Teaching Goal!

Students use data in paragraph form and in a table to analyze team standings in a soccer league.

| Tasks | Tier 1 | Tier 2 | Tier 3 |
|--|-------------|----------|-------------|
| | Below Level | On Level | Above Level |
| Solve problems based on a table of soccer results. | Х | Х | Х |
| Perform whole-number computations. | Х | Х | Х |
| Identify positions using ordinal numbers. | Х | Х | Х |
| Identify the bar graph that matches given data. | Х | | |
| Complete a double-bar graph of team standings. | | Х | Х |
| Create a double-bar graph of team standings. | | | Х |
| Use proportional reasoning. | | | Х |

Getting Started

See the tips below for introducing the lesson. Make copies of the student data sheet (page 49) and the appropriate leveled activity sheet for each group of learners (pages 50–52).

Access prior knowledge by discussing soccer, soccer leagues, and how game results form team standings. Explain how to interpret the asterisk on the standings chart. Also review reading, writing, and using ordinal numbers.



- Use the Standings: Explain that the teams in a *league* play one another during a season, and the number of wins, losses, and ties are used to rank the teams' *standings.* Interpret the data in each column and row. Model summarizing a team's results in one sentence: *This season, the Gliders won 8 games, lost 3 games, and tied 1 game.* Then have children solve items 1–7.
- Pick the Correct Graph: Guide children to compare the information table with the data in the graphs to choose the match.
- List the Clues: Suggest that partners take turns summarizing how they chose the correct graph.

Tier 2

- Use the Standings: Ask volunteers to explain the meaning of the data in each column and row. Challenge them to summarize a team's data in one sentence. Then have children solve items 1–7.
- Finish the Graph: Compare and contrast single and double bar graphs. Discuss how a double-bar graph shows a team's wins and losses. Guide children to identify the given parts of the graph, checking comprehension of the W/L (wins/losses) below the horizontal axis. Have students use the Gliders' bars as a model for the other teams.

Tier 3

- Use the Standings: Challenge children to summarize each team's performance over the season in a single sentence, such as: *This season, the Gliders won 8 games, lost 3 games, and tied 1 game.* To solve item 6, children use proportional relations to predict team standings.
- Make a Graph: Clarify that a doublebar graph provides two pieces of information about each team to show visual comparisons. Guide children to identify the parts of the graph, and verify that they recognize the meaning of W/L (*wins/losses*) below the horizontal axis. Confirm that they realize that their graph is based on the new information provided.
- **Extend:** Have children make up problems based on their double-bar graphs or have them make double-bar graphs to show actual data about the standings of local sports teams.

Skills:

Solving problems based on a table of soccer results

Using ordinal numbers

Understanding data in bar graphs _____ Date __

Skills:

Solving problems based on a table of soccer results

Using ordinal numbers

Understanding data in bar graphs



45 minutes ago

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by Sports Reporter Mia Phann

Goal! Data Sheet

The Hudson Soccer League season just ended. Fans got to watch many great games. The final game was one of the best. The Gliders took first place for the second year in a row. The Rockets improved more than any other team in the league. They won only one game last year. This year, they won 6 and tied the Gliders in the last game of the season. What a super finish! Now it's on to the playoffs. Good luck to all!

Hudson Soccer League End-of-Season Standings

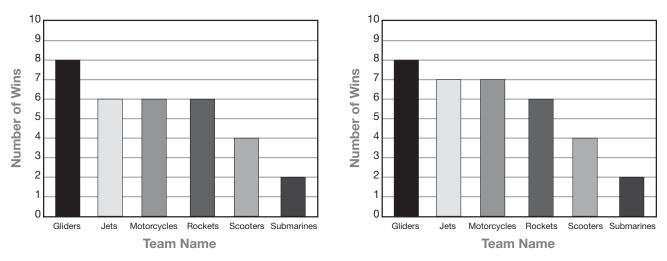
| Team | Wins | Losses | Ties |
|--------------|------|--------|------|
| *Gliders | 8 | 3 | 1 |
| *Jets | 7 | 4 | 1 |
| *Motorcycles | 7 5 | 5 | 0 |
| *Rockets | 6 | 5 | 1 |
| Scooters | 4 | 8 | 0 |
| Submarines | 2 | 9 | 1 |

* Team will take part in the playoffs.

| Nam | ie | Date | |
|-----|--|----------|---|
| • | Goal! Activity Sheet | | |
| Us | e the Standings Answer each question. | | |
| 1. | Which team lost 4 games? | | - |
| 2. | Which team lost the most games? | | |
| 3. | Which teams had no ties? | | |
| 4. | Which 2 teams had the same number of wins? | | |
| 5. | Which team won 6 more games than the Submarin | .es won? | |
| 6. | Which team finished in 4 th place? | | |
| 7. | How many games did each team play this season? _ How do you know? | | |

Pick the Correct Graph

One of the bar graphs correctly shows the number of games each soccer team won. The other one does not. Circle the correct bar graph.



List the Clues

How did you pick the right graph? List a clue that helped you. 8.

Goal! Activity Sheet

Use the Standings Answer each question.

 Which team had the best record?

 Which team had the worst record?

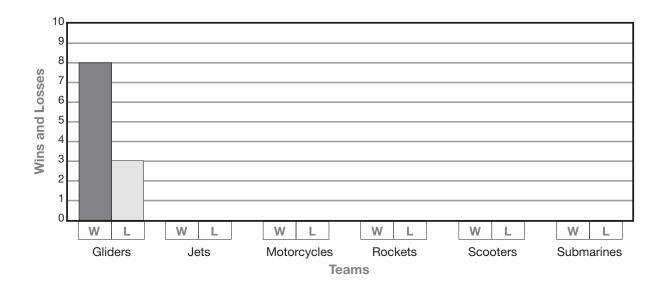
2. Which team won 1 more game than it lost? _____

- **3.** Which team ended the season in 3rd place?
- **4.** Which team won 3 fewer games than the Jets did? _____
- **5.** How many more games did the Rockets win this season than they did last season? ______
- **6.** What if the Scooters had won 2 more games than they did? Then what would their record be? _____
- 7. What if the Gliders had won the game they tied with the Rockets? Then what would their record be? ______
 What record would the Rockets have? ______



Finish the Graph

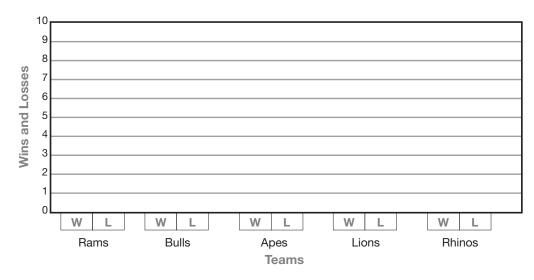
Complete the graph to show how many games each team won and lost. Give the graph a title.



Goal! Activity Sheet **Use the Standings** Answer each question. Which team ended the season in 3rd place? 1. 2. Which team won 4 fewer games than it lost? 3. How many more games did the Rockets win this season than they did last season? 4. How many games does each team play in a season? How do you know? How many games are played in all in a season? Explain. _____ 5. If the Jets had won the game they tied and the Gliders had lost the game they tied, would the standings change? Explain.

6. If the soccer season was 24 games long, predict how many games each team would win. Explain your thinking.

Make a Graph The Scout Soccer League has 5 teams. Each team plays every other team 3 times. No games end in ties. The Rams won it all with 9 wins and 3 losses. The Bulls took 2nd place at 7–5. Then came the Apes at 6–6 and the Lions at 5–7. The Rhinos were last. They won only 3 games. Make a **double-bar graph** to show the wins and losses for each team named above. Use the grid below. Add a title.



Answer Key

Goal!

Tier 1, page 50: Use the Standings: 1. Jets 2. Submarines 3. Motorcycles, Scooters 4. Jets, Motorcycles 5. Gliders 6. Rockets 7. 12; If you add the total number of wins, losses, and ties, the sum is 12; Pick the Correct Graph: Students should circle the graph on the right; List the Clues: The graph on the right shows that the Jets and Motorcycles won 7 games, not 6.

Tier 2, page 51: Use the Standings: 1. Gliders; Submarines 2. Rockets 3. Motorcycles 4. Scooters 5. 5 6. 6 wins, 6 losses 7. 9-3 8. 6-6; Finish the Graph: *Check that students' graphs match the data on the table and feature an appropriate title.*

Tier 3, page 52: Use the Standings: 1. Motorcycles 2. Scooters 3. 5 4. 12; I added the number of wins, losses, and ties: 36; 12 games per team \div 2 (2 teams play in each game) = 6; 6 x 6 = 36 games; 5. Yes; Both teams would have 8-4 records and would be tied for first place. 6. 16, 14, 14, 12, 8, 4; Since 24 is twice as much as 12, I would double the number of wins, losses, and ties per team; Make a Graph: *Check that students' graphs match the data provided in the paragraph and have appropriate titles.*