



## Extension Activities Using Weslandia

Below are a variety of extension activities from 6 different subjects (Math, Arts, Geography, Science, History/Social Studies and Physical Education) that can be completed by using Paul Fleischman's *Weslandia*, or adapted to fit another text of your choosing. Each of the extension activities have been created with the specific subject's overall expectations.

### Extension activities - **MATHEMATICS**

1. Is it feasible to create your vehicle – students would need to pay for materials when designing and creating their harvest vehicle.
  - o Curriculum Connections
  - o Grade 5
    - Number Sense and Numeration - Solve problems involving the multiplication and division of multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to hundredths, using a variety of strategies
    - Patterning and Algebra- demonstrate, through investigation, an understanding of the use of variables in equations
    - Data Management and Probability - collect and organize discrete or continuous primary data and secondary data and display the data using charts and graphs, including broken-line graphs
    - Data Management and Probability - read, describe, and interpret primary data and secondary data presented charts and graphs, including broken-line graph
  - o Grade 6
    - Solve problems involving the multiplication and division of whole numbers, and addition and subtraction of decimal numbers to thousandths, using a variety of strategies
    - Data Management and Probability - Collect and organize discrete or continuous primary data and secondary data and display the data using charts and graphs, including continuous line graphs
    - Data Management and Probability - read, describe, and interpret data, and explain relationships between sets of data
  - o Grade 7
    - Number Sense and Numeration - demonstrate an understanding of addition and subtraction fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers

- Patterning and Algebra - model real-life linear relationships graphically and algebraically, and solve simple algebraic equations using a variety of strategies, including inspection and guess and check
  - Data Management and Probability - collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including relative frequency tables and circle graphs
  - Grade 8
    - Number Sense and Numeration - solve problems involving whole numbers, decimal numbers, fractions, and integers, using a variety of computational strategies
    - Patterning and Algebra - represent linear growing patterns (where the terms are whole numbers) using graphs, algebraic expressions, and equations
    - Data Management and Probability - collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including frequency tables with intervals, histograms, and scatter plots
2. At what point will the cost to make the vehicle even out with the money you have made selling crops. (Teacher – determine how much the crops would be sold for).
- Curriculum Connections
  - Grade 5
    - Number Sense and Numeration - Solve problems involving the multiplication and division of multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to hundredths, using a variety of strategies
    - Number Sense and Numeration - demonstrate an understanding of proportional reasoning by investigating whole-number rates
    - Patterning and Algebra - determine, through investigation using table valued ,relationship in growing and shrinking patterns, and investigate repeating patterns involving translations
    - Patterning and Algebra- demonstrate, through investigation, an understanding of the use of variables in equations
    - Data Management and Probability - collect and organize discrete or continuous primary data and secondary data and display the data using charts and graphs, including broken-line graphs
    - Data Management and Probability - read, describe, and interpret primary data and secondary data presented charts and graphs, including broken-line graph
  - Grade 6
    - Number Sense and Numeration - Solve problems involving the multiplication and division of whole numbers, and addition and subtraction of decimal numbers to thousandths, using a variety of strategies

- Number Sense and Numeration - demonstrate an understanding of relationships involving percent, ratio, and unit rate
  - Patterning and Algebra - describe and represent relationships in growing and shrinking patterns (where the terms are whole numbers), and investigate repeating patterns involving rotations
  - Patterning and Algebra - use variables in simple algebraic expressions and equations to describe relationships
  - Data Management and Probability - Collect and organize discrete or continuous primary data and secondary data and display the data using charts and graphs, including continuous line graphs
  - Data Management and Probability - read, describe, and interpret data, and explain relationships between sets of data
- o Grade 7
- Number Sense and Numeration - demonstrate an understanding of addition and subtraction fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers
  - Number Sense and Numeration - demonstrate an understanding of proportional relationships using percent, ratio, and rate
  - Patterning and Algebra - represent linear growing patterns (where the terms are whole numbers) using concrete materials, graphs, and algebraic expressions
  - Patterning and Algebra - model real-life linear relationships graphically and algebraically, and solve simple algebraic equations using a variety of strategies, including inspection and guess and check
  - Data Management and Probability - collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including relative frequency tables and circle graphs
  - Data Management and Probability - compare experimental probabilities with the theoretical probability of an outcome involving two independent events
- o Grade 8
- Number Sense and Numeration - solve problems involving whole numbers, decimal numbers, fractions, and integers, using a variety of computational strategies
  - Patterning and Algebra - represent linear growing patterns (where the terms are whole numbers) using graphs, algebraic expressions, and equations
  - Data Management and Probability - collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including frequency tables with intervals, histograms, and scatter plots
  - Data Management and Probability - use probability models to make predictions about real-life events

## Extension Activities - **ARTS**

1. Create an abstract design for your vehicle.
  - o Curriculum Connections
  - o Grade 5
    - Visual Arts - Creating and Presenting: apply the creative process to produce a variety of two- and three-dimensional art works, using elements, principles, and techniques of visual arts to communicate feelings, ideas, and understandings
    - Visual Arts - Reflecting, Responding, and Analysing: apply the critical analysis process to communicate feelings, ideas, and understandings in response to a variety of art works and art experiences;
  - o Grade 6
    - Visual Arts - Creating and Presenting: apply the creative process to produce art works in a variety of traditional two- and three-dimensional forms, as well as multimedia artworks, that communicate feelings, ideas, and understandings, using elements, principles, and techniques of visual arts as well as current media technologies
    - Visual Arts - Reflecting, Responding, and Analysing: apply the critical analysis process to communicate feelings, ideas, and understandings in response to a variety of art works and art experiences
  - o Grade 7
    - Visual Arts - Creating and Presenting: apply the creative process to produce art works in a variety of traditional two- and three-dimensional forms, as well as multimedia artworks, that communicate feelings, ideas, and understandings, using elements, principles, and techniques of visual arts as well as current media technologies
    - Visual Arts - Reflecting, Responding, and Analysing: apply the critical analysis process to communicate feelings, ideas, and understandings in response to a variety of art works and art experiences
  - o Grade 8
    - Visual Arts - Creating and Presenting: apply the creative process to produce art works in a variety of traditional two- and three-dimensional forms, as well as multimedia artworks, that communicate feelings, ideas, and understandings, using elements, principles, and techniques of visual arts as well as current media technologies
    - Visual Arts - Reflecting, Responding, and Analysing: apply the critical analysis process to communicate feelings, ideas, and understandings in response to a variety of art works and art experiences
2. Make an advertisement for the mosquito repellent (can be used with Chibitronics Scratch OR Green Screen).
  - o Curriculum Connections
  - o Grade 5

- Visual Arts - Creating and Presenting: apply the creative process to produce a variety of two- and three-dimensional art works, using elements, principles, and techniques of visual arts to communicate feelings, ideas, and understandings
- Visual Arts - Reflecting, Responding, and Analysing: apply the critical analysis process to communicate feelings, ideas, and understandings in response to a variety of art works and art experiences
- Grade 6
  - Visual Arts - Creating and Presenting: apply the creative process (see pages 19–22) to produce art works in a variety of traditional two- and three-dimensional forms, as well as multimedia artworks, that communicate feelings, ideas, and understandings, using elements, principles, and techniques of visual arts as well as current media technologies
  - Visual Arts - Reflecting, Responding, and Analysing: apply the critical analysis process to communicate feelings, ideas, and understandings in response to a variety of art works and art experiences
- Grade 7
  - Visual Arts - Creating and Presenting: apply the creative process to produce art works in a variety of traditional two- and three-dimensional forms, as well as multimedia artworks, that communicate feelings, ideas, and understandings, using elements, principles, and techniques of visual arts as well as current media technologies
- Grade 8
  - Visual Arts - Creating and Presenting: apply the creative process to produce art works in a variety of traditional two- and three-dimensional forms, as well as multimedia artworks, that communicate feelings, ideas, and understandings, using elements, principles, and techniques of visual arts as well as current media technologies
  - Visual Arts - Reflecting, Responding, and Analysing: apply the critical analysis process to communicate feelings, ideas, and understandings in response to a variety of art works and art experiences

#### Extension Activities - **GEOGRAPHY**

1. Create a topographical map of Weslandia – suggestion - create with cardboard and paint.
  - Curriculum Connections
  - Grade 7
    - Physical Patterns in a Changing World - Understanding Geographic Context: demonstrate an understanding of significant patterns in Earth’s physical features and of some natural processes and human activities that create and change those features
  - Grade 8

- Global Settlement Patterns - Understanding Geographic Context: demonstrate an understanding of significant patterns and trends related to human settlement and of ways in which human settlement affects the environment
2. Where in Canada would be the best place to create a world such as Weslandia? Think about the resources, accessible to water, weather (if it snows, what kind of crops would be available? If Weslandia is in the Rockies how would it differ compared to Lowlands?).
- Curriculum Connections
  - Grade 7
    - Physical Patterns in a Changing World - **Application:** analyze some challenges and opportunities presented by the physical environment and ways in which people have responded to them
    - Natural Resources Around the World - **Application:** analyze aspects of the extraction/harvesting and use of natural resources in different regions of the world, and assess ways of preserving these resources
    - Natural Resources Around the World - **Inquiry:** use the geographic inquiry process to investigate issues related to the impact of the extraction/harvesting and/or use of natural resources around the world from a geographic perspective
    - Natural Resources Around the World - **Understanding Geographic Context:** demonstrate an understanding of the sources and use of different types of natural resources and of some of the effects of the extraction/harvesting and use of these resources
  - Grade 8
    - Global Settlement - **Application:** analyze some significant interrelationships between Earth's physical features and processes and human settlement patterns, and some ways in which the physical environment and issues of sustainability may affect settlement in the future
    - Global Settlement - **Inquiry:** use the geographic inquiry process to investigate issues related to the interrelationship between human settlement and sustainability from a geographic perspective
    - Global Settlement - **Understanding Geographic Context:** demonstrate an understanding of significant patterns and trends related to human settlement and of ways in which human settlement affects the environment

#### Extension Activities - **SCIENCE**

1. Based on the plants what would be the best composition of the soil to produce the best crop.
  - Curriculum Connections
  - Grade 6
    - Demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefit to humans

2. Create a habitat that would help the crops flourish (use actual plant seeds). The more obscure the plant the better. Use the Scientific Process.
  - o Curriculum Connections
  - o Grade 6
    - Assess human impacts on biodiversity, and identify ways of preserving biodiversity
    - Demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans
  - o Grade 7
    - Assess the impacts of human activities and technologies on the environment, and evaluate ways of controlling these impacts
    - Investigate interactions within the environment, and identify factors that affect the balance between different components of an ecosystem
    - Demonstrate an understanding of interactions between and among biotic and abiotic elements in the environment
  - o Grade 8
    - Assess the personal, social, and/or environmental impacts of a system, and evaluate improvements to a system and/or alternative ways of meeting the same needs
    - Demonstrate an understanding of different types of systems and the factors that contribute to their safety and efficient operation
3. What kind of energy might those who live in Weslandia use - give a rationale for your choice
  - o Curriculum Connections
  - o Grade 5
    - Analyze the immediate and long-term effects of energy and resource use on society and the environment, and evaluate options for conserving energy and resource
4. What availability is becoming a major concern in a number of places all over the world - Canada included. What kind of technologies can be utilized in Weslandia, to ensure the same concern is not an issue?
  - o Curriculum Connections
  - o Grade 8
    - Assess the impacts of human activities and technologies on the sustainability of water resources
    - Demonstrate an understanding of the characteristics of the earth's water systems and the influence of water systems on a specific region

#### Extension Activities - **HISTORY/SOCIAL STUDIES**

1. Development of culture - if you were Wesley, how would you decide to run Weslandia? What kinds of things would you need to consider? Relate your thinking to

a culture of the past. Think in terms of politic aspects, laws, and how things have been done in the past.

- o Curriculum Connections
- o Grade 5
  - Heritage and Identity - **Understanding Context:** describe significant features of and interactions between some of the main communities in Canada prior to 1713, with a particular focus on First Nations and New France
  - People and Environments - **Application:** assess responses of governments in Canada to some significant issues, and develop plans of action for governments and citizens to address social and environmental issues
  - People and Environments - **Inquiry:** use the social studies inquiry process to investigate Canadian social and/or environmental issues from various perspectives, including the perspective of the level (or levels) of government responsible for addressing the issues
  - People and Environments - **Understanding Context:** demonstrate an understanding of the roles and key responsibilities of citizens and of the different levels of government in Canada
- o Grade 6
  - Heritage and Identity - **Inquiry:** use the social studies inquiry process to investigate different perspectives on the historical and/or contemporary experience of two or more distinct communities in Canada
  - Heritage and Identity - **Understanding Context:** demonstrate an understanding of significant experiences of, and major changes and aspects of life in, various historical and contemporary communities in Canada
  - People and Environments - **Inquiry:** use the social studies inquiry process to investigate some global issues of political, social, economic, and/or environmental importance, their impact on the global community, and responses to the issues
- o Grade 7
  - New France and British North American - **Inquiry:** use the historical inquiry process to investigate perspectives of different groups on some significant events, developments, and/or issues related to the shift in power in colonial Canada from France to Britain
  - New France and British North American - **Understanding Historical Context:** describe various significant events, developments, and people in Canada between 1713 and 1800, and explain their impact
  - Canada, 1800 – 1850 - **Understanding Historical Context:** describe various significant events, developments, and people in Canada between 1800 and 1850, and explain their impact



- o Grade 8
  - Canada, 1890 – 1914 - **Application:** analyze key similarities and differences between Canada in 1890–1914 and in the present day, with reference to the experiences of and major challenges facing different groups and/or individuals, and to some of the actions Canadians have taken to improve their lives
  - Canada, 1890 – 1914 - **Inquiry:** use the historical inquiry process to investigate perspectives of different groups on some significant events, developments, and/or issues that affected Canada and/or Canadians between 1890 and 1914
  
- 2. Teacher would divide up jobs, responsibilities, roles etc. amongst the students. I.e. similar to how the ON government is run – ministers for various things, stakeholders. Students would need to do research and then create a platform for their given job.
  - o Different students running for different jobs of Weslandia. They need to be voted into their job
  - o Curriculum Connections
  - o Grade 5
    - People and Environments - **Application:** assess responses of governments in Canada to some significant issues, and develop plans of action for governments and citizens to address social and environmental issues
    - People and Environments - **Inquiry:** use the social studies inquiry process to investigate Canadian social and/or environmental issues from various perspectives, including the perspective of the level (or levels) of government responsible for addressing the issues
    - People and Environments - **Understanding Context:** demonstrate an understanding of the roles and key responsibilities of citizens and of the different levels of government in Canada
  - o Grade 6
    - People and Environments - **Inquiry:** use the social studies inquiry process to investigate some global issues of political, social, economic, and/or environmental importance, their impact on the global community, and responses to the issues
    - People and Environments - **Understanding Context:** describe significant aspects of the involvement of Canada and Canadians in some regions around the world, including the impact of this involvement
  - o Grade 8
    - Canada, 1890 – 1914 - **Application:** analyze key similarities and differences between Canada in 1890–1914 and in the present day, with reference to the experiences of and major challenges facing different

groups and/or individuals, and to some of the actions Canadians have taken to improve their lives

- Canada, 1890 – 1914 - **Inquiry:** use the historical inquiry process to investigate perspectives of different groups on some significant events, developments, and/or issues that affected Canada and/or Canadians between 1890 and 1914

#### Extension Activities - **PHYSICAL EDUCATION**

1. Create a game that would be played in Wesley's Weslandia. Consider rules, equipment, number of players.
  - Curriculum Connections
  - Grade 5
    - Active Living - demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.
    - Movement and Competence - perform movement skills, demonstrating an understanding of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities
    - Movement and Competence - apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities
  - Grade 6
    - Active Living - demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.
    - Movement and Competence - perform movement skills, demonstrating an understanding of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities
    - Movement and Competence - apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities
  - Grade 7
    - Active Living - demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.
    - Movement and Competence - perform movement skills, demonstrating an understanding of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities
    - Movement and Competence - apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities
  - Grade 8

- Active Living - demonstrate responsibility for their own safety and the safety of others as they participate in physical activities
- Movement and Competence - perform movement skills, demonstrating an understanding of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities
- Movement and Competence - apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities

21st century skills and competencies that are addressed in these activities

- Problem Solving
- Critical Thinking
- Communication
- Metacognition
- Collaboration
- Global Awareness
- Creativity
- Leadership