Learning objectives

Students will be able to find the perimeter of a given geometric figure.

Introduction

 (10 minutes)

1. Play the video [Perimeter](https://www.youtube.com/watch?v=AAY1bsazcgM), by Math Antics, for the class to introduce the concept of perimeter.
2. Once the video is complete, ask for a volunteer to tell you the definition of perimeter.
3. Write the definition on the board.
4. Draw a few figures on the board, along with the lengths of their sides.
5. Challenge students to find the perimeter of the geometrical figures you’ve drawn.
6. Each time a student answers, correctly or incorrectly, explain the reasoning behind each figure’s perimeter.

Explicit instruction/Teacher modeling

 (20 minutes)

* Start by showing your students how to use unit squares to count the perimeter units of a figure. For example, find an object in the classroom, such as a book, to measure.
* Using the cheese crackers (or the unit of your choice), model how students would find the perimeter of the book by placing crackers side-by-side, all around the book.
* Write the unit measurements on the board, and then ask the class to find the perimeter.
* For example, if the object you measured is 3 crackers on one side, by 7 crackers on another side, the perimeter (total) would be 3 + 3 + 7 + 7, or 20 crackers.

Guided practice/Interactive modeling

 (20 minutes)

* Once you’ve finished modeling finding the perimeter, tell students to make a 3x5 array (rectangle) with the cheese crackers.
* As the class creates the rectangle, ask students to find the perimeter when they’re done, and record the perimeter in their math journals.
* Once the class is done, demonstrate how to draw a 3x5 rectangle, and how to find the perimeter, using a projector or document camera.
* Have students create a 2x10 rectangle this time, and repeat the process. Walk around the class to support students, as they need it.
* Pass out copies of the Find the Perimeter worksheet (see attached).
* Model two of the problems for the class on the board, with a document camera or with a projector.

Independent working time

 (20 minutes)

* Have students finish the rest of the Find the Perimeter worksheet independently. If students get stuck, have them raise their hand for your assistance.
* As students complete the worksheet, check their answers.
* Students who successfully complete the worksheet should move on to their application project, creating a Dream House.
* Tell the class that each person will create a floor plan for their dream house, using cheese crackers to design and measure their layout.
* Once they’ve created a floor plan, have students record it in their math journal. The math journal should include a drawing of the floor plan, and the perimeter.

Differentiation

* **Enrichment:** Students who need more of a challenge can build multiple floor plans (for a multi-level dream house) during independent working time. You can also have these students find the area in addition to the perimeter.
* **Support:** Arrange students who are struggling into a small group to work with you. Complete the Find the Perimeter worksheet as a group, using cheese crackers as manipulatives.

Assessment

 (5 minutes)

* Review your students’ worksheets and dream house floor plans to assess their understanding of perimeter.

Review and closing

 (10 minutes)

* Students will complete “Perimeter Four Square Review” as their journal reflection.

