



**MIDLAND PARK PUBLIC SCHOOLS**  
*Midland Park, New Jersey*  
**CURRICULUM**

# **Exploratories**

# **Problem Based Learning**

# **Grade 6**

**Prepared by:**  
**Anne Edwards**

***Superintendent of Schools:***  
**Marie C. Cirasella, Ed.D.**

6<sup>th</sup> Grade Exploratory:  
Problem Based Learning

***Course Description:***

The PBL course will be a 6<sup>th</sup> grade cycled class in which students gain knowledge and skills by working for an extended period of time to investigate and respond to a complex question, problem, or challenge. Essential elements of the PBL will include:

- **Significant, meaningful content for students** - At its core, the project is focused on teaching students important knowledge and skills, derived from standards and key concepts at the heart of academic subjects.
- **21st century skills** - Students build competencies valuable for today's world, such as problem solving, critical thinking, collaboration, communication, and creativity/innovation, which are explicitly taught and assessed.
- **In-depth questions & inquiry** - Students are engaged in an extended, rigorous process of asking questions, using resources, and developing answers.
- **Essential question** - Project work is focused by an open-ended question that students understand and find intriguing, which captures their task or frames their exploration.
- **Relevance & meaning** - Students see the need to gain knowledge, understand concepts, and apply skills in order to answer the Driving Question and create project products, beginning with an Entry Event that generates interest and curiosity. After completing a project, students remember what they learn and retain it longer than is often the case with traditional instruction. Because of this, students who gain content knowledge with PBL are better able to apply what they know and can do to new situations.
- **Voice & choice** - Students are allowed to make some choices about the products to be created, how they work, and how they use their time, guided by the teacher and depending on age level and PBL experience.
- **Public audience** - Students present their work to other people, beyond their classmates and teacher.
- **Work towards CCCS** - The Common Core and other present-day standards emphasize real-world application of knowledge and skills, and the development of the 21st century competencies such as critical thinking, communication in a variety of media, and collaboration. PBL provides an effective way to address such standards.
- **Modern technology** – which students use so much in their lives – is a perfect fit with PBL. With technology, teachers and students can connect with experts, partners, and audiences around the world, and use tech tools to find resources and information, create products, and collaborate more effectively.
- **Collaboration** - PBL allows teachers to work more closely with active, engaged students doing high-quality, meaningful work, and in many cases to rediscover the joy of learning alongside their students.

***Suggested Course Sequence:***

*Unit 1: Intro to the PBL Process - 1 weeks*

*Unit 2: What Makes a Hero? - 2 weeks*



*Unit 3: Who Should Be On the \$10? - 2 weeks*

*Unit 4: What a Town! - 2 weeks*

*Unit 5: Student Choice PBL - Our Highland School Legacy - 2 weeks*

<b>Content Area:</b>	PBL Exploratory 6
<b>Unit Title:</b>	Intro to the PBL Process
<b>Grade Level:</b>	6
<b>Unit Summary:</b> This unit will prepare students for the Problem-Based Learning process and they will build a foundation for this style of learning. They will complete critical thinking exercises where they must determine what they are truly being asked and how they are expected to respond. Students will then complete creativity drills where they can see that the problems can be addressed in a number of different ways with multiple potential responses. Finally, students will discern between relevant and irrelevant information.	
<b>Interdisciplinary Connections:</b> The entire exploratory course is an example of an interdisciplinary unit as the topics, or problems, are thematic, the process in solving the problems is geared towards critical thinking skills, and assessments are varied and differentiated based on student readiness and interests.	
<b>21<sup>st</sup> Century Themes and Skills:</b>	<b>CRP1.</b> Act as a responsible and contributing citizen and employee. <b>CRP2.</b> Apply appropriate academic and technical skills. <b>CRP4.</b> Communicate clearly and effectively and with reason. <b>CRP5.</b> Consider the environmental, social and economic impacts of decisions. <b>CRP6.</b> Demonstrate creativity and innovation. <b>CRP7.</b> Employ valid and reliable research strategies. <b>CRP8.</b> Utilize critical thinking to make sense of problems and persevere in solving them. <b>CRP9.</b> Model integrity, ethical leadership and effective management. <b>CRP11.</b> Use technology to enhance productivity. <b>CRP12.</b> Work productively in teams while using cultural global competence.
<b>Standards (Content and Technology):</b>	
<b>CPI#:</b>	<b>Statement:</b>
<b>CC 6-8.RST.8</b>	Distinguish among facts, reasoned judgment based on research findings & speculation in a text
<b>CCRA.SL.4</b>	Present information, findings, and evidence so that listeners see the organization and style are appropriate to the task, purpose, and audience
<b>CCRA.W.1 - 3</b>	Write arguments, informative texts, or narratives while citing evidence
<b>NJCCCS – Tech 8.1.8.A.1</b>	Demonstrate knowledge of a real world problem using digital tools.
<b>NJCCCS – Tech 8.1.8.A.2</b>	Create a document (e.g. newsletter, reports, personalized learning plan, business letters or flyers) using one or more digital applications to be critiqued by professionals for usability

**Unit Essential Question(s):**

- What is PBL?

**Unit Enduring Understandings:**

- Learning the PBL Process

**Unit Learning Targets/Objectives:***Students will...*

- evaluate the PBL process by completing critical thinking exercise
- analyze problems by addressing creativity drills
- synthesize information by distinguishing relevant vs irrelevant facts
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**Formative Assessments:**

- Quizzes, Tests, Projects, Presentations, Class participation, Class work

**Summative/Benchmark Assessment(s):**

- Ongoing observations of evidence of student learning
- Completion of HW assignments
- Class participation
- Class activities, such as small group discussions, oral presentations, and debates
- Written papers, quizzes, and tests

**Resources/Materials:**

Computer(s), ELMO, IWB, COWS

**Modifications:**

- Special Education Students – will consult with special education teacher
- English Language Learners – will consult with ELL teacher
- At-Risk Students – will consult with I&RS lead teacher
- Gifted and Talented Students – will consult with Enrichment teacher

**Lesson #****Lesson Name****Time frame (hours/days)**

1

**Critical Thinking Exercises**

1-2 days

2

**Creativity Drills**

2-3 days

3

**Relevant vs Irrelevant Info**

1 day

**Teacher Notes:**



## Additional Resources

Click links below to access additional resources used to design this unit:

### Content Area:

PBL Exploratory 6

### Unit Title:

What Makes a Hero?

### Grade Level:

6

### Unit Summary:

This unit will have students research real life heroes, write to a hero of their own, and then complete community service projects of their own as they act in the role of a hero.

### Interdisciplinary Connections:

The entire exploratory course is an example of an interdisciplinary unit as the topics, or problems, are thematic, the process in solving the problems is geared towards critical thinking skills, and assessments are varied and differentiated based on student readiness and interests.

### 21<sup>st</sup> Century Themes and Skills:

- CRP1.** Act as a responsible and contributing citizen and employee.
- CRP2.** Apply appropriate academic and technical skills.
- CRP4.** Communicate clearly and effectively and with reason.
- CRP5.** Consider the environmental, social and economic impacts of decisions.
- CRP6.** Demonstrate creativity and innovation.
- CRP7.** Employ valid and reliable research strategies.
- CRP8.** Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP9.** Model integrity, ethical leadership and effective management.
- CRP11.** Use technology to enhance productivity.
- CRP12.** Work productively in teams while using cultural global competence.

### Standards (Content and Technology):

#### CPI#:

#### Statement:

CCRA.SL.1

Engage effectively in a range of collaborative discussions with diverse partners on grade 6 topics, texts, and issues

CCRA.SL.4

Present information, findings, and evidence so that listeners see the organization and style are appropriate to the task, purpose, and audience

CCRA.W.1 - 3

Write arguments, informative texts, or narratives while citing evidence

<b>NJCCCS – Tech 8.1.8.A.1</b>	Demonstrate knowledge of a real world problem using digital tools. Create a document (e.g. newsletter, reports, personalized learning plan, business letters or flyers) using one or more digital applications to be critiqued by professionals for usability	
<b>NJCCCS – Tech 8.1.8.A.2</b>	Integrate and evaluate content presented in diverse media & formats	
<b>CCRA.R.7</b>  <b>Unit Essential Question(s):</b> <ul style="list-style-type: none"> <li>What examples in the news have you seen about heroes?</li> <li>Who is your hero?</li> <li>How can you become somebody else's hero?</li> </ul> <b>Unit Learning Targets/Objectives:</b> <i>Students will...</i> <ul style="list-style-type: none"> <li>comprehend the definition of hero by reading newsworthy articles noting heroic acts</li> <li>evaluate those heroic traits by realizing who one of their real-life heroes is</li> <li>synthesize an act of kindness they can feasibly complete and plan how to get it done</li> <li></li> <li></li> <li></li> <li></li> </ul>	<b>Unit Enduring Understandings:</b> <ul style="list-style-type: none"> <li>Identifying heroic acts</li> <li>Writing to a hero</li> <li>Completing an act of kindness</li> </ul>	
<b>Formative Assessments:</b> <ul style="list-style-type: none"> <li>Quizzes, Tests, Projects, Presentations, Class participation, Class work</li> </ul> <b>Summative/Benchmark Assessment(s):</b> <ul style="list-style-type: none"> <li>Ongoing observations of evidence of student learning</li> <li>Completion of HW assignments</li> <li>Class participation</li> <li>Class activities, such as small group discussions, oral presentations, and debates</li> <li>Written papers, quizzes, and tests</li> </ul>		
<b>Resources/Materials:</b>  <b>Modifications:</b> <ul style="list-style-type: none"> <li>Special Education Students – will consult with special education teacher</li> <li>English Language Learners – will consult with ELL teacher</li> </ul>	<b>Computer(s), ELMO, IWB, COWS</b> <ul style="list-style-type: none"> <li>At-Risk Students – will consult with I&amp;RS lead teacher</li> <li>Gifted and Talented Students – will consult with Enrichment teacher</li> </ul>	
<b>Lesson #</b>  1  2	<b>Lesson Name</b>  What makes someone a hero?  Write to a hero of their own	<b>Time frame (hours/days)</b>  2 days  3-4 days



3	Perform a heroic act	4-5 days
<b>Teacher Notes:</b>  		
<b>Additional Resources</b> Click links below to access additional resources used to design this unit:          		

<b>Content Area:</b> <b>Unit Title:</b> <b>Grade Level:</b> <b>Unit Summary:</b> This unit will have students examine the current event revolved around the change in the \$10 with the expectation of a famous American woman's representation on it. They will use primary and secondary sources to research and decide, ultimately writing a persuasive essay on their choice to a local Congressman.  <b>Interdisciplinary Connections:</b> The entire exploratory course is an example of an interdisciplinary unit as the topics, or problems, are thematic, the process in solving the problems is geared towards critical thinking skills, and assessments are varied and differentiated based on student readiness and interests.	<b>PBL Exploratory 6</b> <b>Who Should Be On the \$10?</b> 6
<b>21<sup>st</sup> Century Themes and Skills:</b>	<b>CRP1.</b> Act as a responsible and contributing citizen and employee. <b>CRP2.</b> Apply appropriate academic and technical skills. <b>CRP4.</b> Communicate clearly and effectively and with reason. <b>CRP5.</b> Consider the environmental, social and economic impacts of decisions. <b>CRP6.</b> Demonstrate creativity and innovation. <b>CRP7.</b> Employ valid and reliable research strategies. <b>CRP8.</b> Utilize critical thinking to make sense of problems and persevere in solving them. <b>CRP9.</b> Model integrity, ethical leadership and effective management. <b>CRP11.</b> Use technology to enhance productivity. <b>CRP12.</b> Work productively in teams while using cultural global competence.

## Standards (Content and Technology):

### CPI#:

CCRA.SL.1

CCRA.SL.4

CCRA.W.1 - 3

NJCCCS – Tech 8.1.8.A.1

NJCCCS – Tech 8.1.8.A.2

CCRA.R.1

### Statement:

Engage effectively in a range of collaborative discussions with diverse partners on grade 6 topics, texts, and issues

Present information, findings, and evidence so that listeners see the organization and style are appropriate to the task, purpose, and audience

Write arguments, informative texts, or narratives while citing evidence

Demonstrate knowledge of a real world problem using digital tools.

Create a document (e.g. newsletter, reports, personalized learning plan, business letters or flyers) using one or more digital applications to be critiqued by professionals for usability

Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn

### Unit Essential Question(s):

- Why is a change being made to the \$10?
- Should there be a change to the \$20 instead?
- What women would be worthy on gracing the \$10?
- Who can I send my persuasive essay to in order to share my opinion?

### Unit Enduring Understandings:

- Research of famous American women
- Persuasive writing
- Local Congressman that students will write to

### Unit Learning Targets/Objectives:

*Students will...*

- evaluate a current event by researching why changes are being made to paper currency
- synthesize the famous women in our country's history by deciding which one should be the next face of the \$10
- comprehend the persuasive writing format by completing an argumentative piece that will persuade a local Congressman to put their particular famous American woman on the \$10
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### Formative Assessments:

- Quizzes, Tests, Projects, Presentations, Class participation, Class work

### Summative/Benchmark Assessment(s):

- Ongoing observations of evidence of student learning
- Completion of HW assignments
- Class participation
- Class activities, such as small group discussions, oral presentations, and debates
- Written papers, quizzes, and tests



<b>Resources/Materials:</b>		Computer(s), ELMO, IWB, COWS
<b>Modifications:</b>		<ul style="list-style-type: none"> <li>• Special Education Students – will consult with special education teacher</li> <li>• English Language Learners – will consult with ELL teacher</li> <li>• At-Risk Students – will consult with I&amp;RS lead teacher</li> <li>• Gifted and Talented Students – will consult with Enrichment teacher</li> </ul>
<b>Lesson #</b>	<b>Lesson Name</b>	<b>Time frame (hours/days)</b>
1	Discuss the change in paper currency	1-2 days
2	Research famous American women	4-5 days
3	Write persuasive essay	3-4 days
4	Teach formal letter format and send letter to local Congressman	1-2 days
<b>Teacher Notes:</b>		
<b>Additional Resources</b> Click links below to access additional resources used to design this unit:		

<b>Content Area:</b>	PBL Exploratory 6
<b>Unit Title:</b>	What a Town!
<b>Grade Level:</b>	6

### Unit Summary:

This unit have students prepare a walking tour of Midland Park, identifying famous and historical places and events as a result of research, interviews, etc. Working in teams of four, students identify community landmarks that should be included on the walking tour, research history surrounding those landmarks using primary and secondary resources, and communicate their findings by writing and recording a narrative that will guide the tour. Additionally, students will create a map on which landmarks will be identified and design an appropriate sign or marker to identify the stops along the tour. The best tour will be presented to a town representative for review.

### Interdisciplinary

#### Connections:

The entire exploratory course is an example of an interdisciplinary unit as the topics, or problems, are thematic, the process in solving the problems is geared towards critical thinking skills, and assessments are varied and differentiated based on student readiness and interests.

### 21<sup>st</sup> Century Themes and Skills:

- CRP1.** Act as a responsible and contributing citizen and employee.
- CRP2.** Apply appropriate academic and technical skills.
- CRP4.** Communicate clearly and effectively and with reason.
- CRP5.** Consider the environmental, social and economic impacts of decisions.
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- CRP9.** Model integrity, ethical leadership and effective management.
- CRP11.** Use technology to enhance productivity.
- CRP12.** Work productively in teams while using cultural global competence.

### Standards (Content and Technology):

#### CPI#:

CCRA.SL.1

CCRA.SL.4

CCRA.W.1 - 3

NJCCCS – Tech 8.1.8.A.1

NJCCCS – Tech 8.1.8.A.2

NJSS 9.1.8.A.4

#### Statement:

Engage effectively in a range of collaborative discussions with diverse partners on grade 6 topics, texts, and issues

Present information, findings, and evidence so that listeners see the organization and style are appropriate to the task, purpose, and audience

Write arguments, informative texts, or narratives while citing evidence

Demonstrate knowledge of a real world problem using digital tools.

Create a document (e.g. newsletter, reports, personalized learning plan, business letters or flyers) using one or more digital applications to be critiqued by professionals for usability

Design & implement a project management plan using one or more problem-solving strategies



**Unit Essential Question(s):**

- What makes Midland Park unique?
- What historical and famous places lie within our town?
- How can students find out as much about MP as possible? Who can they interview?
- On a two hour walking tour, can all of the student research be shown?

**Unit Enduring Understandings:**

- Use primary and secondary sources for research
- Develop written and electronic versions of tour
- Presentation skills

**Unit Learning Targets/Objectives:**

*Students will...*

- synthesize facts about MP by using primary and secondary sources to identify unique features of the town
- analyze the facts by developing a proposal for a walking tour that includes written and electronic versions to appeal to a variety of audiences
- evaluate their research by presenting their plan for a walking tour to a panel of community citizens or teachers who will provide feedback on the plan and select one plan to implement
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**Formative Assessments:**

- Quizzes, Tests, Projects, Presentations, Class participation, Class work

**Summative/Benchmark Assessment(s):**

- Ongoing observations of evidence of student learning
- Completion of HW assignments
- Class participation
- Class activities, such as small group discussions, oral presentations, and debates
- Written papers, such as book reviews, quizzes, and tests

**Resources/Materials:**

Computer(s), ELMO, IWB, COWS

**Modifications:**

- Special Education Students – will consult with special education teacher
- English Language Learners – will consult with ELL teacher
- At-Risk Students – will consult with I&RS lead teacher
- Gifted and Talented Students – will consult with Enrichment teacher

**Lesson #****Lesson Name****Time frame (hours/days)**

1 Research facts about MP 3-4 days

2 Write and record walking tour 4-5 days

3 Present findings for feedback 1-2 days

## Teacher Notes:

### Additional Resources

Click links below to access additional resources used to design this unit:

### Content Area:

### Unit Title:

### Grade Level:

### Unit Summary:

This unit will be fully differentiated based on student readiness and interest. Some may develop a significant feature on school grounds like a dedication bench or memorial garden while others may do something more basic like a 6<sup>th</sup> Grade Survival Guide Google Slides/Powerpoint presentation. Ultimately, it will be student-developed and anchor activities and mini-lessons will be developed once their ideas are approved.

### Interdisciplinary Connections:

The entire exploratory course is an example of an interdisciplinary unit as the topics, or problems, are thematic, the process in solving the problems is geared towards critical thinking skills, and assessments are varied and differentiated based on student readiness and interests.

### 21<sup>st</sup> Century Themes and Skills:

### PBL Exploratory 6

### Student Choice PBL – Our Highland School Legacy

6

**CRP1.** Act as a responsible and contributing citizen and employee.

**CRP2.** Apply appropriate academic and technical skills.

**CRP4.** Communicate clearly and effectively and with reason.

**CRP5.** Consider the environmental, social and economic impacts of decisions.

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**CRP12.** Work productively in teams while using cultural global competence.



## Standards (Content and Technology):

### CPI#:

CCRA.SL.1

CCRA.SL.4

CCRA.W.1 - 3

NJCCCS – Tech 8.1.8.A.1

NJCCCS – Tech 8.1.8.A.2

### Statement:

Engage effectively in a range of collaborative discussions with diverse partners on grade 6 topics, texts, and issues

Present information, findings, and evidence so that listeners see the organization and style are appropriate to the task, purpose, and audience

Write arguments, informative texts, or narratives while citing evidence

Demonstrate knowledge of a real world problem using digital tools.

Create a document (e.g. newsletter, reports, personalized learning plan, business letters or flyers) using one or more digital applications to be critiqued by professionals for usability

### Unit Essential Question(s):

- How would our class like to leave its mark on Highland Elementary School?

### Unit Enduring Understandings:

- Collaboratively developing ideas
- Deciding what a positive legacy would entail
- Planning it out and acting upon it

### Unit Learning Targets/Objectives:

*Students will...*

- comprehend the PBL process by developing a plan of attack
- evaluate the type of project that is reasonable in the given time frame by judging what is plausible to complete
- analyze the steps that must be done to complete it and divide work equitably
- synthesizing meaningful dedications by deciding what should be done in order to leave their mark
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### Formative Assessments:

- Quizzes, Tests, Projects, Presentations, Class participation, Class work

### Summative/Benchmark Assessment(s):

- Ongoing observations of evidence of student learning
- Completion of HW assignments
- Class participation
- Class activities, such as small group discussions, oral presentations, and debates
- Written papers, quizzes, and tests

### Resources/Materials:

Computer(s), ELMO, IWB, COWS

**Modifications:**

- Special Education Students – will consult with special education teacher
- English Language Learners – will consult with ELL teacher
- At-Risk Students – will consult with I&RS lead teacher
- Gifted and Talented Students – will consult with Enrichment teacher

**Lesson #****Lesson Name****Time frame (hours/days)**

1	Deciding on a project	1-2 days
2	Collaborating as a class and dividing work equitably	1-2 days
3	Work towards benchmarks	4-5 days
4	Presentation of results	1-2 days

**Teacher Notes:****Additional Resources**

Click links below to access additional resources used to design this unit: