## Doubling/Even Numbers

Supports Bridges Kindergarten, Unit 3, Module 1, Session 1, Session 2 & Session 5

### Overview

This Tech-Enhanced Activity is based on learning in Sessions 1, 2 and 5. The work supports students' practice with counting by 2s and visualizing the structure of doubles.

Preview this content with a short video.

|  | **Students will:** | **Assets** |
|---|---|---|
| **Part 1** | Investigate the concept of doubles within the context of counting wheels on bicycles. | How Many Wheels? [Slides] |
| **Part 2** | Observe patterns on the bike chart, count the number of wheels, and practice counting by 2s. | Bike Chart [Slides] |
| **Part 3** | Continue to practice counting by 2s and extend their thinking to solve a problem. | How Many Bikes? [Slides] |

Some tech skills your students will need:
- Take a picture of work done on paper
- Insert an image into a Google Slide

Content notes:
1. The content of this TEA does not include the counting warm-up from Session 1 or the ten-frame flash warm-up from Session 2. Part 1 aligns with Bicycle Wheels Parts 1 and 2 from the Problems & Investigations in Sessions 1 and 2. The double ten-frame is introduced as students model the number of wheels on increasing numbers of bicycles.
2. Part 2 aligns with the Bicycle Chart Problems & Investigations from Session 5. Part 3 of this TEA includes a unique problem, How Many Wheels?, which provides an opportunity for students to find the number of bicycles that can be made from 10 wheels.

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**Part 1: How Many Wheels?**
*Students investigate the concept of doubles within the context of counting wheels on bicycles.*

**You will need your copy of:**
Google Slides: How Many Wheels? (asynchronous or synchronous learning)
- English: preview | copy
- Spanish: preview | copy

1. Prior to Part 1, consider which numbers your students are ready to work with. You may wish to delete some of the slides based on your knowledge of your students.
2. Choose your delivery method:

| If delivering asynchronously | If delivering synchronously |
|---|---|
| <ul><li>Distribute the slides to students via Google Classroom, email, or another preferred method and ***make a copy for each student***.</li><li>Students will self-pace through the slides and consider how many wheels are on a given number of bikes.</li><li>On the final slide, students will choose a bike and color.</li><li>When students submit their work, review their bike color choices to make the chart prior to Part 2.</li></ul> | <ul><li>If students have access to ten-frame mats and counters, ask students to use them for today's activity.</li><li>Start a Zoom or Google Meet session.</li><li>Open the slideshow and share your screen. Students do not need their own copy of the slides.</li><li>Facilitate a discussion of the first slide to set the context and engage students.</li><li>Use the next few slides to model with students how many wheels on 1, 2 and 3 bikes. As you build, use the pair-wise method to emphasize the doubles relationships; see Session 1, Step 7 Teaching Guide for more information.</li><li>Ask students to share observations about the double ten-frame, helping them notice the structure of the mat is based on two groups of ten.</li><li>Build excitement by having every student vote for their favorite bike color on the last slide, recording their choices for your notes for Part 2. Ask for students' predictions about what the bikes will be used for, and let them know they will find out next time.</li></ul> |

3. In preparation for Part 2, use the students' color choices for bikes from Part 1 to make the chart. See Part 2 for further details.

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**Part 2: Bike Chart**
*Students observe patterns on the bike chart, count the number of wheels, and practice counting by 2s.*

**You will need your copy of:**
Google Slides: Bike Chart (asynchronous or synchronous learning)
- English: preview | copy
- Spanish: preview | copy

1. Make sure you have created the bike chart with students' color choices from Part 1.
2. Choose your delivery method:

| If delivering asynchronously | If delivering synchronously |
|---|---|
| <ul><li>Distribute the slides to students via Google Classroom, email, or another preferred method and **make a copy for each student**.</li><li>Students self-pace through the slides and make observations and look for patterns on the bike chart.</li><li>Have students turn in their completed slides.</li><li>Review student work from Part 2 to see if students were able to notice patterns on the chart and accurately continue the counting pattern, placing markers on 16, 18 and 20.</li></ul> | <ul><li>If students have access to ten-frame mats and counters, ask students to use them for today's activity.</li><li>Start a Zoom or Google Meet session.</li><li>Open the slideshow and share your screen. Students do not need their own copy of the slides.</li><li>Facilitate a discussion around the bike chart on the first slide. Invite students to share their observations.</li><li>On the next slides, invite students to count how many wheels on each row of bikes, looking for patterns. See Session 5 Teaching Guide, starting at Step 5 for further context.</li><li>Extend students' counting practice and observation of the pattern by asking them to continue to count by 2s up to 20 using the graph and numbers on the slides for support.</li></ul> |

**Part 3: How Many Bikes?**
*Students continue to practice counting by 2s and extend their thinking to solve a problem.*

**You will need your copy of:**
Google Slides: How Many Bikes? (asynchronous or synchronous learning)
- English: preview | copy
- Spanish: preview | copy

| If delivering asynchronously | If delivering synchronously |
|---|---|
| <ul><li>Distribute the slides to students via Google Classroom, email, or another preferred method and **make a copy for each student**.</li><li>Students self-pace through the slideshow and practice counting aloud by 2s.</li><li>Students apply what they've learned to solve a problem, determining how many bikes when given a number of wheels.</li><li>Review students' work to see what strategies they used to approach the final problem.</li></ul> | <ul><li>Start a Zoom or Google Meet session.</li><li>Open the slideshow and share your screen. Students do not yet need their copy of the slides.</li><li>Use the first slide to discuss the pattern observed (counting by 2s, growing pattern) in Part 2. Practice with students counting by 2s.<ul><li>See Session 5, Steps 11–13 for variations to support counting by 2s.</li></ul></li><li>Introduce students to the context of the "How Many Wheels" slide and have students count the wheels. Invite a few students to share their counting strategies.</li><li>You might choose to work on the last slides with students as a whole group, or assign students their own copy of the slides as an independent assignment.</li></ul> |