

STEAMS Black History Month Project-Based Lesson Plan (6-8)

Objective: The objective of this lesson plan is to engage middle school students (grades 6-8) in an interdisciplinary exploration of Black History Month, integrating Science, Technology, Engineering, Arts, Math, and Social Studies (STEAMS) concepts. Through this project, students will gain insights into the contributions, achievements, and cultural significance of African Americans throughout history.

Key Components

Science (S): Contributions to Science and Medicine	Topics: <ul style="list-style-type: none">❖ Explore the contributions of African Americans to science and medicine.❖ Learn about notable figures such as George Washington Carver, Mae Jemison, and Dr. Charles Drew.
Technology (T): Digital Research and Multimedia Presentations	Topics: <ul style="list-style-type: none">❖ Utilize technology tools for digital research on influential African Americans.❖ Create multimedia presentations showcasing their contributions and achievements.
Engineering (E): Innovations and Inventors	Topics: <ul style="list-style-type: none">❖ Engage in the engineering design process to study innovations and inventions by African Americans.❖ Discuss the impact of inventions such as the traffic light, the ironing board, and the potato chip.
Arts (A): Musical Expression and Artistic Contributions	Topics: <ul style="list-style-type: none">❖ Explore genres such as jazz, blues, gospel, and hip-hop, and the artists who shaped them.

Math (M): Statistical Analysis and Demographic Trends	Topics: <ul style="list-style-type: none"> ❖ Analyze statistical data related to African American demographics, achievements, and socio-economic status. ❖ Discuss mathematical concepts such as percentages, ratios, and trends in the context of Black history.
Social Studies (SS): Civil Rights Movement and Social Justice	Topics: <ul style="list-style-type: none"> ❖ Explore the history of the Civil Rights Movement and the struggle for social justice. ❖ Discuss key figures and events such as Martin Luther King Jr., Rosa Parks, and the Montgomery Bus Boycott.

Resource Needs

1. Planning and Research:	<ul style="list-style-type: none"> ❖ Materials: ❖ Technology: ❖ Experts/Community Resources:
2. Science Component:	<ul style="list-style-type: none"> ❖ Lab Equipment: ❖ Materials: ❖ Technology:
3. Technology Integration:	<ul style="list-style-type: none"> ❖ Devices: ❖ Software: ❖ Technical Support:
4. Engineering Design and Prototyping:	<ul style="list-style-type: none"> ❖ Materials: ❖ Tools: ❖ Technology:
5. Arts and Design Elements:	<ul style="list-style-type: none"> ❖ Art Supplies: ❖ Multimedia Tools: ❖ Technology:
6. Mathematical Calculations:	<ul style="list-style-type: none"> ❖ Calculators: ❖ Tools: ❖ Technology:
7. Social Studies Connection:	<ul style="list-style-type: none"> ❖ Reference Materials: ❖ Guest Speakers: ❖ Field Trip:

Assessment Criteria

Science:	Understanding of the contributions, achievements, and cultural significance of African Americans throughout history.
Technology:	Effective use of technology for digital research and multimedia presentations.
Engineering:	Creativity and craftsmanship in designing engineering projects and artistic expressions.
Arts:	Quality interpretation of musical influence in the civil rights movement and culture.
Math:	Accuracy and application of mathematical concepts in analyzing demographic data and trends.
Social Studies:	Insightful contributions to discussions on the Civil Rights Movement and social justice.