

Table Discussion Activity

Consider the following problem: How many edges of a cube do you need to cut in order to open the cube completely? Find the least number of edges needed to be cut.



This question relates to [CCSS.Math.Content.6.G.A.4](#): Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

To solve this problem, consider what you know about a cube (the number of edges, number of faces, number of vertices).

1. Think about the mathematics that students in the following grade bands would need to know to be successful with this problem and the mathematics that builds upon it in later grades.

Pre- K – Grade 2	
Grade 3 – Grade 5	
Grade 6- 8	
Grade 9-12	

2. What implications do you see from the early mathematics presentations and from this activity for your own instructional practice or role with educators?