Foundational Area Maps
Foundational area maps for grade bands 3-5; 6-8; and 9-12 are available at http://www.dynamiclearningmaps.org/sites/default/files/documents/ERP/foundational_maps-all_grades.pdf.

Map Key
• Blue = ELA
• Pink = math
• Yellow = ELA and math
• White = not used in testlets in this grade band

For readability we recommend printing maps on 11 X 17 paper.

Grades 3-5
Grades 3-5 initial precursor testlets address skills and understandings that are critical to achieving grade level Essential Elements. The section of the learning map that contains nodes assessed in initial precursor testlets represents foundational cognitive understandings including awareness states and intentionality, categorization, and iconic thinking. Foundational skills and understandings are precursors to later developing skills. In the DLM system, the nodes assessed in initial precursor testlets are carefully selected from these foundational skills in order to maximize their importance to and alignment with each grade level Essential Element.

Awareness States and Intentionality
Essential Elements that require students to use symbolic language, identify objects and characteristics of sets of objects, or perform more complex cognitive processes require students to develop an awareness of the environment and intentional communication. Demonstrating an awareness of the environment, directing attention to objects or people, and intentionally reaching or vocalizing to direct another’s attention are all examples of these basic cognitive skills that may be considered the underpinnings of more complex grade level target skills.

1 The foundation section of the learning map includes a variety of critical cognitive skills. Those described here have been mentioned because they represent significant precursor understandings or because their relationship to later Essential Elements may be less transparent than other foundation nodes.
Conceptual Categorization

Essential Elements that require students to distinguish categories of information, use symbolic language to communicate, or understand the meaning of words all require the development of **conceptual categorization**. Language provides a cue for students to attend to when forming conclusions about sets of objects. For example, statements from a teacher like, “These are all dogs,” activate categorization as students begin to search for characteristics that group all of the objects together. Language labels also help students begin to understand grammatical categories in a very basic way – first understanding object labels or nouns (e.g., ball), and later understanding that objects can be further distinguished with additional words (e.g., big ball, red ball, two balls).

Iconic Thinking

Essential Elements that require students to use symbols meaningfully (e.g., letters and numbers) require **iconic thinking**. Iconic thinking begins with an understanding of concrete objects. A well-developed representation of an object lends itself to understanding close approximations to that object. For example, a student may first understand that “Mom” is applied to a person before they understand that a photograph of this person is also “Mom.” Eventually, more abstract representations (e.g., cartoon-like images) are also recognized as “Mom.” Letters and numerals are also iconic representations, as they require learners to understand the relationship between a symbol and its interpreted meaning (e.g., the letter M stands for the speech sound /m/).

Grades 6-8

Grades 6-8 initial precursor testlets address skills and understandings that are critical to achieving grade level Essential Elements. The section of the learning map that contains nodes assessed in initial precursor testlets represents foundational cognitive understandings including attention and perceptual skills, basic language, conceptual categorization, routines, and “otherness,” an initial awareness of other people’s perspectives. Foundational skills and understandings are precursors to later developing skills. In the DLM system, the nodes assessed in initial precursor testlets are carefully selected from these foundational skills in order to maximize their importance to and alignment with each grade level Essential Element.

Attention and Perceptual Skills

Essential Elements that require students to use symbolic language, identify objects and characteristics of sets of objects, or perform more complex cognitive processes require students to develop **attention** to aspects of their environment and make use of their available **perceptual skills**. These basic cognitive skills are considered the underpinnings of more complex grade level target skills.

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2 The foundation section of the learning map includes a variety of critical cognitive skills. Those described here have been mentioned because they represent significant precursor understandings or because their relationship to later Essential Elements may be less transparent than other foundation nodes.
Basic Language
Essential Elements that require students to demonstrate an understanding of types of words, as well as how to identify and use words in communication, require basic language skills. These include the ability to understand that words have different roles within a sentence – some words label objects, while others qualify objects or describe actions. Basic language skills also include an understanding of how labels can be meaningfully applied to an individual’s environment. These skills, which typically require students to be adept at recognizing and using single words, support the growth of more complex face-to-face and written language skills.

Conceptual Categorization
Essential Elements that require students to comprehend categories of information and understand word meaning require conceptual categorization skills. Students use language labels to group sets of objects into meaningful categories. As they acquire more information, basic categories become more conceptual in nature. For example, information is organized hierarchically into broad categories (e.g., food) and subcategories (vegetables, grains, dairy). Organizing information in this way is linked to target skills that require students to identify topics and subtopics and to make use of subject-specific vocabulary.

Routines
Essential Elements that require students to understand patterning and events require knowledge of routines. Comprehending the routines in one’s own life (e.g., first I eat breakfast, then I brush my teeth, then I get dressed…) aids students in identifying patterns or events that occur in text. Further understanding that routines consist of actions, objects, and people help students generalize to external events.

Otherness
Essential Elements that require reasoning about an author or a character’s actions or thoughts requires the ability to think about others. Understanding that others have thoughts that differ from one’s own is a critical foundational skill. This ability to understand another’s thinking is necessary for reasoning about the actions of characters or an author’s decisions within a text.

Grades 9-12
Grades 9-12 initial precursor testlets address skills and understandings that are critical to achieving grade level Essential Elements. The section of the learning map that contains nodes assessed in initial precursor testlets represents foundational cognitive understandings including early language, categorical decision-making, routines, and otherness. Foundational skills and understandings are precursors to later developing skills. In the DLM system, the nodes assessed in initial precursor testlets are carefully selected from these foundational skills in order to maximize their importance to and alignment with each grade level Essential Element.

3 The foundation section of the learning map includes a variety of critical cognitive skills. Those described here have been mentioned because they represent significant precursor understandings or because their relationship to later Essential Elements may be less transparent than other foundation nodes.
Early Language

Essential Elements that require students to identify words and their meaning in text or use language to communicate require early language skills. These include the ability to understand that words have different roles within a sentence – some words label objects while others qualify objects or describe actions (i.e., grammatical awareness). Basic language skills also include understanding how words can be combined meaningfully to communicate. For example, questions that begin with words like “who,” “what,” “when,” and “where” help convey specific information. Answering “where” questions requires the individual to identify location, just as answering “who” questions requires the individual to identify a person.

Categorical Decision-Making

Essential Elements that require students to make determinations based on perceptual features or conceptual knowledge require categorical decision-making. Labeling objects, people, and events with words assists in the development of conceptual categories. Forming concepts enables decision-making about membership in categories and early inductive reasoning (e.g., generalizing from personal experience to a category of experiences). For example, contrasting objects or making determinations about which objects belong in a set requires the ability to categorize. Essential Elements may also require students to make sense of informational texts that organize information into conceptual categories (e.g., a text about dogs introduces the broad category and then goes on to describe subsets of information, such as dog types or features of dogs).

Routines

Essential Elements that require students to understand patterning and events necessitate knowledge of routines. Likewise, Essential Elements that call for reasoning about an author or a character’s actions or thoughts require the ability to think about others. Comprehending the routines in one’s own life (e.g., first I eat breakfast, then I brush my teeth, then I get dressed, and so on) allows for understanding patterns or events in text.

Otherness

Likewise, Essential Elements that require reasoning about an author or a character’s actions or thoughts requires the ability to think about others. Also, understanding that others have thoughts that differ from one’s own is a critical foundational skill. This ability to understand another’s thinking is necessary for reasoning about the actions of characters or an author’s decisions within a text.