

Bridges in Mathematics Tech-Enhanced Activity for Seesaw

Measurement & Data with Paper Gliders

This activity is based on The Math Learning Center’s Tech-Enhanced Activities (TEAs), adapted from the Bridges in Mathematics Second Edition PK–5 math curriculum. This activity is designed to support Bridges Grade 1, Unit 8, Module 3, [Session 1](#), [Session 2](#), [Session 3](#), and [Session 4](#) (login required). For standards alignment, refer to the Bridges sessions.

Overview

The work gives students opportunities to use nonstandard units to measure lengths and supports their understanding of 2-digit subtraction and addition strategies that anchor on 10.		
	Students will:	Assets
Part 1	Measure the lengths of glider flights using Unifix cubes.	Introducing Paper Gliders
Part 2	Measure, compare, and order the lengths of glider flights, and determine the difference between the lengths of two glider flights.	Gliders in Flight
Part 3	Analyze data displays related to gliders and learn how to make their own paper gliders.	Glider Class Data

Content notes:

1. This TEA is a digital version of the glider activities found in Module 3. The activity focuses on using groups of 10 Unifix cubes to measure and compare distances.
2. Part 1 loosely aligns with Session 2. Students label a “glider runway” and use it to measure the distance of glider flights. The runways used throughout this TEA are up to 100 cubes long, while the runways in the sessions can be up to 200 cubes long.
3. Part 2 loosely aligns with Session 3. Students measure multiple glider flights and then compare and order the distances.
4. Part 3 loosely aligns with Session 1 and Session 4. Students analyze class data displays related to glider flights and learn how to make their own gliders. The class discussion about “changes” (Session 1 Steps 1–4) is omitted from this activity.

Part 1: Introducing Paper Gliders [\[Seesaw\]](#)

Students measure the lengths of glider flights using Unifix cubes.

1. Choose your delivery method:

If delivering asynchronously	If delivering synchronously
<ul style="list-style-type: none">● Students self-pace through the activity.● Students study each page, read or listen to the strategies for measuring the lengths of glider flights, and respond to the prompts.	<ul style="list-style-type: none">● If possible, prepare your own glider beforehand and begin the activity by demonstrating on camera how it flies. (Students are not expected to make gliders of their own until Part 3 of this activity.)● Start a Zoom or Google Meet session. Open the activity and share your screen. Students do not yet need to open their copy.● Facilitate a discussion about how to measure the lengths of glider flights, focusing on strategies that anchor on 10. Annotate the pages with summarized student input.● For the “Joseph’s glider” page, demonstrate how to drag the glider along the cubes and place the orange line at the glider’s nose to indicate the length of the flight. If students prefer, allow them to place their gliders directly on top of the cube runway.● Preview the last three pages and invite students to solve the problems in their copy of the activity.

2. Review responses to the problems on the last page. Look for students who count by ones to determine the distance of their flight. Encourage these students to consider how groups of 10 cubes can help them measure the distances more efficiently. If needed, review “Mattie’s glider, Part 2” with these students before moving on to Part 2.

Part 2: Gliders in Flight [[Seesaw](#)]

Students measure, compare, and order the lengths of glider flights, and determine the difference between the lengths of two glider flights.

1. Choose your delivery method:

If delivering asynchronously	If delivering synchronously
<ul style="list-style-type: none">● Students self-pace through the activity.● Students study each page, read or listen to strategies for comparing flight lengths and determining differences between flights, and respond to the prompts.	<ul style="list-style-type: none">● Start a Zoom or Google Meet session.● Open the activity and share your screen. Students do not yet need to open their copy.● Throughout this activity, encourage students to notice and use strategies that anchor on 10.● On the “You might have noticed ...” and “Joseph’s flight, Part 2” pages, invite students to share their own thoughts and strategies before revealing the examples.● Preview the last two pages and invite students to solve the problems in their copy of the activity.

2. Prior to Part 3, review student work on the last two problems, taking note of students’ work as they use nonstandard units to measure lengths and determine the difference between two lengths.

Part 3: Glider Class Data [[Seesaw](#)]

Students analyze data displays related to gliders and learn how to make their own paper gliders.

1. Choose your delivery method:

If delivering asynchronously	If delivering synchronously
<ul style="list-style-type: none">● Students study each page, read or listen to the strategies for analyzing class data, and respond to the prompts.	<ul style="list-style-type: none">● Start a Zoom or Google Meet session.● Open the activity and share your screen.● Facilitate a discussion of the data for Jack’s class, Maria’s class, and Wei’s class. Annotate the pages with summarized student input. Encourage students to notice and use strategies that anchor on 10 or 5.● For the “Make a glider!” page, consider supplementing the page with a camera demonstration of how to make a glider (if possible).● Preview the “Challenge” page. This problem can be solved together as a group, individually, or with pairs or small groups in breakout rooms (if possible).● On the last page, encourage students to brainstorm their own ideas for possible glider experiments.

3. Encourage students to experiment with their paper gliders on their own after the activity concludes. If possible, consider inviting students to share their glider experiments with each other at a later time.