# Essential Element, Linkage Levels, and Mini-Map
## Math: Grade 5
### M.EE.5.MD.3

<table>
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<th>Grade-Level Standard</th>
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| M.5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement | M.EE.5.MD.3 Identify common three-dimensional shapes | **Initial Precursor**  
- Notice what is new |
| | | **Distal Precursor**  
- Recognize same  
- Recognize different |
| | | **Proximal Precursor**  
- Match the same three-dimensional shapes with same size and different orientation  
- Match the same three-dimensional shapes with different size and different orientation  
- Match the same three-dimensional shapes with same size and same orientation  
- Match the same three-dimensional shapes with different size and same orientation |
| | | **Target**  
- Recognize spheres  
- Recognize cones  
- Recognize cubes  
- Recognize cylinders |
| | | **Successor**  
- Use geometric shapes to describe objects  
- Describe attributes of shapes |

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**How is the Initial Precursor related to the Target?**

**Initial Precursor:** In order to identify three-dimensional shapes, students must first begin by learning to notice what is new. In the context of this Essential Element, educators should work on attending while interacting with real objects that have definable shapes (e.g., cylinder, cube, cone). As students’ attention to the objects increases, the educator draws the students’ attention to the object and labels it (e.g., “This is a cube, and it has 6 sides,” or “this is a cone, and it has a round bottom and a pointy top.”), and the students observe, feel, or otherwise interact with it. Educators encourage students to begin placing like objects together, drawing attention to the characteristics that make an item the same or different.

**How is the Distal Precursor related to the Target?**

**Distal Precursor:** Now that students have experience with three-dimensional shapes and objects, they need to begin learning about how shapes and objects are the same or different. Provide instruction that focuses on creating sets that are grouped together in meaningful ways. Students do not have to label the shapes, but they do need to be able to match and identify items in a group based on the rule or attribute. For this Essential Element, it is important to use three-dimensional objects to create sets. These types of activities support students in understanding what attributes to pay attention to and what attributes to ignore based on the goal of the activity.

Note: Notice these activities are not just about sorting. The students are comparing an item or group of items to multiple items and learning what attribute to focus on. This should be done with real objects to begin with rather than pictures on a worksheet or folder activity. "Find my match" is an easier activity than "What’s my rule," so if students are really struggling to find the rule, provide more experiences with finding the match.
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.5.MD.3** Identify common three-dimensional shapes