

Lesson 5: Trapezoids

Standards Alignments

Addressing 5.G.B.4

Building Towards 5.G.B.3

Teacher-facing Learning Goals

- Compare different definitions for trapezoids, and use them to identify trapezoids.

Student-facing Learning Goals

- Let's explore trapezoids.

Lesson Purpose

The purpose of this lesson is for students to explore two different definitions of trapezoid.

The purpose of this lesson is for students to explore trapezoids and agree on a definition of trapezoids for this course. In the first activity, students see two different definitions for a trapezoid both of which are commonly used, one that excludes parallelograms and one that includes parallelograms. The exclusive definition of a trapezoid states that a trapezoid has exactly one pair of opposite sides that are parallel. The inclusive definition states that a trapezoid has at least one pair of opposite sides that are parallel. In the second activity, students recognize that we have chosen to use the inclusive definition of a trapezoid. Students should have access to straight edges, protractors, and patty paper throughout this lesson.

Access for:

Students with Disabilities

- Engagement (Activity 2)

English Learners

- MLR8 (Activity 2)

Instructional Routines

What Do You Know About ____? (Warm-up)

Lesson Timeline

Warm-up	10 min
Activity 1	20 min

Teacher Reflection Question

Did students notice the difference in the definitions of the trapezoid? How did they explain that difference in terms of the hierarchy on the anchor chart?

Activity 2	15 min
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Lesson Synthesis	10 min
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Cool-down	5 min
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Cool-down (to be completed at the end of the lesson)

 5 min

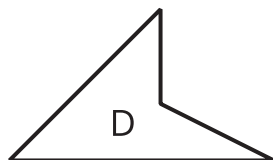
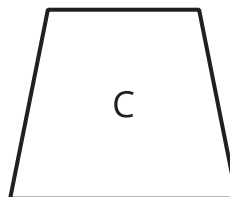
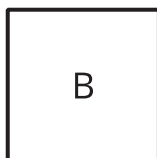
Which Ones are Trapezoids?

Standards Alignments

Addressing 5.G.B.4

Student-facing Task Statement

1. When is a quadrilateral also a trapezoid?
2. Which of the following shapes are trapezoids? Show or explain your reasoning.



Student Responses

1. A quadrilateral is a trapezoid if it has at least one pair of opposite sides that are parallel.
2. All of the shapes except D are trapezoids because they have at least one pair of opposite sides that are parallel.