STUDIO TIME SCIENCE WITH MR. B

SCIENCE AND MUSIC STATE STANDARDS

K-2 SCIENCE AND MUSIC STANDARDS

KINDERGARTEN SCIENCE STANDARDS

K.P.1.1 Give examples of different ways objects and organisms move (to include falling to the ground when dropped.)

K.P.2.1 Classify objects by observable physical properties (including size, shape, color, texture, weight, and flexibility.)

K.P.2.2 Compare the observable physical properties of different kinds of materials from which objects are made and how they are used.

K.E.1.2 Summarize daily weather conditions noting changes that occur from day to day and throughout the year.

K.E.1.3 Compare weather patterns that occur from season to season.

K.L.1.2 Compare characteristics of living and nonliving things in terms of their structure, growth, changes, movement, basic needs.

FIRST GRADE SCIENCE STANDARDS

1.P.1.1 Explain the importance of a push or pull to changing the motion of an object.

1.P.1.2 Explain how some forces (pushes and pulls) can be used to make things move without touching them, such as magnets.

1.P.1.3 Predict the effect of a given force on the motion of an object, including balanced forces.

1.E.1.1 Recognize differences in the features of the day and night sky and apparent movement of objects across the sky as observed from Earth.

1.E.1.2 Recognize patterns of observable changes in the Moon’s appearance from day to day.

1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.

1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.

1.L.2.1 Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth.

1.L.2.2 Summarize the basic needs of a variety of different animals (including air, water, and food) for energy and growth.

SECOND GRADE SCIENCE STANDARDS

2.P.2.1 Give examples of matter that change from a solid to a liquid and from a liquid to a solid by heating and cooling.

2.P.2.2 Compare the amount (volume and weight) of water in a container before and after freezing.

2.E.1.1 Summarize how energy from the sun serves as a source of light that warms the land, air and water.

2.E.1.2 Summarize weather conditions using qualitative and quantitative measures to describe temperature, wind direction, wind speed, precipitation

2.E.1.3 Compare weather patterns that occur over time and relate observable patterns to time of day and time of year.

2.L.1.1 Summarize the life cycle of animals

2.L.1.2 Compare life cycles of different animals such as, but not limited to, mealworms, ladybugs, crickets, guppies or frogs.

KINDERGARTEN MUSIC STANDARDS

K.ML.1.1 Exemplify proper technique when singing and playing a variety of music

K.ML.1.3 Execute simple rhythms using body, instruments, or voice

K.ML.1.5 Illustrate a steady beat

K.ML.3.2 Select vocal and/or instrumental sounds to accompany readings, stories or dramatizations

K.ML.3.3 Create patterns that illustrate a steady beat

K.MR.1.1 Use singing, playing, and/or moving to respond to a variety of musical ideas

K.MR.1.2 Recognize contrasts in music, such as high/low pitch, loud/soft dynamics, fast/slow tempo, and same/different sections of music

K.MR.1.3 Recognize that music is performed in a variety of settings and for a variety of purposes

K.MR.1.4 Illustrate different vocal timbres by type (whispering, speaking, singing, and shouting)

K.CR.1.2 Recognize the relationships between music and concepts from other areas.

FIRST GRADE MUSIC STANDARDS

1.ML.1.1 Use proper technique when singing and playing a variety of music

1.ML.1.2 Use accurate pitch to imitate three-pitch melodic patterns

1.ML.1.3 Execute rhythmic patterns using body, instruments, or voice

1.ML.1.4 Apply changes in dynamics and tempo when singing and playing music

1.ML.2.2 Execute three-pitch songs with voice and/or instruments

1.ML.3.2 Select a variety of traditional and non-traditional sound sources to accompany readings, stories, or dramatizations

1.MR.1.1 Use corresponding movements or actions to respond to prominent music characteristics (such as patterns in rhythm, melodic contour, dynamics, and form) while listening to and/or singing music

1.MR.1.3 Compare appropriate behaviors for different types of music performances (such as outdoor concerts, concerts with audience participation, vocal concerts, etc.)

1.CR.1.2 Understand the relationships between music and concepts from other areas

SECOND GRADE MUSIC STANDARDS

2.ML.1.2 Use accurate pitch to sing three-pitch patterns

2.ML.1.3 Execute extended rhythmic patterns using body, instruments, or voice

2.ML.1.4 Apply changes in music to the elements of dynamics, tempo, melody, and form

2.ML.3.3 Create rhythm patterns using half and quarter notes, half and quarter rests, and beamed eighth notes in duple and triple meter

2.MR.1.1 Illustrate prominent musical characteristics or specific musical events while listening to and/or singing music

2.MR.1.2 Illustrate melodic patterns, dynamics, and forms

2.MR.1.3 Illustrate audience and participant behavior appropriate for the purpose and setting that music is performed

2.CR.1.2 Understand the relationships between music and concepts from other areas

3-5 SCIENCE AND MUSIC STANDARDS

THIRD GRADE SCIENCE STANDARDS

3.P.2.1 Recognize that air is a substance that surrounds us, takes up space and has mass.

3.P.2.2 Compare solids, liquids, and gases based on their basic properties.

3.P.2.3 Summarize changes that occur to the observable properties of materials when different degrees of heat are applied to them, such as melting ice or ice cream, boiling water or an egg, or freezing water.

3.P.3.2 Recognize that energy can be transferred from a warmer object to a cooler one by contact or at a distance and the cooler object gets warmer.

3.E.1.1 Recognize that the earth is part of a system called the solar system that includes the sun (a star), planets, and many moons and the earth is the third planet from the sun in our solar system.

3.E.1.2 Recognize that changes in the length and direction of an object's shadow indicate the apparent changing position of the Sun during the day although the patterns of the stars in the sky, to include the Sun, stay the same.

3.L.1.1 Compare the different functions of the skeletal and muscular system.

FOURTH GRADE SCIENCE STANDARDS

4.P.1.1 Explain how magnets interact with all things made of iron and with other magnets to produce motion without touching them.

4.P.2.1 Compare the physical properties of samples of matter (strength, hardness, flexibility, ability to conduct heat, ability to conduct electricity, ability to be attracted by magnets, reactions to water and fire).

4.P.3.1 Recognize the basic forms of energy (light, sound, heat, electrical, and magnetic) as the ability to cause motion or create change.

4.P.3.2 Recognize that light travels in a straight line until it strikes an object or travels from one medium to another, and that light can be reflected, refracted, and absorbed.

4.E.1.1 Explain the cause of day and night based on the rotation of Earth on its axis.

4.E.1.2 Explain the monthly changes in the appearance of the moon, based on the moon's orbit around the Earth.

4.L.1.1 Give examples of changes in an organism's environment that are beneficial to it and some that are harmful.

4.L.2.2 Explain the role of vitamins, minerals and exercise in maintaining a healthy body.

FIFTH GRADE SCIENCE STANDARDS

5.P.2.2 Compare the weight of an object to the sum of the weight of its parts before and after an interaction.

5.P.2.3 Summarize properties of original materials, and the new material(s) formed, to demonstrate that a change has occurred.

5.P.3.2 Explain how heating and cooling affect some materials and how this relates to their purpose and practical applications.

5.L.1.2 Compare the major systems of the human body (digestive, respiratory, circulatory, muscular, skeletal, and cardiovascular) in terms of their functions necessary for life.

5.L.2.1 Compare the characteristics of several common ecosystems, including estuaries and salt marshes, oceans, lakes and ponds, forests, and grasslands.

5.L.2.2 Classify the organisms within an ecosystem according to the function they serve: producers, consumers, or decomposers (biotic factors).

5.L.2.3 Infer the effects that may result from the interconnected relationship of plants and animals to their ecosystem.

THIRD GRADE MUSIC STANDARDS

3.ML.1.1 Apply elemental changes, including changes to dynamics, tempo, timbre, or texture, when singing or playing music.

3.ML.1.2 Execute the performance of major scale tones using the voice.

3.ML.3.2 Create soundscapes using a variety of sound sources.

3.MR.1.1 Illustrate the corresponding response to conductor gestures for meter, tempo, and dynamics.

3.MR.1.2 Use musical terminology when describing music that is presented aurally.

3.CR.1.2 Understand the relationships between music and concepts from other areas.

FOURTH GRADE MUSIC STANDARDS

4.ML.1.1 Apply expressive qualities when singing or playing a varied repertoire of music representing genres and styles from diverse cultures.

4.ML.1.2 Execute the performance of vocal ostinatos, partner songs, counter-melodies, and rounds in two or more parts.

4.ML.2.1 Interpret rhythm patterns, including whole, half, dotted half, quarter, and eighth notes and rests in 2/4, 3/4, and 4/4 meter signatures.

4.ML.3.2 Create compositions and arrangements using a variety of traditional and non-traditional sound sources.

4.MR.1.1 Illustrate perceptual skills by moving to, answering questions about, and describing aural examples of music of various styles and cultures.

4.MR.1.3 Design a set of criteria for evaluating music performances and compositions.

4.CR.1.2 Understand the relationships between music and concepts from other areas.

FIFTH GRADE MUSIC STANDARDS

5.ML.1.1 Illustrate independence and accuracy while singing and playing instruments within a group or ensemble.

5.ML.1.2 Illustrate blending vocal timbres, matching dynamic levels, and responding to the gestures of a conductor while singing in groups.

5.ML.2.1 Interpret rhythm patterns, including whole, half, dotted half, quarter, dotted quarter, eighth, and sixteenth notes and rests in 2/4, 3/4, 4/4, and 6/8 meter signatures.

5.ML.3.2 Create compositions and arrangements within specified guidelines.

5.MR.1.1 Interpret through instruments and/or voice the gestures of the conductor, including meter, tempo, dynamics, entrances, cut-offs, and phrasing, when singing and playing music.

5.MR.1.3 Exemplify appropriate behaviors as a participant and observer of music in relation to the context and style of music performed.

5.CR.1.2 Understand the relationships between music and concepts from other areas.