# Essential Element, Linkage Levels, and Mini-Map

## Math: High School

**M.EE.F-IF.1-3**

<table>
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<th>Grade-Level Standard</th>
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| M.F-IF.1 Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If \( f \) is a function and \( x \) is an element of its domain, then \( f(x) \) denotes the output of \( f \) corresponding to the input \( x \). The graph of \( f \) is the graph of the equation \( y = f(x) \); **M.EE.F-IF.1-3** Use the concept of function to solve problems. | **Initial Precursor:**  
- Order objects  
- Arrange objects in pairs |
| **M.F-IF.2** Use function notation, evaluate functions for inputs in their domains, interpret statements that use function notation in terms of a context; **M.F-IF.3** Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. For example, the Fibonacci sequence is defined recursively by \( f(0) = f(1) = 1, f(n + 1) = f(n) + f(n - 1) \) for \( n \geq 1 \) | **Distal Precursor:**  
- Explain \( x \)-coordinate  
- Explain \( y \)-coordinate  
- Explain coordinate pairs (ordered pairs) |
| **Proximal Precursor:**  
- Describe the rate of change in a table  
- Describe rate of change in a graph | **Target:**  
- Solve real-world problems by interpreting linear function graphs  
- Solve real-world problems by interpreting linear function tables |
| **Successor:**  
- Use graphs to read beyond the data  
- Use tables to predict function values | **© 2018** The Dynamic Learning Maps Essential Elements, linkage levels, and nodes are copyrighted by the University of Kansas Center for Research. Linkage levels and nodes are available for use by educators in DLM states but may not be used by commercial entities without written permission. Linkage level information and nodes may not be altered by anyone without express written permission from the University of Kansas Center for Research. |
A diagram showing the relationship of nodes in the mini-map appears below.

Key to map codes in upper right corner of node boxes:

- **IP** Initial Precursor
- **SP** Supporting
- **DP** Distal Precursor
- **S** Successor
- **PP** Proximal Precursor
- **UN** Untested
- **T** Target

**M.EE.F-IF.1-3** Use the concept of function to solve problems