



INTERPRETING DATA

Overview, Objectives, Inquiry Questions, and Planning

THINGS TO CONSIDER FOR MILESTONE #4

- If your students haven't learned to divide three and four-digit numbers, you may want to allow them to use a calculator to find the percent of change.

LEARNING OBJECTIVES FOR MILESTONE #4

At the conclusion of this milestone, students will be able to:

- Use a formula to calculate percent of change.
- Use percent of change to predict the value of their sports team next year.
- Create graphs to show the predicted value of their sports team next year.
- Design an advertisement to persuade people to buy tickets to their sporting event.

EXTENSIONS AND ENHANCEMENTS FOR MILESTONE #4

- Could you have the students practice finding the percent of change by playing [Rags to Riches](#)? You could play as a whole class or have the students play with a partner.

STUDENT INQUIRY QUESTIONS FOR MILESTONE #4

- How do you calculate the percent of change?
- How can I use the percent of change to predict the value of my sports team next year?
- How can I create a graph to show the predicted value of my sports team next year?
- How can I design an advertisement to persuade people to buy tickets to my sporting event?
- Last week, Chelsea made \$24 by washing cars. This week, she made \$43. How can finding the percent of change help you predict the amount of money Chelsea will make next week?

ASSESSMENT FOR MILESTONE #4

- **Formative Assessment for Individual Activity:** Check each student's "Predicting Ticket Sales" printable on page 15 of the Student Pack.

- **Formative Assessment for Group Activity:** Meet with the groups to discuss how the students are taking their big ideas from Milestone 3 and customizing them for their teams.
- **Summative Assessment:** Have the students complete the response printable on page 18 of the Student Pack for the Inquiry Question, “Last week, Chelsea made \$24 by washing cars. This week, she made \$43. How can finding the percent of change help you predict the amount of money Chelsea will make next week?”

Student Pack

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Teacher Pack

- Page 10
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Project Activities for Milestone #4: Interpreting Data

PREPARE (Bell-ringer/opener activity)

Show the students the video “[Percent of Change](#)” to learn the steps for calculating percent of change.

Give them the “Calculating Percent of Change” printable on page 13 of the Student Pack. Have them use the formula to calculate the percent of change in each problem. Use the “Calculating Percent of Change Answer Key” on page 10 of the Teaching Guide to go over the answers together.

PRESENT (Lecture/model)

Use the “Predicting Ticket Sales Model” on page 11 of the Teaching Guide to show the students how to use the “1-Year Change” from Milestone 1 to predict future sales. Show them how to predict the percent of change that will result from their big idea and use that to predict future sales.

Give the students the “Tips for Designing an Advertisement” printable on page 14 of the Student Pack. Discuss ways to make a persuasive advertisement to convince people to buy tickets to a sporting event .

PARTICIPATE (Student/group share, group activity)

Give the students the “Predicting Ticket Sales” printable on page 15 of the Student Pack. Have them follow the directions to calculate the value of their team and to create new graphs.

Have the students meet with their groups to discuss how they can make the big ideas specific to their team. Have them write their ideas on the “My Big Idea” printable on page 16 of the Student Pack.

Give the students the “Advertisement” printable on page 17 of the Student Pack. Have them design an advertisement to persuade people to buy tickets to their sporting event. Students can publish their advertisements on poster board or by using technology resources, such as PowerPoint, Google Slides, Google Drawing, Paint, or SketchUp.

Formative Assessment: Meet with the groups to discuss how the students are taking their big ideas from Milestone 3 and customizing them for their teams.

PRACTICE (Homework/independent work/extensions)

Give each student the writing response template on page 18 of the Student Pack and ask them to write an answer to the inquiry question for this Milestone: “Last week, Chelsea made \$24 by washing cars. This week, she made \$43. How can finding the percent of change help you predict the amount of money Chelsea will make next week?”

ASSESSMENT

Formative Assessment for Individual Activity: Check each student’s “Predicting Ticket Sales” printable on page 15 of the Student Pack.

Formative Assessment for Group Activity: Meet with the groups to discuss how the students are taking their big ideas from Milestone 3 and customizing them for their teams.

Summative Assessment: Have the students complete the response printable on page 18 of the Student Pack for the Inquiry Question, “Last week, Chelsea made \$24 by washing cars. This week, she made \$43. How can finding the percent of change help you predict the amount of money Chelsea will make next week?”