

CPM Teacher eBook Tour

The Teacher Edition eBook is a Student Edition with additional tabs for answers, teacher notes, personal notes, and sharing. In addition, an entire teacher section contains much of the information from the large teacher binder as well as additional information such as eTools.

Be sure to view the Student eBook Tour before viewing the Teacher eBook Tour which is an extension of the student tour.

This tutorial describes the overall structure and components of a Teacher Edition CPM eBook. Specific eBooks for the various courses may deviate somewhat from this description. Choose one of the formats below for an overall video tour or select a topic for step by step instruction.

Video Tour


- 💡 Vimeo: [Teacher eBook Introduction](#)
- Vimeo: [Supplemental eBook Introduction](#)
- YouTube: [Teacher eBook Introduction](#)
- YouTube: [Supplemental eBook Introduction](#)

Topic Instruction

Answer Tab

The Answer Tab has two components:

1. Answers for the student class lesson
2. Answers for the student homework after the Review and Preview section.



CPM EDUCATIONAL PROGRAM

Tools ▾ Calculators ▾ Translate CPM Tutorials CPM Help CPM LI

Introduction ▾

Chapter 1 ▾

Chapter 2 ▾

Chapter 3 ▾

3 Opening

3.1.1

3.1.2

3.1.3

3.1.4

3.1.5

3.1.6

3.1.7

3.2.1

3.2.2

CC Course 3

Lesson (ENG) Lección (ESP) **Answers** Teacher Notes My Notes Sharing

Search

c. Possible answers: $(2, -2)$ or $(4, 0)$

3-45. See answers in bold below:

IN (x)	-4	-3	-2	-1	0	1	2	3	4
OUT (y)	4	4.5	5	5.5	6	6.5	7	7.5	8

b. No; when $x = 10$, $y = 11$

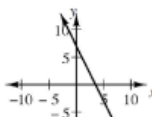
Review

Preview

3-46. $y = x + 3$

3-47. See graphs and tables below.

x	y
-2	11
-1	9
0	7



Teacher Notes Tab for each lesson

The teacher Notes Tab provides the following support sections.

Introduction	CC Course 3		
Chapter 2	Lesson 1 (DSO) Lesson 0 (DS) Answers	Teacher Notes	My Notes Sharing
Chapter 3	<h2>Lesson 4.3 How does it grow?</h2>		
Chapter 4	Connecting Linear Rates and Graphs		
4 Opening	Student Issues pages 159 – 161.		
4.1.1	Lesson Objective	Students will understand linear functions patterns with patterns on a graph, specifically focusing on how a given rate pattern grows and how the rate pattern grows.	
4.1.2	CC Standards	4.EE.4.4	
4.1.3	Mathematical Practices	Tables students look for and recognize regularly in repeated measures by identifying how the given pattern and the pattern grows.	
4.1.4	Lesson Material	Video	
4.1.5			
4.1.6		Connecting Rates and (part)	
4.1.7			
4 Closure			
Chapter 5			
Chapter 7			
Chapter 7	Length of Activity	One day (approximately 45 minutes)	
Chapter 7	Course Problem	Problem 4.2.2 and 4.2.3	
Chapter 9	Technology	Students in interest connected patterns with computers/machines may prefer the Excel handout found on the 4.3 Resources Page.	
Chapter 10			
Reference	Materials	<ul style="list-style-type: none"> Mathematical Practices Lesson 4.1.3, Lesson 4.2, Lesson 4.3 Lesson 4.1.3, Lesson 4.2, Lesson 4.3 Lesson 4.1.3, Lesson 4.2, Lesson 4.3 Lesson 4.1.3, Lesson 4.2, Lesson 4.3 	
Teacher	Suggested Lesson Activity	It may be helpful, especially if you do not have a computer or a graphing calculator, to have a graph of a line with one or two random points and the equation that you want to use as an example.	
Chapter 3		Also, if you have a graph and have enough space to use a table. The Patterns 4.3 from problem 1.1 in Lesson 4.3, have them start with that.	
Chapter 4		These students are ready to use a graph and to use the methods for finding the slope of a line. The Patterns 4.3 from problem 1.1 in Lesson 4.3, have them start with that.	
4 Opening		This is a very good example of a graph and a table. The Patterns 4.3 from problem 1.1 in Lesson 4.3, have them start with that.	
4.1.1		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
4.1.2		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
4.1.3		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
4.1.4		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
4.1.5		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
4.1.6		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
4.1.7		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
4 Closure		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
Chapter 5		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
Chapter 6		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
Chapter 7		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
Chapter 8		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
Chapter 9		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
Chapter 10		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
Reference		When students have enough space to use a table, the whole class discussion about the table continues. It is recommended that a student use the table to find the slope of a line.	
Teacher		You could start the plot of the table and present general entries in the classroom so that students can refer to them as they work together.	
		Problem 4.2.2, Lesson 4.3	
	Homework	Problem 4.2.2, Lesson 4.3	

Teacher Tab - Left menu at the bottom

1. Program Description

A Quick Reference Guide has links to all of the sections in the Teacher tab as well as research articles discussing cooperative learning, Problem-Based learning, Spaced Practice, and more!

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Teacher

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Team Support

CC Course 3

QRG

Introduction

Course Design

Active Learning

Differentiation

Research Summary

Research

Research2: PBL

Research3: MSP

Search

[C3PO]

Quick Reference Guide to Reviewing the *Core Connections* Course 3 Teacher eBook

This guide will point you to many of the sections and features in the teacher resources for the CPM middle school program, *Core Connections, Courses 1, 2, and 3.*

Teacher Tabs	Page Tabs	Content
Program Description	QRG	Quick Reference Guide
	Introduction	CPM Curriculum Program Description
	Course Design	The fundamental learning principles and their implications in the course design.

2. Course Preparation

This is a great place for teachers new to CPM to start. It includes the Quick Start Guide, course preparation, materials needed for the course, and the timeline for each chapter.

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Chapter 8

Chapter 9

Chapter 10

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Standards

CC Course 3

Introduction

Organization

Course Components

Materials

Timeline

Using Tiles

Te

Block Schedule

Accelerated Pathways

[C3PO]

Preparing to Teach This Course

Introduction and Overview

When using the CPM curriculum, keep the three research-based pillars of CPM pedagogy in mind: students need to dis-
their peers, actively engage in problem-based learning, and engage and re-engage with ideas over time. Students in effe
accompanying characteristics listed as bullet points beneath each of the three pillars. For more information about the re-
research articles in the eBook or at cpm.org.

Collaborative Learning: Students learn ideas more deeply when they discuss ideas with classmates.*

- Students function effectively within a team environment, value and listen to the ideas of others, and communicate

3. Teacher Support

Linked support materials include: Selected Answers for homework, eTools for all chapters, chapter and lesson mathcast videos, resource pages (pdf), Parent Guide (pdf), and professional development links.

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Mathcasts

Parent Guide

PIP Notes

Printable Resources

Prof. I

Selected Answers

SMART Board

Stat Supplement

Textbook Errata

[C3PO]

eTools

The table below describes the lessons and problem numbers applicable for the tools on the right. In addition to having a
computer/mobile device and Internet connection, the table below describes the required additional technology for each
should always verify tools you plan to use before presenting to students. Items highlighted in yellow are not included in
eBook.

Lesson	Problem	Description of Tool	Link
General Tool	Algebra Tiles	Algebra Tiles (CPM)	
General Tool	Algebra Tiles	Expression Mat (CPM)	
General Tool	Algebra Tiles	Expression Comparison Mat (CPM)	

4. Closure

Find ideas for lesson and chapter closure as well as numerous ideas for summarizing student learning.

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CC Course 3

Lesson Closure

Chapter Closure

Pamphlet

Concept Catcher

Magic Book

8-Page Booklet

Search

[C3PO]

Closure Guidebook

It is important to provide an opportunity for students to consolidate their understanding, to correct any misunderstandings, and pe questions for future consideration. In other words, each lesson and chapter needs closure. The Closure section of the teacher note provides a possible closure activity. The last lesson in each chapter is designed to provide chapter closure.

Closure Learning Log

Closure Ticket out

CL Class Discussion 1

Closure Hot Potato

CL Clas

Lesson Closure

Closure is a vital portion of a lesson, and therefore suggestions for closure are included in the teacher notes of each lesson. Comm activities include reflective writing, questions the teacher can use to facilitate a whole-class discussion, or a short activitv to chec

5. Assessment

Sample team and individual tests can be downloaded here. Your eBook username and password is your login for the Assessment Site where you can create and save custom tests and quizzes. There are many more assessment ideas to support you and your students. You can access the CPM Assessment Site through the CPM links at the top menu bar within your eBook.

The screenshot shows the CPM Educational Program website. The top navigation bar includes links for Tools, Calculators, Translate, CPM Tutorials, CPM Help, and CPM Links. A red arrow points to the 'Assessment Site Link' in the 'CPM Links' dropdown menu. The left sidebar contains a list of navigation options: Program, Description, Course, Preparation, Standards, Practices, Teacher, Support, Closure, Assessment (highlighted), Team Support, and Strategies. The main content area is titled 'CC Course 3' and 'Assessment Guidebook'. It includes a search bar and a list of tabs: Guidebook, Individual Assess, Team Assessment, Presentations, Portfolios/Hwk, Observations, and Rubric S. The 'Guidebook' tab is selected, showing the 'Assessment Guidebook' page. The page content includes a link to 'CPM Principles of Assessment' and a paragraph explaining that CPM provides an assessment website with a test bank organized by chapter or by standard. It also mentions that the assessment site houses a large number of problem test bank and provides sample tests for the chapters of each course. A second paragraph states that this guidebook explains a variety of assessment strategies and offers suggestions for assessing students' mathematical skills and understanding. It notes that students learn what teachers value primarily by observing what is assessed, and that in CPM courses, a broad range of skills and abilities is valued, therefore important that a broad range of assessment strategies is used. A third paragraph begins with 'In a CPM course, value is placed on:'.


6. Team Support

Achieving effective study teams can be a challenge for teachers who have not used teams before. This section provides support and ideas for effective study teams.

The screenshot shows the CPM Educational Program website. The top navigation bar is the same as in the previous screenshot. The left sidebar is the same, but the 'Team Support' tab is now highlighted. The main content area is titled 'CC Course 3' and 'Team Support Guidebook'. It includes a search bar and a list of tabs: Using Study Teams, Purpose, Organizing Classroom, Assigning, Working in Teams, Norms, and Using Roles. The 'Using Study Teams' tab is selected, showing the 'Team Support Guidebook' page. The page content includes a link to 'C3PO' and a title 'Team Support Guidebook Using Study Teams for Effective Learning'. The text explains that study team interaction is one of the three pillars in the learning process within the CPM curriculum. It states that the daily activities in CPM courses depend on students working having discussions in teams to make sense of concepts. The teacher has an active and important role in supporting these interactions and encouraging students' learning. Primarily, the teacher's responsibility is to ask good questions that stimulate student thinking and develop self-directed lifelong learners. This section describes student interactions in study teams and offers suggestions for creating and maintaining a learning environment that supports effective study teams. A list of resources is provided, including links to video content: Study Team Guidelines (Vimeo) (YouTube), Examples of Study Team Interactions (Vimeo) (YouTube), Math Discourse (Vimeo) (YouTube), Circulation (Vimeo) (YouTube), and We Have a Question (Vimeo) (YouTube).

7. Strategies

Scroll through a plethora of study team and teaching strategies providing numerous ideas for engaging students in your classroom.



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CC Course 3

Ambassador

Purpose: To have students share their strategies

When one team has finished their work before all the other teams have finished, and their answers are correct, you will allow them to go and work with a team that might need the extra help. The Ambassadors should clarify their thinking rather than go over and show the team how to do a problem.

- When a team finishes their work, each person becomes an Ambassador.
- Ambassadors help other teams.

Carousel

Purpose: Brainstorm

Several small teams can brainstorm at once with this idea by Pam Robbins. Divide the participants into teams of 3-4. Each team writes a problem or question on a large poster paper and either hung up around the room or placed one at each table. Teams gather and discuss about what to write on the chart. After two or three minutes the teams move on to the next topic; either the teams move the wall or the charts move physically from table to table. The teams read what the previous teams have written, and add to the list.

8. Universal Access

This tab provides ideas for supporting various student populations.

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CC Course 3

Intro
Success for Students
Student Struggle
More Help
Special Needs
ELL
Advanced Learners

Unprepared Students
Conclusion

[C3PO]

Universal Access Guidebook

The CPM Educational Program originated as an Eisenhower-funded curriculum project to write and support classroom materials that would access to mathematics for a broad range of students. The result is a challenging curriculum that provides the opportunity for all students to r exceed expected state and local standards. The program is especially effective in teaching students of varied abilities and backgrounds beca incorporates strategies, lesson components, and content that is accessible to most learners. Especially key, is the use of student study teams, research, to provide support for students who may need assistance with reading, alternate explanations, and guided learning.


The program's instructional materials provide contextual and concrete problems to introduce students to concepts. Problems are grounded in that are familiar and understandable. Lessons and problems are constructed to offer visual representations of many ideas. Manipulatives and support learning when appropriate. The curriculum also supports learning by helping students to use higher-order thinking skills and to deve solving strategies. (Problem-Based Learning)

Because mastery is best achieved over time, practice of basic skills and major concepts is spaced throughout the curriculum. Students have : opportunities to learn an idea or skill before mastery is expected. Closure activities at the end of each day's lesson and at the end of the chap students with opportunities to summarize their learning and to deepen their mathematical understanding. (Mixed, Spaced Practice)

Study teams, as well as being an effective vehicle to support struggling students, encourage mathematical discourse. In addition to asking q

9. Literacy

The Literacy Resource Guide describes numerous ideas to support students with a variety of literacy challenges as well as great suggestions for students struggling with reading.

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Literacy

CC Course 3

Introduction
Literacy Guide
Student Strategies
Team Strategies
Reading Strategies

[C3PO]

Literacy Support Guidebook

In today's schools, many students struggle with English language literacy. Some students grow up speaking, reading, a being exposed to English. Other students grow up speaking English but have not yet acquired strong literacy skills. It i support the development of literacy for all students, especially those who struggle with reading and writing in English.

Many effective support strategies are embedded within CPM curriculum. In addition, this section is designed to provid supporting literacy in teamwork, whole class discussions, and writing activities.

Strategies that require students to generate ideas (student-driven literacy strategies) are most effective for many reason students the opportunity to connect meaning of new vocabulary to their own prior understanding and experiences thro recognize these personal connections to new ideas, whether the content is mathematical, language, or anything else. Al own vocabulary lists or find challenging words themselves enables them to build strategies that can effectively help th Learning is much more effective when students have a sense of ownership or connection to it. Whenever possible, allo vocabulary lists, discuss the meaning of a portion of text, and provide them opportunities to make sense of new words. as you circulate among the study teams during class.

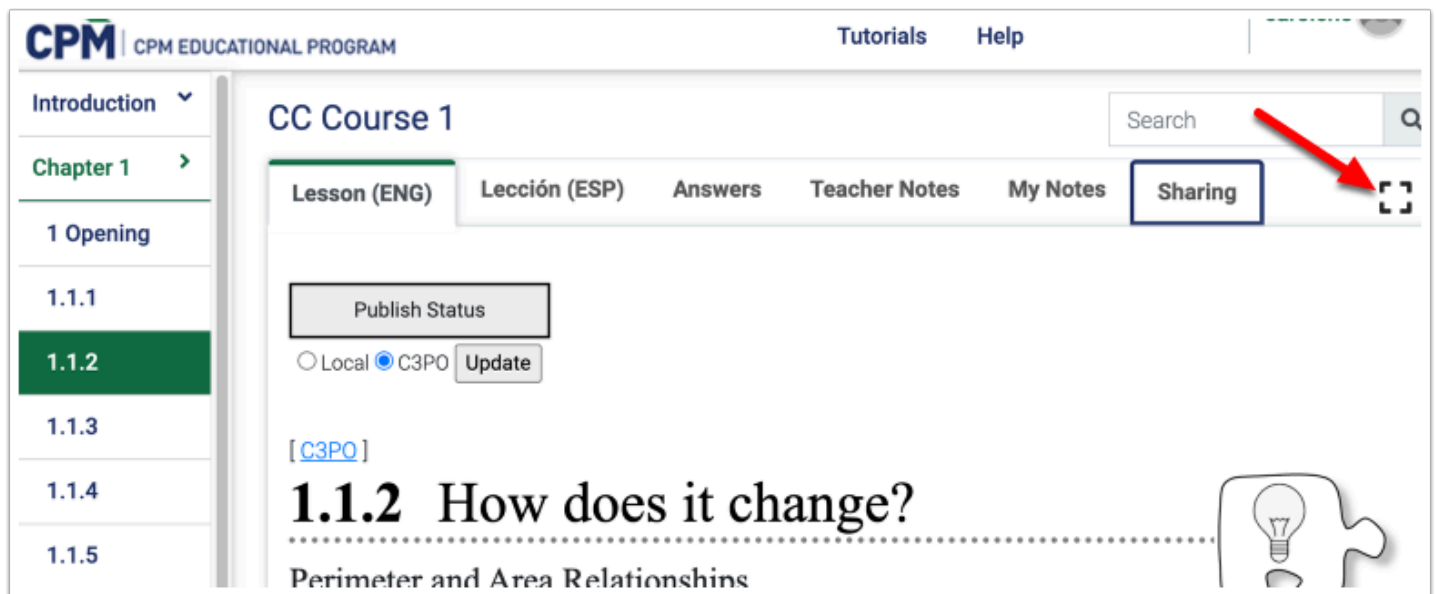
Taking time in class to focus on supporting literacy is beneficial to all students, not just those who may be identified E for supporting English language learners are the same strategies found most effective to promote learning for all stude is to provide multiple learning strategies so that all students will have access to learning mathematics.

Toggle between Full Screen view & Toolbar view

You can hide the toolbars to allow for a larger viewing area. This is particularly good for viewing on mobile devices or projecting pages to students viewing from the back of the room.

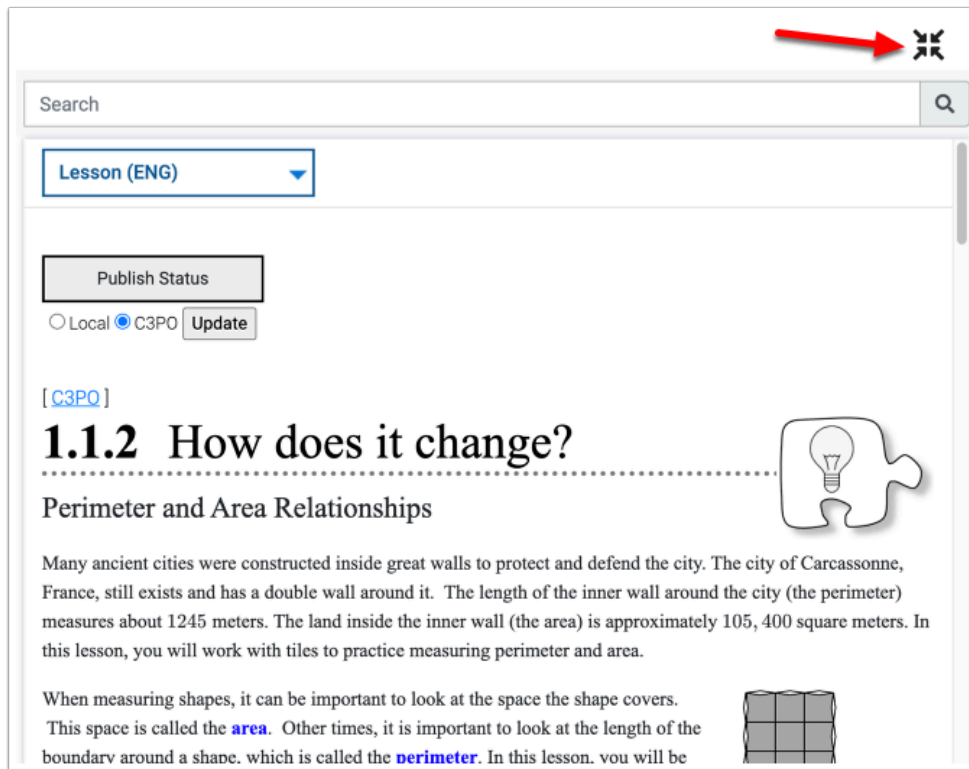
Full Screen Mode

Click the square icon just below the search bar to go into full screen mode.



Toolbar Mode

Click the icon with 4 inward facing arrows at the upper right to view the toolbars.



The screenshot shows the CPM Teacher eBook interface. At the top right, a red arrow points to a close button (an 'X' icon). Below this is a search bar with the text 'Search' and a magnifying glass icon. Under the search bar is a dropdown menu labeled 'Lesson (ENG)'. Below the dropdown is a 'Publish Status' section with two radio buttons: 'Local' and 'C3PO' (which is selected), and an 'Update' button. Below this is a link '[C3PO]' and a section header '1.1.2 How does it change?'. To the right of the header is an icon of a lightbulb inside a puzzle piece. Below the header is a sub-header 'Perimeter and Area Relationships'. The main text describes the city of Carcassonne and its walls, mentioning the perimeter and area. It then discusses the importance of looking at the space a shape covers (area) and the length of the boundary (perimeter). To the right of the text is an icon of a stack of tiles.

Search

Lesson (ENG)

Publish Status

☐ Local ☒ C3PO

[C3PO]

1.1.2 How does it change?

Perimeter and Area Relationships

Many ancient cities were constructed inside great walls to protect and defend the city. The city of Carcassonne, France, still exists and has a double wall around it. The length of the inner wall around the city (the perimeter) measures about 1245 meters. The land inside the inner wall (the area) is approximately 105,400 square meters. In this lesson, you will work with tiles to practice measuring perimeter and area.

When measuring shapes, it can be important to look at the space the shape covers. This space is called the **area**. Other times, it is important to look at the length of the boundary around a shape, which is called the **perimeter**. In this lesson, you will be