Louisville Public Schools
Course Description-- Updated 2013

Name of Course:	Science 6 - General Science
Suggested Grade Level:	6
Term (Quarter/Semester/ Year)	Year
Suggested Prerequisites: (If any)	None

Summary of the Course
General science in sixth grade is a course in which students will discover general ideas on topics including plants, how living things interact, light and sound, electrical energy, elements and compounds, weather and climate, and physical science. After the first two units (plants and how living things interact) students will be given local assessments to monitor students' knowledge and understanding.

Learner Indicators
The successful students will...
• Formulate testable questions that lead to predictions and scientific investigations.
• Makes relevant observations and measurements
• Designs and conducts logical and sequential investigations including repeated trials.
• Determine controls and variables of the investigation

Learner Indicators
• Selects and use equipment correctly and uses it accurately.
• Collects and organizes data
• Follows safety instructions
• Communicate findings of investigation through report form
• Develops a reasonable explanation based on collected data.
• Design a basic idea for a lab extension.
<u>Physical Science:</u>
The successful student…
• Identify and describe how energy systems and matter interact.
• Recognize that vibrations set up wave like disturbances that spread away from the source
• Identify waves move at different speeds in different materials
• Knows that matter is made up of atoms and elements
• Recognize that light interacts with matter by transmission, absorption and scattering

Learner Indicators
• Explain what force and work is and how they relate.
<u>Life Science:</u>
The successful student…
• Know that plants and animals have unique structures that provide for their needs and enable them to live in different environments.
• Know that plants and animals can be classified according to structure and function.
• Explains the difference between asexual and sexual reproduction.
• Understands photosynthesis is the process in which plants get food.
• Knows the importance of the interdependence of plants, animals, and the environment
• Knows the earth is divided into biomes and describes the characteristics of the biomes.
• Understands the role of producers, consumers, and decomposers.
• Describes how plants and animals respond to environmental stimuli.
• Diagrams the flow of energy through a food web

Learner Indicators
Earth Science:
The successful student…
• Knows the earth's crust is formed by plates and the movement of the plates create specific physical features (mountains, trenches)
• Understand that the surface of the earth changes (erosion, volcanic eruptions, earthquakes, floods, droughts, mechanical weathering, chemical weathering)
• Classifies resources as renewable and nonrenewable and knows how the resources can be used.
• Knows the impact that humans have on the earth's resources.
• Knows the basic weather and climate cycle.
Science & Technology:
The successful student…
• Recognizes that science creates opportunities for inventions
• Recognizes that technology both creates and solves problems.

Learner Indicators
• Recognize that scientific explanations are based on evidence and scientific knowledge.
• Understands that new discoveries are always being made which impact scientific knowledge.
• Can describe how scientist go about their work
• Understands that new discoveries are always being made which impact scientific knowledge.
• Can describe how scientist go about their work

Additional Resources:

Foresman, Scott (2008). Science. Pearson Education Inc.