# PERFORMANCE DESCRIPTORS FOR MASTERY

# **5TH GRADE SCIENCE**

# Nature of Science:

#### SC.PD.5.1 Mastery

Fifth grade students at the mastery level recognize the research of historical and diverse scientists in society and culture; use careful methodology to observe, measure and record data as part of an investigation; demonstrate safe investigative techniques.

### Students will:

- Demonstrate an understanding of the history of science and the evolvement of scientific knowledge.
- Demonstrate an understanding of science as a human endeavor encompassing the contributions of diverse cultures and scientists.
- Demonstrate an understanding of the characteristics of a scientist.
- Demonstrate skills of scientific inquiry.

## **Content of Science:** SC.PD.5.2

#### Mastery

Fifth grade students at the mastery level identify and explain the function of living organisms, cells, and common energy conversions in cycles of matter; explore differences in niches and life cycles of organisms in an ecosystem that contribute to survival; find density experimentally; recognize that mass is conserved in physical changes; describe how the motion of objects are affected by variables; describe the structure of the earth and characterize the lithosphere and atmosphere; explore the earth's history using plate tectonics and relative dating; select the appropriate materials to design and test an electromagnet.

### Students will:

- Demonstrate knowledge, understanding and applications of scientific facts, concepts, principles, theories and models as delineated in the objectives.
- Demonstrate an understanding of the interrelationships among physics, chemistry, biology and the earth and space sciences.
- Apply knowledge, understanding and skills of science subject matter/concepts to daily life experiences.



### **Application of Science:**

#### SC.PD.5.3 Mastery

Fifth grade students at the mastery level compare the functioning of parts to the functioning of a model; report on a technological innovation; use the appropriate technology to collect scientific data; use two media sources to evaluate points of view regarding health, population, resources or environmental practices.

### Students will:

- · Explore the relationship between the parts and the whole system; construct a variety of useful models; examine changes that occur in an object or system.
- Demonstrate an understanding of the interdependence between science and technology.
- · Demonstrate the ability to utilize technology to gather data and communicate designs, results and conclusions.
- Demonstrate the ability to evaluate the impact of different points of view on health, population, resource and environmental practices.

# **5TH GRADE SOCIAL STUDIES**

#### **Geography:**

#### Performance Descriptors

#### Mastery

Fifth grade students at mastery level in geography:

measure distances in latitude and longitude, use a map scale and direction to describe location;

locate, identify and compare the regions, major rivers, landforms, natural resources and deserts of the United States and correctly locate the fifty states:

summarize the significance and contributions of immigrants in the United States during the early 20th century:

explain how the natural terrain influenced westward travel and settlement; and

identify and interpret the information and purpose of maps, globes, models, charts, graphs and various geographic tools.

### **Civics:**

#### Performance Descriptors

### Mastery

Fifth grade students at mastery level in civics:

research how and when the government provides for the needs and wants of the people;

role play a function of each level of government;

compare and contrast the rights, responsibilities, duties and privileges of a citizen;

summarize how the Thirteenth, Fourteenth and Fifteenth Amendments changed the lives of minorities; and

outline, interpret, and apply the process by which amendments are made, simulate a law being made and assume a role in a mock trial.

### **Economics:**

#### Performance Descriptors

#### Mastery

Fifth grade students at mastery level in economics:

evaluate the roles of consumers and producers, and explain the concept of supply and demand;

critique the economic reasons for immigration and migration in the United States;

assess the resources of the geographic regions in the United States and the world;

evaluate the role of agriculture and the impact of industrialization on economic development of the **United States;** 

compare the industrial North to the agricultural South prior to the Civil War; and

explain the social and economic effects of **Reconstruction and Westward Expansion on** different populations.

### West Virginia History:

**Performance Descriptors** 

Mastery

Fifth grade students at mastery level in West Virginia Studies:

reconstruct the economic, social and political history of West Virginia;

compare and contrast roles and functions of the government at the local, county and state levels and explain why fulfilling one's civic responsibility is important; and

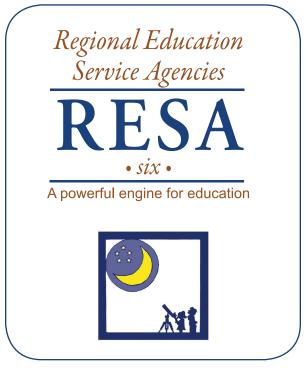
sequence events and describe the tensions that led to the formation of West Virginia.

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#### **History:**

Performance Descriptors

#### Mastery

Fifth grade students at mastery level in history: compare and contrast the industrial North to the agricultural South before, during and after the **Civil War**;

examine the economic, political and social developments during Reconstruction;

analyze how transportation affected various peoples living in the West;

compare and contrast the major domestic and foreign developments that contributed to the United States' becoming a world power; and

explain the people and factors that led to industrialization of the United States in the late 19th century.

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