when creating, assessing, or revising art works.
2. Discover the history and meaning of arts forms and specific works of art by collecting information from a variety of sources.

⁵ Amino, T., et al., *Foreign Languages: Ohio's Model Competency-Based Program*, OH: State Board of Education, 1996.

3. Identify some of the arts forms and specific works of art they have most enjoyed studying and discuss reasons for those selections.
4. Analyze ways a culture(s) can impact the natural environment.
5. Explain processes by which they solve artistic problems.
6. Analyze characteristics of arts works and experiences and develop criteria for evaluating their effectiveness.

Third Grade

The student will:

1. Make predictions about the existence, as well as enduring features, of a natural or human-made form or event(s).
2. Document how they use personal and established criteria to modify, improve, and/or expand an artistic idea.
3. Prove through reasoning and their own work that artists make choices that impact the communication of an idea.
4. Select art works and organize an exhibit/performance based upon specific criteria and/or philosophical view.
5. Combine ideas with appropriate materials and techniques to create a work of art.

Fourth Grade

The student will:

1. Analyze the historical and cultural contexts and technological development of existing art forms.
2. Speculate about and identify the factors that could influence the personal and group decision-making process.
3. Develop a plan which contains specific criteria to evaluate a collection, exhibition, or performance.
4. Adapt a technique, process or arts form from another cultural group to produce artwork which is relevant to the individual or to her cultural group.

Fifth Grade

The student will:

1. Create a presentation on an artist, arts form, or artistic process, based on information from a variety of sources, and develop criteria to judge its quality.
2. Construct a portfolio to show evidence of the development and exploration of techniques, personal ideas, and criteria for assessment.
3. Select an arts issue or philosophy, organize key ideas, and debate its merit.
4. Debate the merit of the different technological formats used for transmitting arts forms.
5. Identify and explain the properties of a given work of art that serve to define its tradition and its historical and/or social context.

Sixth Grade

The student will:

1. Construct a portfolio to show evidence of the development and exploration of techniques, personal ideas, research, reflection, and philosophies.
2. Take an existing human-made creation, study the history of its development and analyze its elements, design, and structure; speculate about its form and use in the future; create a futuristic model of the form; and develop criteria for judging its effectiveness and the process that created it.

Seventh Grade

The student will:

1. Speculate about a future social political or environmental issue and create a prototype art form that contributes to the solution of this hypothetical situation.
2. Address a social, political, or environmental issue using two or more art forms to communicate ideas, and then defend the artistic choices using the schema of an assessment rubric.
3. Evaluate the effectiveness of a given art work and explain the criteria used
4. Review employment opportunities touched upon by the arts, determine arts careers involved, and develop an application portfolio for a selected career.
5. Develop a collection of information supporting a personal philosophical view of the arts in commercial media.

Eighth Grade

The student will:

1. Use one or more of the arts to create a personal chronology that speculates about a future career choice.
2. Select and research a culture and investigate the reciprocal influence between the arts forms (art, music, drama/theatre, and dance) and one of the following: science and technology or philosophical and religious ideas. In a public forum defend and provide evidence for the position.
3. Co-develop (with others), construct, test, evaluate, and trouble shoot a set of procedures for younger learners to investigate an artistic ideas or process; apply teaching and learning strategies to prepare a discover center in which students will select and investigate various arts forms and discuss their characteristics.
4. Develop criteria for judging the technological formats used to present, project, or transmit arts images and speculate about the impact of future technologies on the arts viewing and listening process.
5. Collaborate with others to select, research, and address a contemporary issue and to create an art work or performance that communicates a specific point of view.

Ninth Grade

The student will:

1. Develop or co-develop with others a presentation in one or more of the arts, grounding its artistic merit within historical, social, cultural, critical, and aesthetic parameters, and taking into account the merit of the arts form or arts concept in an in-depth manner.
2. Develop and present a self-profile which takes advantage of current available technological advances and provides information about her/his development as an artist and creative and critical thinker, and speculates about the application of attained knowledge, and skills in her/his life beyond high school.

Tenth Grade

The student will:

1. Locate recurring themes, images, or symbols used in works of art and speculate about the facts impacting their continuing presence; use a collection of works to substantiate his/her position.
2. Communicate information about a concept or problem encountered using multiple solutions/technologies and assess the effectiveness/impact of each approach.
3. Create a body of work, using a specific medium/technique, that reflects focus, exploration, and experimentation.
4. Document the ways in which the arts contribute to living and learning in the community.

Eleventh Grade

The student will:

1. Create or perform a body of work which contains and reflects exploration, experimentation, and development.
2. Present his/her own portfolio of work in terms of existing and recurring ideological themes, images, symbols, styles, and/or technologies.
3. Select a local arts event, work, structure, organization, or institution and judge its merit in terms of artistic, economic, social, political, and environmental aspects.

Twelfth Grade

The student will:

1. Develop and present a public exhibition or performance of personal work which represents the evolution of creative and critical thinking and the individual contributions to the arts form and subject it to an authentic review.
And/or
2. Organize a collection of personal art work, use specific criteria and/or evidence to identify its philosophical focus, stylistic features, and overall emphasis, and subject it to an authentic review.
3. Create a presentation strategy to implement a class/community defined arts project.

Foreign Language

*Based on Foreign Languages: Ohio's Model Competency-Based Program.*⁶

Kindergarten

o The student will:

1. Demonstrate the use of appropriate expressions and gestures for greetings, farewells, and other common or familiar classroom expressions.
2. Demonstrate comprehension of stories and songs through dramatization or other forms of creative expression.
3. Identify how people in the target culture(s) celebrate important traditions, holidays, or events.
4. Identify common objects in the environment after listening to an oral description (e.g., size, geometric shape, color).
5. Given a number of objects, demonstrate an understanding of number.
6. Demonstrate comprehension of simple directions and instructions by responding appropriately.
7. Demonstrate the ability to use time references to sequence events that occur throughout the school day and in the family.

First Grade

The student will:

1. Given oral and visual information about families of the target, culture(s), ask and answer oral questions about the information provided.
2. Follow oral instructions and sort objects according to attributes such as quantity, color size, shape, or weight.
3. Demonstrate gestures and courtesy expressions commonly used in both the target culture(s) and one's own culture.
4. Given visual cues, identify well-known persons, resources, products, and climate patterns of a country where the target language is spoken.
5. After listening to a song, poem, or story in the target language, point to pictures that correspond to oral descriptions.
6. Make a chart of Venn Diagram to illustrate similarities and differences between folk tales in the target culture(s) and one's own culture.

Second Grade

The student will:

1. Given visual cues, orally describe similarities and differences between houses of the target and home cultures.
2. Graphically illustrate (chart, Venn diagram) similarities and differences between family rituals of the target and home cultures.

⁶ Amino, T., et al., *Foreign Languages: Ohio's Model Competency-Based Program*, OH: State Board of Education, 1996.

3. After listening to a story/poem/song which portrays aspects of life in the target culture(s), orally summarize the main ideas.
4. Recite a poem/sing a song in the target language.
5. Demonstrate an understanding of the target culture such as people and their daily lives, houses, and natural environments through art, print, or drama.

Third Grade

The student will:

1. Graphically illustrate (e.g., by making a land form map) and label geographical features of the target language country (countries).
2. After viewing a typical event in the target culture (either live or on video), describe orally or in written form similarities and differences between the target and home cultures.
3. Write a list of questions that could be asked of a person of the target culture regarding topics such as daily routines, leisure time activities, meals, and traditional celebrations.
4. Role-playing a customer in a store in the target culture, inquire about prices and purchase items using the appropriate currency.
5. Through print, illustrate and describe symbols and signs used in the target culture(s).
6. Based on advertisements found in magazines/catalogs/newspapers of the target culture(s), prepare a chart to provide information regarding item descriptions and prices.
7. Communicate in writing (can via e-mail) on a regular basis (e.g., monthly) with a pen pal from the target culture.
8. Demonstrate understanding of a story, folk tale, or legend by asking and answering questions or retelling the story with or without visuals.

Fourth Grade

The student will:

1. Describe in writing a contribution made to the world community by the target culture(s).
2. Given a world map or globe, use oral language to compare Ohio and the target language country in terms of geographic location, climate, natural resources, exports, and imports.
3. Through an oral interview or written questionnaire, gather and summarize information given by persons from the target culture who have immigrated to the United States.
4. Measure and record distances, weights, and capacities of a variety of objects using the measuring system of the target culture(s).
5. Describe and compare common stereotypes of both the target and home cultures.
6. List prefixes and suffixes used in both the target language and English and orally explain how the affixes change meanings.
7. Continue to communicate in writing (can be via e-mail) on a regular basis (e.g., once a month) with a pen pal from the target culture.

8. Describe in writing the advantages of knowing how to communicate in the target language as well as in English.
9. After listening to a story read aloud, identify the main ideas and characters.

Fifth Grade

The student will:

1. Create two travel brochures in the target language: one to illustrate and describe attractions in the target country, and the other to illustrate and describe attractions in Ohio.
2. Collaborate in creating a class book with illustrations (photographs and/or drawings) and written descriptions of various aspects of daily life in the target culture(s).
3. After reading about the lives of famous persons of the target culture(s), summarize in writing and present orally information about one of the persons.
4. Collaborate in writing and acting out short skits that demonstrate appropriate language (including the use of idiomatic expressions) for a variety of contexts.
5. Collaborate in developing a booklet that lists target language resources (people, organizations) at the local, state, and national levels.
6. Continue to communicate in writing (can be via e-mail) on a regular basis (e.g., once a month) with a pen pal from the target culture.
7. Take notes while listening to information about the target culture given by a guest or on video; afterwards, the learner will use the notes to summarize the information shared.
8. Participate in a conversation about current events and issues of the target culture(s).

Sixth Grade

The student will:

1. Describe orally target culture behavior patterns as they relate to daily routines.
2. Collaborate with peers in writing and acting out short skits that demonstrate appropriate language (verbal and nonverbal) for both formal and informal settings typical of the target culture(s).
3. After reading an authentic fictional text (folk tale, poem, song, short story) in the target language, write a brief summary of the text and express personal feelings, emotions, or opinions relating to the text.
4. Use written authentic information (magazine or newspaper articles, personal letters, pamphlets, etc.) to write and present orally a report which compares issues that are common to both the local and target cultures.
5. Demonstrate understanding of maps, graphs, charts, and other visuals by responding to questions that require the learner to identify patterns, note trends, and draw conclusions.
6. Demonstrate understanding of an oral presentation in the target language by taking appropriate notes, asking and answering questions, and summarizing main ideas.
7. Prepare messages on video or audio tape to be sent to peers in the target culture(s) on topics of shared personal interest in their daily lives at home or at school.

8. Prepare and present a report on the target language country (countries) which includes geographical information, a description of significant historical events and people, and descriptions of aspects of daily life.

Seventh Grade

The student will:

1. Plan and participate in a celebration or other event typical of the target culture(s).
2. While participating in a conversation with peers and/or adults, exchange information about topics of mutual interest and share opinions about people, activities, and events.
3. Use information from authentic texts to write a report about events in the target culture(s).
4. Research authentic documents and present information (in a written/oral report, newsletter, dramatization, or other formal) which compares aspects of contemporary culture in the home and target cultures.
5. While listening to a sustained oral text, obtain information by using verbal and nonverbal cues, taking notes, requesting a rephrasing of words and expressions, and/or asking questions.
6. Collaborate with peers in creating and presenting a group project that describes and compares how artists in the home and target culture(s) portray universal themes such as love, friendship, beauty, and grief.
7. Create and explain a visual display which illustrates the influence of the target culture(s) on the home culture.
8. Write letters/e-mail messages to peers in the target country and exchange information/ideas/opinions relating to the life of adolescents in both the target and the home countries.

Eighth Grade

The student will:

1. Research authentic texts, write a report with illustrations, and present information orally about how people in the target culture(s) interact with their physical and social environment to meet their needs and wants.
2. Prepare a presentation (written report, poem, dramatization) which describes ways in which the learner's views about the target culture(s) have changed over time.
3. Prepare a report which relates information acquired from the foreign language classroom to a topic studied in another class.
4. Use information gained from authentic texts to develop a timeline which illustrates major contributions of the target culture(s) to the world community.
5. While participating in a conversation with peers and/or adults, effectively exchange information/opinions about causes and consequences of an historical event in the target language of the country (countries).
6. Collaborate with peers in the planning and presentation of a dramatization that compares the interpretation of an event by people in the home and target cultures.
7. Communicate (via letters, e-mail, short-wave radio, etc.) with peers in the target country and exchange information/ideas/opinions relating to world events both past and current.