What's the Big Idea, Ben Franklin?



CREDITS

■SCHOLASTIC

Producers	Leonard Mlodinow, Maureen Bunney	
QA Manager	Mark Perry	
Lead Tester	Lyndon Lorenz	
Testers	Duane Bereczki, Nicklas Weich, Andrew Turits, Annie Tsui	
Editorial Consultants	Jean Fritz, Leigh Corra, Paul Gagne, Linda Lee	
Package Design	Truus Teeuwissen	
Teacher's Guide, Writer	Judith Conaway	
Teacher's Guide, Design	Katreena S. Salgado	



L3i LEARNING

Executive Producer	Jon Rosen		
Senior Engineer	Robert Rosen		
Creative Director	Mark Rosen		
Title Producer, Editing, Sound	Steve Dieveney		
Art Director	Cliff Dawes		
3D Animator	Hary O.Wilke		
Reasearch and Licensing	Lauren Wolpert		
Graphics	Karina Chaki, Nick Faigin, Napoleon Hambrick,		
	Leo Krainer, Pankaj Sanghai		
Animatics	Karina Chaki, Nick Faigin, Napoleon Hambrick,		
	Kris Kelly, Leo Krainer, Jane Zechar-Kelly,		
	Pankaj Sanghai, Ludmil Trenkov		
Illustrators	Kris Kelly, Jane Zechar-Kelly		
Storyboarding	Kris Kelly		
Writers	Video Explorer - Catherine Valeriote		
	Glossary - Judith Conaway		
	Back of Cube - Judith Conaway		
Voice Overs	Jean Fritz, Lisa Kable, Bill Timoney		

Special thanks to the UCLA Extension Visual Arts Dept. and Weynand Training International

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About Scholastic

any of today's teachers and parents grew up with Scholastic. For more than 75 years, Scholastic has been committed to creating quality educational materials for children, teachers and families.

Scholastic is one of the leading publishers and distributors of educational material for children—including best-selling books, classroom and professional magazines, core curriculum materials, educational CD-ROMs, videos and audios for both school and home use, and on-line content. Some of Scholastic's well-known titles include *Clifford the Big Red Dog®*, *The Magic School Bus®*, *Goosebumps®*, *I Spy®*, *Animorphs®*, and *The Baby Sitter's Club®*. You might also be familiar with Scholastic's book clubs, software clubs and book fairs.

Scholastic's aim is to offer children materials that create opportunities for optimal educational, emotional and social development. All software, audiovisual adaptations and book titles from Scholastic begin with respect for developmental principles and a variety of learning styles. Scholastic's software sparks children's innate sense of curiousity, sense of fun, search for mystery and mastery, and love of absorbing experiences. The creative teams at Scholastic are confident that learning is inevitable when children are excited about and engaged in what they are doing.

Welcome!

his CD-ROM program is part of the Scholastic CURRICULUM CONNECTIONS™ Learning Series. The program consists of the CD-ROM disk and this printed handbook.

The program is based on a popular, award-winning book, "What's the Big Idea, Ben Franklin?" The story is an amusing, offbeat look at the writer, printer, scientist, inventor, diplomat, and founding father. On this CD, the text's wit and humor are enhanced by the wry narration by the author, Jean Fritz. She cleverly draws out the facets of Franklin's complex character: his extraordinary self-discipline, his pride in his own success, his ability to have good ideas and put them into practice, his successes and failures in following his own rules for living. The witty illustrations by Margot Tomes (transformed into animations for this program) bring to life the everyday details of Franklin's world.

The CD-ROM contains many other exciting features to help students learn through multimedia. From the video lessons, students can take audiovisual "side trips" with the Video Explorer. Students can also read and hear the lessons in a fuller, narrated text, digging into the Glossary for fascinating facts. Each lesson also has one of three kinds of games, which help check and reinforce what students have learned.

The CD-ROM also contains a variety of materials for teachers and parents, including Assignments (guided explorations of the CD-ROM), Bulletin Boards (for displaying results of students' explorations), and Challenges (extra projects inspired by the CD-ROM). There's also a list of Recommended Reading. Teachers will especially appreciate the program's internal tracking system, which allows them to monitor students' progress.

Our goal for the Scholastic CURRICULUM CONNECTIONS Learning Series is to set a new standard in educational software. Children can choose the mode in which they learn best, shifting easily from "experiential" visual learning to "conceptual" narrated, text-based learning that reinforces reading skills. Once a child, teacher or parent learns how to use one title in the series, they will know how to use every other one in the growing library. Now, time and energy can be focused on the actual educational content instead of learning new software. We know you'll enjoy this program and find it effective, easy to use, and fun for kids, parents, and teachers.

Welcome!

OBJECTIVES OF THE PROGRAM

After working with the materials on this CD-ROM, students will be able to:

- recall the main ideas about the life and accomplishments of Benjamin Franklin.
- discuss and give examples of Franklin's complex character.
- learn details and select key words from seeing pictures, hearing narrations, and reading text.
- find additional material in a database by using key words.
- define key words and new words and use them in context.
- place Franklin in time, both on a time line and in history in general.
- identify and read original source material by and about Benjamin Franklin.
- form and express opinions about Benjamin Franklin and his achievements.

By using the materials on this CD-ROM, teachers will be able to:

- use learning teams and learning themes as strategies in working with the CD-ROM (3 to 5 students per computer).
- track and monitor students' progress through the CD-ROM.
- give students reproducible Assignments that guide their explorations of the CD-ROM.
- display results of students' work on theme-related Bulletin Boards (and Study Centers).
- integrate the CD-ROM across the curriculum: literature, history, geography, social studies, science, math, art, music, dance, and drama.

THE LEARNING CUBE

Like all the titles in the Scholastic CURRICULUM CONNECTIONS Learning Series, this program features the Learning Cube®, a "magic cube" that spins, expands, and breaks into smaller cubes, allowing users to select from a multimedia menu.

The front of the Learning Cube is for students. The cube face is divided into nine chapters, or lessons. Students can see and hear the lessons on entertaining videos, taking audiovisual "side trips" with the Video Explorer. They can also read and hear the lessons in a fuller, narrated text, digging into the Glossary for fascinating facts. Each lesson also has one of three kinds of games, which help check and reinforce what students have learned. The back of the Learning Cube is for teachers. Back panels provide access to a Teacher's Guide, which contains Assignments, Bulletin Boards, Challenges, a Recommended Reading list, and information about other titles in the Scholastic CURRICULUM CONNECTIONS CD-ROM series.

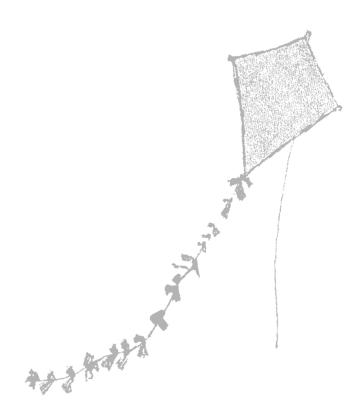
Welcome!

OVERVIEW OF THIS HANDBOOK

This handbook has two parts: a CD-ROM Users' Guide and a Teachers' Guide.

The CD-ROM Users' Guide explains the screens, navigations, and functions of the CD. It is written for students and others who will be directly working with the CD. Teachers may show these pages to students as they introduce the program.

The Teachers' Guide includes suggested classroom strategies for using the CD-ROM, instructions on how to access teacher-only material on the CD, and print versions of Assignments, Bulletin Boards, and Challenges from the disk. The Teachers' Guide also contains answers to questions from the Assignments, extra time lines, puzzles, and indexes.



SYSTEM REQUIREMENTS

Check the System Requirements below to make sure your computer is compatible with this CD-ROM. If you have difficulty installing or using the software even though your system meets these requirements, please refer to the Troubleshooting section at the end of this User's Guide. The printer is optional.

Windows®:

- 486DX66MHz or faster processor (100MHz recommended)
- Microsoft Windows® 95 or later
- 16 MB RAM (32 MB recommended)
- 10 MB hard disk space available
- 640 x480 display with 256 colors
 (24 bit color video card recommended)
- Four-speed CD-ROM drive (eight-speed recommended)
- Windows-compatible sound card
- Mouse

Macintosh®:

- 68040 or Power Macintosh®
- System 7.5 or later
- 6 MB Free Ram
- 16MB RAM (24 MB recommended)
- 16MB hard disk space available
- 640 x480 display with 256 colors (24 bit video card recommended)
- Double-speed CD-ROM drive (four-speed recommended)
- Mouse

INSTALLATION AND LAUNCHING

Windows/PC. If you want to run this Learning Cube on a Windows/PC, simply double click the file named PC Cube. It will check to make sure all the proper files that are needed to run the program are in place, and it will install the ones that aren't.

Macintosh. If you want to run this Learning Cube on a Mac, simply double click on the file named **Mac Cube**. It will check to make sure all the proper files that are needed

to run the program are in place, and it will install the ones that aren't.



OPENING SCREENS

➤ Start Screen

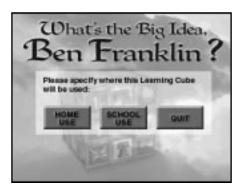
The Start screen is the first screen you see after you install the program. (See previous page)

You can do the following with the buttons on this screen.

- Click on QUIT to exit the program.
- Click on **START** to activate the program.

After you click START, the program will check to make sure the computer meets the minimum system requirements and is configured properly.

- If your computer does not meet requirements, additional installation instructions will appear.
- Once the computer checks out, you will see animated titles from Scholastic and L3 Interactive, and then the Log-On screen.



- ➤ **Home Use.** Choosing this option brings the user directly into the program, bypassing the log-on screen.
- ➤ **School Use.** Selecting this option brings the user to the Log-on screen. This option is useful for classroom environments where there are multiple users and multiple log-ins.

➤ Log-On Screen

This screen appears after you click **START**. You will be asked to log on every time you use this program. The screen looks like this.

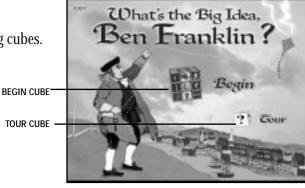
Students and teachers have different options for using this screen.

- If you're a student, log on by typing your name on the line. The program will then keep track of what you have viewed and read and record your game scores.
- If you're a teacher, you can enter a password that allows you to
 monitor students' progress, read their essays, and track their game scores.
 For more on teacher passwords, see the "Teacher's Resource Room" section
 of the Teachers' Guide. (The Teachers' Guide is the second half of this book.)
- Click CONTINUE to register your name and continue the program.
 The next screen you see will be the Welcome screen.



On this screen you will see two rotating cubes. The larger cube is labeled "Begin."

The smaller cube is labeled "Tour."



What's the Big Idea.

Ben Franklin

JOHN SHITH

Here are your options for this screen.

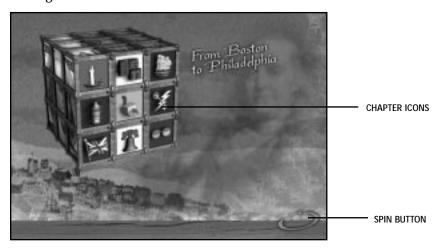
- Click on the TOUR cube for a brief slide show tour of the Learning Cube.

 To interrupt the tour and return to the Welcome screen, press the ESCAPE key on the keyboard. Otherwise, the tour will return automatically to the Welcome screen at the end of the slide show.
- Click on the **BEGIN** cube to get to the Learning Cube (the main menu).
- Click on the EXIT button to quit the program. This button is a standard feature, which appears on most screens. (There will be no further explanation of this button in the rest of this User's Guide.)



MAIN MENU: THE LEARNING CUBE

The Learning Cube is the main menu of the program. From the Cube, you can move to any of nine chapters. You can also access the Teacher's Resource Room and other materials on the back of the Cube. The Learning Cube looks like this.



➤ Lessons Facet and Chapter Icons

On the main menu screen, the Learning Cube appears with its "lessons facet" facing the user. There are nine chapter icons on the lessons facet. You can do the following with the chapter icons.

- See and hear the chapter titles. As you pass your mouse over each chapter icon, a voice speaks the chapter's title, and it appears in print. Here are the nine chapter titles for this program.
 - 1. Ben Franklin's Early Years
- 6. Electricity
- 2. Apprenticeship
- 7. Ben Franklin in London
- 3. Ben Franklin in Philadelphia
- 8. Declaration of Independence

4. Early Ideas

- 9. Ben Franklin's Later Years
- 5. Inventions & Innovations
- Click on any of the nine chapter icons to go to that chapter. After you click, a chapter row (made up of three blocks) will emerge from the Learning Cube.

➤ Spin Button

The SPIN button is located in the lower right corner.

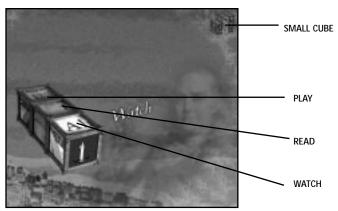
 Click on the SPIN button the Learning Cube over, allowing access to the Teachers' Resource Room and other materials on the back of the Cube.

CHAPTER ROWS AND LESSON BLOCKS

When you click on any chapter icon, you will see a chapter row emerge from the Learning Cube. Each chapter row is made up of three lesson blocks.

Chapter Rows

- See and hear what's in each block by passing the mouse over the block.
- Click on any of the three lesson blocks to detach it from its chapter row and bring it forward.



Lesson Blocks

- Click on the front block (the video lesson block) to WATCH and hear the chapter in video form.
- Click on the middle block (the text lesson block) to READ and hear the chapter in more detailed text form.
- Click on the rear block (the game block) to PLAY a game that goes with the chapter.

Small Cube Icon

 Double click the small cube icon (upper right corner) to return to the main menu (the Learning Cube). Or use the keyboard instead (press SHIFT and ESCAPE simultaneously).

Help Button

Click on the HELP button to read the options available to you at the
place you clicked. You can return to where you were in the Learning Cube
either by clicking the small cube icon (upper right corner) or by clicking the
BACK button on the Help screen itself.

➤ Video Lesson Block

The front block in each chapter row lets you watch and hear the chapter in video form. When you click on the front block in each chapter row, this screen will appear.



You can do the following with the buttons and icons on this screen.

Video Control Buttons

Click on the video control buttons below the small screen to control the video.
 The control buttons are PLAY, PAUSE, FAST FORWARD, and REWIND.

Video Explorer Slides

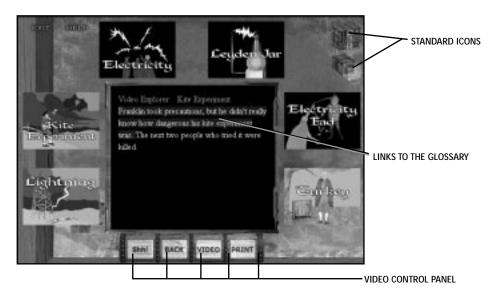
• Click on the Video Explorer slides that appear around the screen, to get fascinating new information related to the topic.

Chapter Row and Cube Icons

- Click on the chapter row icon to return to the three-block chapter row.
 The icon appears in the upper right corner, just below the small cube icon.
- Click on the small cube icon to return to the main menu (the Learning Cube).

➤ Video Explorer Text Screens

Video Explorer text screens look like this. You get to these screens by clicking on the slides that appear as you watch the video.



You can do any of the following on this screen.

Video Control Panel

- Choose either to listen and read or to read alone. Use the **Shh!** button to turn the narrator's voice on and off.
- Click on the BACK button to go back to the previous text screen.
 (You may also go back by pressing the ESCAPE key on your keyboard.)
- Click on the VIDEO button to continue watching the video.
- Click on the PRINT button to print out the text of the Video Explorer entry.

Links to the Glossary

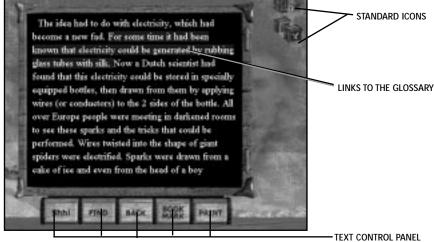
 Click on any of the yellow key words within the text to go to a related Glossary entry.

Standard Icons

- Click on the chapter row icon to return to the three-block chapter row.
- Click on the small cube icon to return to the main menu (the Learning Cube).

➤ Text Lesson Block

The middle block in each chapter row lets you read and hear the chapter in more detailed text form. When you click on the middle block in each chapter row, a screen like this will appear.



You can do any of the following on this screen.

Text Control Panel

- Choose either to listen and read or to read alone. Use the **Shh!** button to turn the narrator's voice on and off.
- Click on the FIND button to search for a specific word within the text.
- Click on the **BACK** button to go back to the previous text screen.

You can do any of the following on this screen. (You may also go back by pressing the **ESCAPE** key on your keyboard.)

- Click on the BOOK MARK button to mark this particular page. A book mark flag
 will appear at the top of the frame. You can return to your book marks later by
 clicking on the flags.
- Click on the PRINT button to print out the part of the text that you see on the screen.

Links to the Glossary

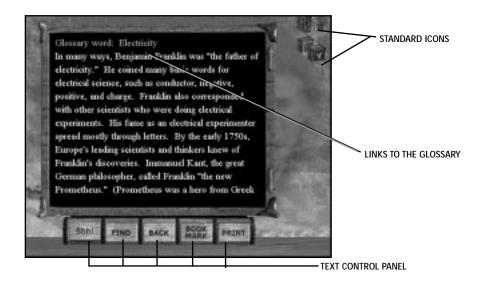
Click on any of the yellow key words within the text to go to a related Glossary entry.

Standard Icons

- Click on the chapter row icon to return to the three-block chapter row.
- Click on the small cube icon to return to the main menu (the Learning Cube).

➤ Glossary Text Screens

Glossary text screens look like this. You get to these screens by clicking on the yellow-highlighted words and phrases in the lesson text or the Video Explorer text. The Glossary text is read-only (there is no audio).



You can do any of the following on this screen.

Text Control Panel

- Click on the BACK button to go back to the previous text screen.
 (You may also go back by pressing the ESCAPE key on your keyboard.)
- Click on the TEXT button to continue reading the lesson block text.
- Click on the **PRINT** button to print out the text of the Glossary entry.

Standard Icons

- Click on the chapter row icon to return to the three-block chapter row.
- Click on the small cube icon to return to the main menu (the Learning Cube).

➤ Video Explorer and Glossary Topics

Α

Antislavery Work

Ants

Apprenticeship

Arguing

Arithmetic

В

Bache, Sarah Franklin

Battle of Lexington

Blacksmith

Bonhomme Richard

Boston Tea Party

Boston, Massachusetts

C

Candle and Soap Smells

Citizen Codfish

Comets

Constitutional Convention (1787)

Continental Congress

D

Debbie Read

Deborah Franklin

Declaration of Independence (1776)

Delaware River

Dipping Candles

Ε

Electricity

Electricity Fad

F

Fashion

Fire Department

First Lion

France

France Joins the War

Franklin and the Declaration of Independence

Franklin Names

Franklin Stove

Franklin, Benjamin (1706-1790)

Franklin, Francis Folger (1732-1736)

Franklin, James

Franklin, Josiah and Abiah

Franklin, William Temple (1731-1813)

Franklin's Death

Franklin's Three Children

Freedom

G

George III (1738-1820)

Going to Sea

Н

Hospitals

House on Milk Street

Hurricanes

ı

Ideas

Inventions

J

James Franklin

Junto

➤ Video Explorer and Glossary Topics

K

Kite Experiment Kites

L

Leather Apron Club/Junto Leyden Jar Library Lightning Lightning Rod London

М

Money Moon

Ν

Newspaper Northwest Passage

0

One Tenth of the Treasure Other Explorers

Ρ

Paddles
Pennsylvania's Government
Philadelphia
Pirates
Poor Richard's Almanack
Postmaster
Preacher
Printing
Private School

R

Reading Revolutionary War (1775-1783) Royal Society Rules for Good Behavior

S

School
Sea Battles
Shoemaker
Silence Dogood
Soapmaking
Stevenson, Polly
Strokes
Swimming
Swimming Tricks

T

Taxes
The Way to Wealth
Thomas Jefferson (1743-1826)
Tides
Trades
Treaty of Paris (1783)
Turkey

U

United States Constitution University Honors

V

Vegetarianism

W

Weather Prediction Wigs Writing

GAMES BLOCK

Click on the rear block in each chapter row to play a game or do creative writing that goes with the chapter. There are three kinds of games and activities. In the nine chapter rows, you get three different versions of each game.

Write It! activities follow the lessons in chapters 6, 7, and 9.

Spot It! games follow the lessons in chapters 2, 3, and 4.

Risk It! games follow the lessons in chapters 1, 5, and 8.

➤ Write It! Creative Activity

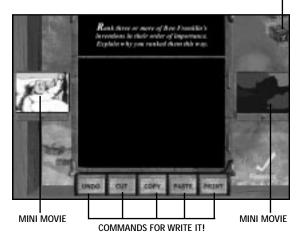
In this game, you are given the chance to express yourself about what you saw, heard, and read in the video and text lesson blocks.

Composing Your Answer

- Play the two mini-movies that appear on either side of the writer's window. The movies have visual clues from the video, just to get you thinking.
- Type your answers in the writer's window, using the keyboard.
- Edit your writing by using the UNDO, CUT, COPY, and PASTE buttons on the control panel.
- Click on the PRINT button on the control panel to print out your answer.

Getting a New Question

Click on the chapter row icon. When you return to the chapter row, move your
cursor to the game block (the rear block in the row). Click on a different facet
of the game block to get a different question. Each Write It! activity has two
questions.



SMALL CUBE

Scoring

• By using a teacher's password, your teacher can read and evaluate your answers.

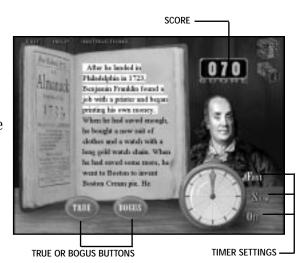
➤ Spot It! Game

In this game, you read along with a text and try to spot the sentences that are wrong.

Timer Settings

 Select your speed of play by clicking on the lever (FAST, SLOW, or OFF).
 The FAST setting gives you 10 seconds to read each sentence and decide whether it is true or bogus.

The SLOW setting gives you 20 seconds per sentence.
The OFF setting lets you take your time.



How To Play

- Click on the framed portrait to hear instructions for the game.
- Interrupt the instructions by pressing the space bar on your keyboard.
- Read the passage that appears on the book page. Occasionally a "True, or Bogus?" sentence will appear. When it does, the timer will begin counting down while you decide on the answer.
- Click the TRUE or BOGUS button. A voice then tells you whether the answer was right or wrong.

Scoring

 You get 5 points for each correct answer, 0 points for an incorrect answer, and a negative 5 points if you fail to click the TRUE or BOGUS button before the timer runs out.

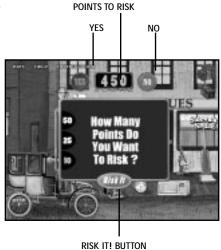
➤ Risk It! Game

In this game, you look at the objects in an environment, choose the objects that do and don't belong there, and risk points on your choice.

POINTS TO RISK

How To Play

- Click on each object in the environment.
- Decide whether the object does or does not belong in the environment.
 Then click on the YES or NO button.
- Select how many points you want to risk on your choice.
- Click on the RISK IT! button. Get a message telling you what you should have answered, and why.



Scoring

• The computer adds the points you risked to your score if you were right, and subtracts the points if you were wrong.

BACK OF THE CUBE

The back of the Learning Cube is packed with extra features that help you explore the CD in depth, and learn everything you can.

How To Get There

- Use the small cube icon
 (upper right corner) to return to
 the main menu (the Learning Cube).
- Click on the SPIN button (lower right corner) and watch the cube turn!



What You'll Discover

The back of the cube has three facets: a Recommended Reading List, a Scholastic Curriculum Connections Overview, and the Teacher's Resource Room.

➤ Recommended Reading

This list describes extra reading material related to the topic of this CD-ROM. Contents include lists of original source materials, publications that contain maps and illustrations, and suggested extra reading for students as they meet the Challenges.

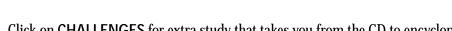
➤ About Scholastic Curriculum Connections

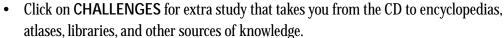
This section provides more detailed information about the Scholastic Curriculum Connections series of educational titles.

➤ Teacher's Resource Room

In the Teacher's Resource Room you can do the following.

- Click on ASSIGNMENTS for extra study that relates only to the CD-ROM and a dictionary.
- Click on BULLETIN BOARDS
 for ideas on how to display
 what students have learned.
 (This section is accessible only to those with teacher passwords.)





 Click on the SMALL CUBE ICON if you are in the Assignments, Bulletin Boards or Challenges screens to return to the back of the cube.



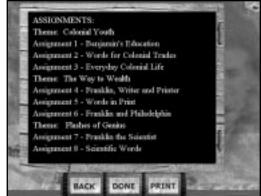
Assignments

Assignments are study tours through the CD-ROM, guided to help you focus on key questions, new words, and sequences of events. To do these assignments, you need only the CD-ROM and a dictionary. Assignments help you develop the skills of recalling and organizing details. Assignments are organized according to themes.

This picture shows an Assignment screen.

There are 20 assignment screens in the section. On Assignment screens you can do the following.

- Click on BACK and FORWARD buttons to read other assignments.
- Use the **PRINT** button to print out the assignment.
- Click on the DONE button to return to the Teacher's Resource Room main menu.



➤ Challenges

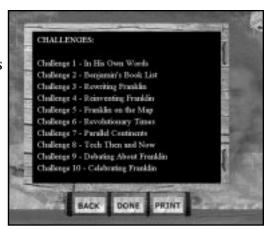
Challenges are extra study topics inspired by the CD-ROM and designed to take you further afield, to encyclopedias, libraries, and other sources of information. You also get creative ideas for expressing your ideas and opinions about Columbus.

This picture shows a Challenge screen.

There are 10 challenge screens in the section.

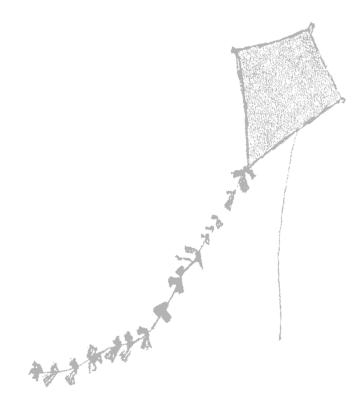
On Challenge screens you can do the following.

- Click on BACK and FORWARD buttons to read other challenges.
- Use the **PRINT** button to print out the challenge.
- Click on the DONE button to return to the Teacher's Resource Room main menu.



Notes

Ent.
April Six
THE WAY



CLASSROOM STRATEGIES

This Scholastic CURRICULUM CONNECTIONS title provides your students with true multimedia learning. Students can watch and hear the lessons on video, read fuller, narrated text versions of the lessons, and research topics from the lesson with the Video Explorer and Glossary features.

➤ Introducing the CD-ROM to the Class

An effective opening is to use the CD itself, especially its title, as a way to open class discussion and motivate students, as well as to introduce the CD.

- Introduce the title of the story, "What's the Big Idea, Ben Franklin?" Post the title on the bulletin board, or write it on the chalkboard. Discuss what students think the title means.
- Remind students that the word "what" begins questions that ask about things, including abstract things like ideas. What school subjects show us how to answer the question what? (all subjects, but especially science, math, history)
 Ask students to suggest questions from each subject, such as, "What is electricity?" and "What happened on July 4, 1776?"
- Remind students that we can learn other key facts by asking different questions. Ask students to suggest questions that help us find and remember key facts about people (who), dates (when), ways of doing things (how), and reasons (why).
- Encourage students to ask those key questions as they watch, listen to and read
 the story, do the assignments, and take the challenges.
- Hold up the CD, show what it looks like, tell where it is kept, and explain the rules for checking out and using the program.
- Show students the User's Guide as you explain how to use the program.

➤ Group Study with "Theme Teams"

A very effective way for a classroom to study a large topic, such as the life of Benjamin Franklin, is to divide the work among study teams and have the teams share information with each other. This approach also reinforces learning, because students must strengthen their knowledge and skills in order to pass them on to others. Often each team is assigned a different theme to study.

The teachers' resource materials on the CD-ROM were designed with such "theme teams" in mind. In the classroom, small groups of students often must cluster around a single computer, or take turns sharing a single computer. So team study is already encouraged.

You can direct the theme teams even more carefully with the Assignments, which are grouped by theme. Challenges explore the themes in greater depth, and Bulletin Boards are organized so that theme material can be displayed.

➤ Connections to the Curriculum

The story of Benjamin Franklin lends itself well to use across the curriculum. Because he lived at the time of the American and French Revolutions, the industrial revolution, and the Enlightenment, the story connects especially well to United States and world history and to the history of modern science and technology. Science experiments related to wind, air, and electricity are especially effective when used along with this topic. Students can do math by assembling time lines. Above all, the achievements of Franklin, who never stopped being curious, studying, and trying out new ideas, will inspire literary, musical, and dramatic expression.

To help you and your students make these curriculum connections, each reproducible Assignment or Challenge page is labeled by subject area. On the Assignment pages, curriculum subjects are listed at the top of the page. On the Challenges, subjects are listed under "Ways to meet the challenge." You may assign students Assignments and Challenges according to the subjects in which they need the most work.

➤ Reproducible Pages

This printed Teacher's Guide includes the Assignments, Bulletin Boards, and Challenges in reproducible form. The teacher can copy and distribute materials to individuals or study teams, as required by the class's learning goals.

Evaluation

Several means of evaluating students' progress are built into the lessons on the front of the Learning Cube. With a teacher's password, you can do the following:

 Monitor whether students have watched the video lessons or read the text lesson blocks.

- Check students' scores on the Risk It! and Spot It! games.
- Read and score students' essay answers in the Write It! activity.

This printed guide also provides means of evaluating students.

- Check the Assignments section in this printed guide for answers to the key questions on the Assignments.
- Use the puzzles as comprehension guizzes.

TEACHER'S PASSWORD

Windows/PC. To set the Teacher's Password on a Windows PC, do the following:

• Go into the Support folder on the CD-ROM and double click on a file called TP Config. A window will appear on the screen where you both set and confirm the Teacher's Password.

Macintosh. To set the Teacher's Password on a Macintosh, do the following:

 Go into the Mac Support folder on the CD-ROM and double click on a file called TP Config. A window will appear on the screen where you both set and confirm the Teacher's Password.

To change the Teachers Password:

Run the TP Config application and, at the prompt, enter your Teacher's Password.
 Only after you enter your pre-existing password will you be able to change it to another.

If you forget your Teacher's Password:

After the Teacher's Password has been initially set, subsequent uses of the TP
Config application will prompt you for that password. If you forget your password
you must Un-Install the program and then re-install it. You will then be able to
enter a new Teacher's Password.

TEACHER'S RESOURCE ROOM: REPRODUCIBLE MATERIALS

The pages that follow in this printed Teachers' Guide are reproducible versions of the materials that appear in the Teacher's Resource Room on the CD-ROM.

The Teacher's Resource Room has the following three sections.

➤ Assignments

Assignments are study tours through the CD-ROM, guided so that students will focus on key questions, new words, and sequences of events. Assignments focus on the skills of recalling and organizing details. They are also organized according to themes, for ease in working with "theme teams" and creating theme-based bulletin boards.

➤ Bulletin Boards (for teachers only)

Bulletin boards (and study centers) contain ideas for displaying what students have learned in the lessons and explorations on the CD, as well as by doing assignments and taking challenges.

➤ Challenges

Challenges are extra study topics inspired by the CD-ROM and designed to take students' further afield, to encyclopedias, libraries, and other databases. Students also express and explore their own opinions and ideas about Benjamin Franklin.

KEEPING TRACK OF STUDENTS' PROGRESS

From the Teacher's Resource Room on the back of the cube, Teachers can access the **SCORE BOARD**, providing them with data relating individual student's performances in any of the games on the cube. (Remember that to access multiple student scores, the Teacher must log in as a teacher and type in their password).

The following data is supplied for each student:

- Number of Problems
- Total Points
- Number of problems attempted
- Total Correct
- Whether the game was played to completion or if it was exited prematurely

If the user logs in as a student (i.e., if they don't log in as a teacher and provide the requisite password), they will be able to access only data relating to their performance on the games. Also note that if a student user has not yet played any of the games, they will get a message indicating that there is no game performance data to review.



THEMES

- 1. Benjamin's Education
- 2. Words for Colonial Trades
- 3. Everyday Colonial Life

COLONIAL YOUTH

- 4. Franklin, Writer and Printer
- 5. Words in Print
- 6. Franklin and Philadelphia

THE WAY TO WEALTH

- 7. Franklin the Scientist
- 8. A Scientific Vocabulary
- 9. The Birth of Science

FLASHES OF GENIUS

- 10. Franklin the Founding Father
- 11. Common Revolutionary Words
- 12. Proper Revolutionary Names

THE NEW NATION

- 13. Franklin the Family Man
- 14. Words for Everyday Things
- 15. Benjamin Franklin's Times

PUBLIC AND PRIVATE

Assignment 1: Benjamin's Education

SUBJECTS: Reading, history

WHAT YOU NEED : CD-ROM

HOW TO STUDY: • Read or reread the text version of the story

(Block B).

• Answer the key questions

as you read.

 Explore more by clicking on words or phrases that are highlighted in the text.



QUESTIONS TO ANSWER

- 1. How many years of formal schooling did Benjamin have?
- 2. What work did Benjamin do in his father's shop?
- 3. For what trades did Benjamin consider becoming an apprentice?
- 4. What trade did Benjamin learn under his brother James?
- 5. What books did Benjamin read, and how did he pay for them?
- 6. How did Benjamin teach himself to write?
- 7. What ideas from books did young Benjamin try out?
- 8. What were magic squares, and what subject did they help Benjamin learn?
- 9. How did Benjamin keep educating himself after he went to work on his own?
- 10. How did Franklin educate himself later in life?

HOW TO SHOW YOU KNOW

- Write a short answer to each question.
- Write a short report that answers at least five of the questions.

Assignment 2: Words for Colonial Trades

SUBJECTS: Reading, history, science

WHAT YOU NEED: CD-ROM, dictionary

HOW TO STUDY : • Read or reread the text

version of the story (Block B).

• Find the key words as

you read.

• Explore more by clicking on

words or phrases

that are highlighted in the text.

 Use a dictionary to learn the meanings of any words you do not know.



apprentice	coopers	hatters	master
barber	cutlers	improvements	printer
blacksmith	duty	leather apron	trades
club	errands	lye	watchmen

HOW TO SHOW YOU KNOW:

- Make a picture dictionary, illustrating at least five of the terms on the list above.
- Write ten sentences that use words from the above list.
 Your sentences should prove you know the meanings of the words.

Assignment 3: Everyday Colonial Life

SUBJECTS : Reading, history **WHAT YOU NEED** : CD-ROM, globe

HOW TO STUDY : • Read or reread the text version

of the story (Block B).Explore more by clicking on words or phrases that

are highlighted in the text.



QUESTIONS TO ANSWER

- 1. How large was the city of Boston when Benjamin was born there?
- 2. What were Boston's most important industries?
- 3. What were some of the dangers of sailing in colonial times?
- 4. How were young people educated in the American colonies?
- 5. How did people in colonial times amuse themselves?
- 6. What kinds of transportation were used in colonial times?
- 7. What books and other things did people in the American colonies read?
- 8. What things were sold in colonial shops?
- 9. Where did immigrants come from during colonial times?
- 10. What ideas were new during colonial times?

HOW TO SHOW YOU KNOW

- Write a short answer to each question.
- Write a short report that answers question #10.
 Your report should answer at least five of the questions.

Assignment 4: Franklin, Writer and Printer

SUBJECTS: Reading, history, science

WHAT YOU NEED : CD-ROM

HOW TO STUDY: • Read or reread the text version of the story (Block B).

• Explore more by clicking on words or phrases that are

highlighted in the text.



QUESTIONS TO ANSWER

- 1. What jobs were done by printers when Franklin was learning to print?
- 2. Who were some of the writers Benjamin read as a young man?
- 3. What was the subject of young Benjamin Franklin's first poem?
- 4. Who was Silence Dogood, and why was she important?
- 5. What kinds of things did Franklin print in his Philadelphia shop?
- 6. What were two publications that made Franklin wealthy?
- 7. What were some of the best-known sayings of "Poor Richard"?
- 8. Who were some of the people with whom Franklin exchanged letters?
- 9. What were three basic documents of American government that Franklin helped to write?
- 10. How did the ability to write well help Benjamin Franklin succeed?

HOW TO SHOW YOU KNOW

- Write a sentence that answers each of the questions above.
- Write a short report that answers question #10. Include sentences that answer at least five of the other questions.



Assignment 5: Words in Print

SUBJECTS: Reading, history, math

(time lines)

WHAT YOU NEED : CD-ROM

HOW TO STUDY : • Read or reread the text

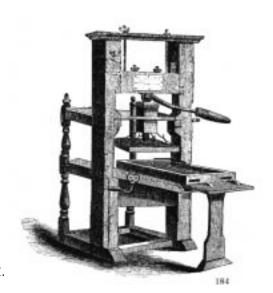
version of the story

(Block B).

Look for the key words

as you read.

 Explore more by clicking on words or phrases that are highlighted in the text.



WORDS TO NOTICE

advice	Declaration	opponent
almanac	edition	poetry
argumentative	essay	printer
comments	humorous	prose
Constitution	letters	vocabulary
contradict	library	

HOW TO SHOW YOU KNOW (CHOOSE ONE)

- Write a sentence that uses each of the words above.Your sentences should prove you know the meanings of the words.
- Give an example for each of five words on the list.
 You may make up your own examples of copy examples from books.

Assignment 6: Franklin and Philadelphia

SUBJECTS: Reading, history, technology

WHAT YOU NEED : CD-ROM

HOW TO STUDY : • Watch or read the

video version (Block A) and the text version (Block B) of the story.

 Answer the key questions as watch and read.

 Explore more by clicking on words or

phrases that are highlighted in the text.



QUESTIONS TO ANSWER

- 1. When did Benjamin Franklin first arrive in Philadelphia?
- 2. What was the first job Franklin got in Philadelphia?
- 3. What was Franklin's wife's name, and when were they married?
- 4. How did Mrs. Franklin help her husband earn money?
- 5. What was the Leather Apron Club and what was its purpose?
- 6. What improvements the Leather Aprons help Franklin make?
- 7. When did Philadelphia get its public library? its hospital?
- 8. How much did Philadelphia grow in the 50 years after Franklin's arrival?
- 9. What important events of the American Revolution took place in Philadelphia?
- 10. How did Benjamin Franklin help the city of Philadelphia grow?

- Write a short answer to each question.
- Write a report that answers question #10. Your report should answer at least five of the other questions.

Assignment 7: Franklin the Scientist

SUBJECTS: Reading, science

WHAT YOU NEED : CD-ROM

HOW TO STUDY: • Watch or read the

video version (Block A) and the text version (Block B) of the story.

 Answer the key questions as watch and read.

• Explore more by clicking on words or phrases

that are highlighted in the text.



- As a boy, how did Benjamin use a kite to experiment with wind power?
- 2. What did Franklin prove by his early experiment with ants?
- 3. What did the term "natural science" mean in Franklin's time?
- 4. What did the term "useful science" mean in Franklin's time?
- 5. What were some of the natural events about which Franklin formed theories?
- 6. What were some of Franklin's early inventions?
- 7. What forms of energy did Franklin's inventions use?
- 8. For what "big idea" did Franklin go down in science history?
- 9. How did he prove this big idea?
- 10. What honors did he get as a result of this big idea?

- Write a sentence that answers each of the questions above.
- Write an imaginary letter from Benjamin Franklin, describing the experiment that proved his biggest scientific idea.

Assignment 8: Scientific Words

SUBJECTS : Reading, science **WHAT YOU NEED** : CD-ROM, dictionary

HOW TO STUDY : • Read or reread the text version

of the story (Block B).

• Find the key words as you read.

 Explore more by clicking on words or phrases that are highlighted in the text.

 Use a dictionary to learn the meanings of any words you do not know.



WORDS TO NOTICE

comet	experiment	inventions	sparks
concluded	generated	lightning	theory
conductor	hurricane	moon	tides
contraption	idoa	rod	woothor

contraption idea rod weather forecast

electricity improvements shock wind

- Make a picture dictionary that includes at least ten of the terms on the list above.
- Write ten sentences that use words from the above list.
 Your sentences should prove you know the meanings of the words.

Assignment 9: The Birth of Science

SUBJECTS: Reading, history, science

WHAT YOU NEED : CD-ROM

HOW TO STUDY : • Read or reread the text

version of the story (Block B).

 Explore more by clicking on words or phrases that are highlighted in the text.

 Look for the key words, both in the text and in the Glossary material.

Notice dates as you read.



NAMES AND TERMS TO NOTICE

electricity Kalm, Peter Royal Society
Franklin stove kite experiment scientific
Halley, Edmond Linnaeus shoemaker
industrial Newton, Isaac soapmaking
inventions Priestley, Joseph university

revolution

- Make a time table or time line of new technology during Franklin's lifetime.
- Write a short report about how science was changing in Franklin's time.
 Your report should include information you discover from the text,
 Video Explorer, and Glossary.

Assignment 10: Franklin the Founding Father

SUBJECTS: Reading, history

WHAT YOU NEED : CD-ROM

HOW TO STUDY : • Watch or read the video

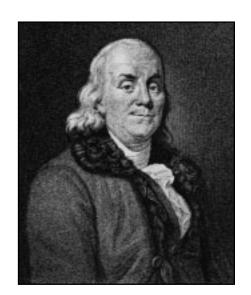
version (Block A) and the text version (Block B)

of the story.

 Answer the key questions as watch

and read.

 Explore more by clicking on words or phrases that are highlighted in the text.



QUESTIONS TO ANSWER

- 1. When and how did Benjamin learn to argue for his point of view?
- 2. How did the Leather Apron Club prepare Franklin for public life?
- What public offices did Franklin hold before 1775?
- 4. How did Franklin help Great Britain during the French and Indian War?
- 5. Why was Franklin chosen to represent Pennsylvania and the other colonies in Great Britain?
- 6. What means did Franklin use to present the colonies' point of view?
- 7. How did Franklin directly and indirectly help write the Declaration of Independence?
- 8. How did Franklin help the American colonies gain their independence?
- 9. How did Franklin help the United States rule itself for the first 15 years?
- 10. How did Franklin help form the United States Constitution?

HOW TO SHOW YOU KNOW:

• Write a short report that explains Franklin's importance in the founding of the United States. Your report should also contain sentences that answer at least five of the other questions.



Assignment 11: Common Revolutionary Words

SUBJECTS : Reading, history **WHAT YOU NEED** : CD-ROM, dictionary

HOW TO STUDY

 Read or reread the text version of the story (Block B).

 Explore more by clicking on words or phrases that are highlighted in the text.

• Look for the key words, both in the text and in the

Glossary material.

Use a dictionary to learn any definitions you do not know.



WORDS TO NOTICE

boycott gunpowder repeal citizen law representative colonies self-evident opinions committee patriot slavery elect persuade taxes freedom public troops government rebel

- Write ten sentences that use words from the above list.
 Your sentences should prove you know the meanings of the words.
- Write five sentences that use words from the above list, plus the name Benjamin Franklin.

Assignment 12: Proper Revolutionary Names

SUBJECTS: Reading, history,

math (time lines)

WHAT YOU NEED: CD-ROM

HOW TO STUDY : • Read or reread

the text version of the story (Block B).

• Explore more by

clicking on words or phrases that are highlighted in the text.

• Look for the key words, both in the text and in

the Glossary material.

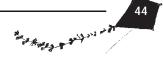


Articles of Confederation France Philadelphia **Boston Tea Party** George III **Privy Council Continental Congress** Jefferson, Thomas Seven Years War **Constitutional Convention** Lexington Stamp Act Declaration of Independence Paine, Thomas Sugar Act England Pennsylvania **Townshend Acts**

United States Constitution

HOW TO SHOW YOU KNOW (CHOOSE ONE)

- Construct a time line that includes important dates in the American Revolution.
- Write a short report about Benjamin Franklin's part in the American Revolution. Include at least 10 of the above names in your report.



Assignment 13: Franklin the Family Man

SUBJECTS: Reading, history

WHAT YOU NEED : CD-ROM

HOW TO STUDY : • Read or reread the text

version of the story

(Block B).

• Answer the key

questions as you read.

Explore more by clicking

on words or phrases that are highlighted in the text.

QUESTIONS TO ASK

- 1. Who were Benjamin Franklin's parents?
- 2. Why didn't Benjamin get along with his older brother James?
- 3. How old was Franklin when he ran away from his brother and Boston?
- 4. Who was Benjamin Franklin's wife?
- 5. How many children did Benjamin Franklin have?
- 6. How did Franklin lose his son Francis?
- 7. How did Franklin lose his son William?
- 8. With whom did Franklin spend the last years of his life?
- 10. How was Franklin's family life influence his actions?

- Write a short report that answers question #10.
 Your report should also contain sentences that answer at least five of the other questions.
- Write an account of one of Franklin's science experiments, or of some other event in Franklin's life, from the viewpoint of a member of his family.



Assignment 14: Words for Everyday Things

SUBJECTS : Reading, history, technology

WHAT YOU NEED : CD-ROM

HOW TO STUDY : • Read or reread

> the text version of the story (Block B). Look for the key words

as you read.

molasses

Explore more by

clicking on words or phrases that are highlighted in the text.



WORDS TO NOTICE

almanac compass newspaper turkey barrels fur hat pulpit watch chain books kite sealing wax wig buckles spectacles windmill knives candles leather apron stepladder codfish sword blade

- Make a picture dictionary, illustrating at least ten of the terms on the list above.
- · Write ten sentences that use words from the above list. Your sentences should prove you know the meanings of the words.

Assignment 15: Benjamin Franklin's Times

SUBJECTS: Reading, history

WHAT YOU NEED : CD-ROM

HOW TO STUDY : • Read or reread the

text version of the story (Block B).

 Explore more by clicking on words or phrases that are highlighted in the text.

· Look for dates as you read.



NAMES AND WORDS TO NOTICE

all personal names library
all words about American independence money
arguing Philadelphia
fire department pirates

inventions prate

kites The Way to Wealth

Leather Apron Club

HOW TO SHOW YOU KNOW

Construct a time line of Benjamin Franklin's life.
 You might want to shade or color your time line to show where Franklin was during each period.

ASSIGNMENT 1: BENJAMIN'S EDUCATION

- 1. How many years of formal schooling did Benjamin have? one year in Latin school, 2 years of ordinary school, for three years in all
- 2. What work did Benjamin do in his father's shop? running errands, helping make candles and soap
- 3. For what trades did Benjamin consider becoming an apprentice? hatters, coopers, cutlers, printers
- 4. What trade did Benjamin learn under his brother James? **printing**
- 5. What books did Benjamin read, and how did he pay for them? the Bible, Essays To Do Good, by Cotton Mather, Essays on Projects, by Daniel Defoe, plus books on public speaking, geography, swimming any books he could find. He paid for them by saving his food money.
- 6. How did Benjamin teach himself to write? by writing the same work in poetry and then in prose, by copying the styles of The Spectactor and other newspapers, by writing (under the name Silence Dogood) for his brother's newspaper
- 7. What ideas from books did young Benjamin try out? vegetarianism, making lists of rules for life, swimming tricks, magic squares
- 8. What were magic squares, and what subject did they help Benjamin learn?

 Magic squares were puzzles in which numbers were lined up in patterned rows.

 They helped teach math.
- 9. How did Benjamin keep educating himself after he went to work on his own?
 He read many books. He formed a club called the Leather Apron Club or Junto, to discuss and debate ideas with men like himself. He wrote letters to other scientists and tried scientific experiments.

ASSIGNMENT 3: EVERYDAY COLONIAL LIFE

- 1. How large was the city of Boston when Benjamin was born there? It had about 11,000 people.
- 2. What were Boston's most important industries? shipping, trade, fishing
- 3. What were some of the dangers of sailing in colonial times? storms at sea, high and low tides, hurricanes
- 4. How were young people educated in the American colonies?

 Some learned trades as apprentices. Others went to public schools for only a few years (like Ben). A small number were educated at the Latin School and other private schools.

- How did people in colonial times amuse themselves?
 They saw circuses and displays of animals. walked around and looked at people and things in the streets, went on picnics, saw electrical amusements, and staged parades.
- 6. What kinds of transportation were used in colonial times? boats, horses, stagecoaches, walking
- 7. What books and other things did people in the American colonies read? the Bible, newspapers, Poor Richard's Almanack, letters
- 8. What things were sold in colonial shops? books, paper, ink, soap, candles, cod, cheese (see list from Debbie Franklin's shop), wigs, spectacles, buckles, shoes, clothes
- 9. Where did immigrants come from during colonial times? England, Scotland, Ireland, Wales, Germany, Africa
- 10. What ideas were new during colonial times? democracy, industrialization, science, freedom of religion, free trade

ASSIGNMENT 4: FRANKLIN, WRITER AND PRINTER

- What jobs were done by printers when Franklin was learning to print?
 They printed bills of trade, newspapers, almanacs, public papers, even paper money.
- Who were some of the writers Benjamin read as a young man?Daniel Defoe, John Bunyan, Cotton Mather, Joseph Addison, Plutarch
- 3. What was the subject of young Benjamin Franklin's first poem? Blackbeard the Pirate
- 4. Who was Silence Dogood, and why was she important? She was the pen name used by Ben Franklin for his first successful public writing.
- What kinds of things did Franklin print in his Philadelphia shop?
 bills, newspapers, Poor Richard's Almanack, paper money, public papers
- What were two publications that made Franklin wealthy? Poor Richard's Almanack, The Way to Wealth
- 7. What were some of the best-known sayings of "Poor Richard"?
 A penny saved is a penny earned. Early to bed and early to rise, makes a man healthy, wealthy, and wise.
- 8. Who were some of the people with whom Franklin exchanged letters?
 His wife Deborah and daughter Sarah, Linneus, Joseph Priestley and other scientists

9. What were three basic documents of American government that Franklin helped to write?

Articles of Confederation, Declaration of Indepedence, United States Constitution

10. How did the ability to write well help Benjamin Franklin succeed? His writing ability earned him public approval at an early age, which motivated him to succeed. Then he earned his fortune by writing Poor Richard's Almanack. After that he made himself famous as a scientist by writing letters and pamphlets to other scientists. In London, he wrote and printed pamphlets to put forward the colonists' views, such as "No taxation without representation."

ASSIGNMENT 6: FRANKLIN AND PHILADELPHIA

- When did Benjamin Franklin first arrive in Philadelphia?
 when he was 17
- 2. What was the first job Franklin got in Philadelphia? working for a printer
- 3. What was Franklin's wife's name, and when were they married?

 Deborah Read. They were married after he got back from England in 1726.
- 4. How did Mrs. Franklin help her husband earn money? She kept a shop in their home.
- 5. What was the Leather Apron Club and what was its purpose? It was a group of young businessmen like Franklin who were interested in new ideas. They met to educate themselves, exchange books, and discuss and debate new ideas.
- 6. What improvements the Leather Aprons help Franklin make? public library, fire department, better garbage collection, hospital, schools
- 7. When did Philadelphia get its public library? The hospital was founded in 1742.
- 8. How much did Philadelphia grow in the 50 years after Franklin's arrival? Philadelphia had fewer than 8,000 people when Ben Franklin arrived there in 1723. The population grew to about 15,000 by 1750 and 25,000 by 1775.
- What important events of the American Revolution took place in Philadelphia?
 Continental Congress, signing of the Declaration of Independence, Consitutional Convention
- How did Benjamin Franklin help the city of Philadelphia grow?
 He helped lay out its streets, sound its fire department, public library, hospitals, and schools.

ASSIGNMENT 7: FRANKLIN THE SCIENTIST

- As a boy, how did Benjamin use a kite to experiment with wind power?
 He used a kite as part of a swimming experiment, and towed himself across a river with a kite.
- 2. What did Franklin prove by his early experiment with ants? that ants had some way of communicating with each other
- What did the term "natural science" mean in Franklin's time?
 the study of nature, including what are today life sciences (biology, ecology, biochemistry, etc.) and earth sciences (geology, paleontology).
- 4. What did the term "useful science" mean in Franklin's time? technology
- 5. What were some of the natural events about which Franklin formed theories? winds, waves, hurricanes, lightning
- 6. What were some of Franklin's early inventions? the Franklin stove, door lock, stepladder chair, bifocals, lightning rod
- 7. What forms of energy did Franklin's inventions use? wind and electrical energy, heat energy
- 8. For what "big idea" did Franklin go down in science history? that lightning and electricity were the same thing
- 9. How did he prove this big idea?
 by flying a kite in a thunderstorm
- 10. What honors did he get as a result of this big idea? He was elected to the Royal Academy of Science and given honorary degrees by many universities.

ASSIGNMENT 10: FRANKLIN THE FOUNDING FATHER

- When and how did Benjamin learn to argue for his point of view?
 As a young man he read books on arguing. He argued with his brother James.
 He also tried to persuade people with his Silence Dogood essays, pamphlets on such issues as paper money, and other writings.
- How did the Leather Apron Club prepare Franklin for public life?
 It gave him practice with working with a group, debating issues, putting ideas for the public good into practices.

- What public offices did Franklin hold before 1775?
 He was elected to the Pennsylvania State Assembly. He was postmaster general for all the colonies. He was elected to represent Pennsylvania and other colonies at the court of George III.
- 4. How did Franklin help Great Britain during the French and Indian War?

 He tried to get the colonies to unify in their own defense. He helped raise money and supplies for British troops.
- 5. Why was Franklin chosen to represent Pennsylvania and the other colonies in Great Britain?
 - Acute readers will note that it was Franklin's Big Idea (that lightning was electricity) that first made him famous enough to earn prestige in Europe. His many years of public life in Philadelphia led to his being chosen by Pennsylvania to represent them to the King and Parliament.
- 6. What means did Franklin use to present the colonies' point of view? He always had his own printing press and printed and circulated the colony's viewpoint by means of pamphlets he wrote and printed.
- 7. How did Franklin directly and indirectly help write the Declaration of Independence? Directly, he was a member of the five-man writing committee. Indirectly, he was responsible for introducing Thomas Paine to Philadelphia. Paine's fiery pamphlets had a huge influence on younger rebels like Thomas Jefferson.
- 8. How did Franklin help the American colonies gain their independence?

 He represented the rebellious colonies in France, and got France to support the American Revolution with ships, troops, weapons, and money.
- How did Franklin help the United States rule itself for the first 15 years?
 He helped to write the Articles of Confederation and served for some of that time in the Continental Congress.
- 10. How did Franklin help form the United States Constitution?

 He was a delegate from Pennsylvania to the Constitutional Convention.

ASSIGNMENT 13: FRANKLIN THE FAMILY MAN

- 1. Who were Benjamin Franklin's parents? **Josiah and Abaiah Franklin**
- 2. Why didn't Benjamin get along with his older brother James?

 James had a violent temper. There was a big difference in their ages. Both Ben and James liked to argue a lot.
- 3. How old was Franklin when he ran away from his brother and Boston? seventeen

- 4. Who was Benjamin Franklin's wife? **Deborah Read**
- 5. How many children did Benjamin Franklin have? Three, a son William, an older son born outside of marriage, a son Francis, who died at a young age of smallpox, and a daughter Sarah, who cared for him in his last years.
- 6. How did Franklin lose his son Francis? Francis died of smallpox at the age of 4.
- 7. How did Franklin lose his son William? William, who was by then the governor of the New Jersey colony, was a Loyalist who refused to change to the revolutionary side. His father could not forgive this.
- 8. With whom did Franklin spend the last years of his life? his daughter Sarah
- 10. How was Franklin's family life influenced by his actions?

 Franklin lived apart from his family for most of his. He left his parent's home for his brother's home when he was quite young, and he was only 17 when he ran away from his brother. He left Debbie Read after agreeing to marry her, to go to London for two years. Later, when he moved to London, his wife stayed behind in Philadelphia. His years in London as a representative of the colonies began his important public career. During those years he stayed in touch with his family mostly by letters. Note: Students may well draw conclusions from these facts, such as "Benjamin Franklin might not have been happy at home," or "Franklin's family suffered because of his public life." Close readers of the Video Explorer and Glossary entries will learn that Franklin's son William benfitted by his father's fame by getting an important appointment. He became the colonial governor of New Jersey.

Bulletin Boards (and Study Centers)

TITLES: PRESENTATION AND DISCUSSION

Main Title and Main Idea Key Question Titles Theme Titles

THEMES: ON THE BOARD (OR TABLE)

Colonial Youth
The Way to Wealth
Flashes of Genius
The New Nation
Public and Private

Art from Franklin's Time

TIPS FOR TIMELINES



Titles: Presentation and Discussion

A bulletin board is an effective tool for introducing the CD-ROM to the class and motivating students to learn about Benjamin Franklin.

OBJECTIVES:

The students will

- identify the main idea of the story, as expressed in the title.
- identify key questions (where, who, how, why, when) to ask in viewing and reading, and listening to the story.
- look for details that tell who, what, when, where, how, and why.

PREPARATIONS:

- Clear a bulletin board or chalkboard.
- Optional: Copy and enlarge the titles on the next page.
- Enlist the help of students in writing and posting the titles.

Presentation and Discussion:

- Introduce the title of the story, "What's the Big Idea, Ben Franklin?" Post the title on the bulletin board, or write it on the chalkboard. Discuss what students think the title means.
- Remind students that the word "what" begins questions that ask about things. including abstract things like ideas. What school subjects show us how to answer the question what? (all subjects, but especially science, math, history) Ask students to suggest questions from each subject, such as, "What is electricity?" and "What happened on July 4, 1776?"
- Remind students that we can learn other key facts by asking different questions. Ask students to suggest questions that help us find and remember key facts about people (who), dates (when), ways of doing things (how), and reasons (why). Erase and rewrite questions on the chalkboard, or change the titles by posting new words and phrases over the main title.
- Encourage students to ask those key questions as they watch, listen to and read the story, do the assignments, and take the challenges.

What's the Big Idea, Ben Franklin?

KEY QUESTION TITLES

When Did You Have the Big Idea?
What Other Big Ideas Did You Have?
Where Did You Get Your Ideas?
How Did You Prove Your Big Ideas?
How Do We Know About Your Big Ideas?
Why Were Your Big Ideas Important?
Who Helped You with Your Ideas?

THEME TITLES

Colonial Youth
The Way to Wealth
Flashes of Genius
The New Nation
Public and Private

The bulletin board (and study center) helps students connect various ideas that make up a theme. Students can work on themes alone or as part of "theme teams."

OBJECTIVES:

The students will

- display the results of their work on Benjamin Franklin.
- define and display key words through written and picture definitions.
- collect and display objects similar to those used in Franklin's time.
- prepare and display time lines.
- draw and display maps.
- create and display original works of art, poetry, and fiction.

PREPARATIONS:

- Assign a section of the bulletin board to each "theme team."

 If you are short of bulletin board space, have students make posters instead.
- Optional: Copy or enlarge the page of titles from the printed Teachers' Guide.
- Enlist the help of students in writing and posting the titles.

PRESENTATION AND DISCUSSION:

- Introduce the title of each theme. Post the title on the bulletin board, or write it on the chalkboard. Discuss what students think the title means.
- Distribute Assignments that relate to each theme.
- Encourage students to display the results of their Assignments. They should be prepared to explain their displays to the class.

THEME: COLONIAL YOUTH

Objectives:

By studying this theme, students will

- look through the eyes of young Benjamin Franklin and other people who lived in the English colonies.
- discover how Benjamin and others got their educations and earned their livings.

Classwork and homework:

Use the CD-ROM and basic reference materials to complete

- Assignments 1 to 3.
- all Challenges, focusing on topics related to life in America before 1775.



Enrichment:

Optional materials to collect and display include

- examples of objects made by hand crafts workers, such as pottery, woven cloth, embroidered samplers, horsehoes, and baskets.
- pictures of colonial tradesmen and their tools.
- copies of the King James Bible and Paul Bunyan's Pilgrim's Progress (the two books most likely to be found in colonial homes).
- historical maps of colonial America and the British empire in 1700, 1725, 1750, 1775, and 1800.
- books and magazine articles on colonial life.
- travel literature from the 13 states that were original colonies, showing maps and pictures of colonial sites.
- models of colonial ships and houses.

THEME: THE WAY TO WEALTH

Objectives:

By studying this theme, students will

- look through the eyes of Benjamin Franklin, printer, and through the eyes of his readers.
- discover how Franklin earned his living from his writing.





Classwork and homework:

Use the CD-ROM and basic reference materials to complete

- Assignments 4 to 6.
- all Challenges, using topics that relate to Franklin as a writer.

Enrichment:

Optional materials to collect and display include

- replications of early colonial money, early schoolbooks, the Declaration of Independence, and the Constitution.
- present-day examples of the kinds of things Franklin printed, including paper money, invoices and bills, government documents, pamphlets, and books.
- postage stamps and paper money with Franklin's portrait.
- a hand printing set.
- a copy of "The Way to Wealth."
- posters made by students illustrating sayings by Benjamin Franklin.

THEME: FLASHES OF GENIUS

Objectives:

By studying this theme, students will

- look through the eyes of Benjamin Franklin and other scientists of his time.
- explore the beginnings of the industrial and scientific revolutions.

Classwork and homework:

Use the CD-ROM and basic reference materials to complete

- Assignments 7 to 9.
- all Challenges, using topics that relate to science and math.

Enrichment:

Optional materials to collect and display include

- objects like those used in Franklin's experiments, including kites, paddles, a Leyden jar, and an ant farm.
- pictures, books, and diagrams about subjects Franklin studied, such as North American insects, lightning, hurricanes, and tides.
- models or other science exhibits made by students in response to Challenge 4, "Reinventing Franklin," and Challenge 8, "Tech Then and Now."



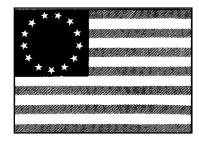
- portraits of Isaac Newton, Edmond Halley, and other scientists of the 1700s.
- pictures or models of the mechanical seed drill, spinning jenny, power loom, and other early inventions of the industrial revolution.
- photos or models of modern technologies for performing the same tasks.
- time lines and time tables made by students, showing events of the industrial and scientific revolutions.

THEME: THE NEW NATION

Objectives:

By studying this theme, students will

- look through the eyes of Benjamin Franklin and other founders of the United States of America.
- discover Franklin's contributions to the creation of the United States.



Classwork and homework:

Use the CD-ROM and basic reference materials to complete

- Assignments 10 to 12.
- Challenge 6, "Revolutionary Times," and Challenge 8, "Parallel Continents."

Enrichment:

Optional materials to collect and display include

- a replica of the original American flag.
- a copy of Franklin's "Join or Die" cartoon.
- portraits of Thomas Jefferson, Thomas Paine, George Washington, Lafayette, John Paul Jones, and other heroes of the revolution.
- maps, pictures, and time lines showing important revolutionary events.
- models of toy soldiers, cannons, and ships from the late 1700s.

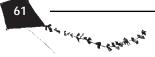


THEME: PUBLIC AND PRIVATE

Objectives:

By studying this theme, students will

- look at Benjamin Franklin both as a public figure and a private person.
- discover how the Franklin's wide range of talents assured him his place in history.



Classwork and homework:

Use the CD-ROM and basic reference materials to complete

- Assignments 13 to 15.
- all Challenges relating to Franklin's biography, especially Challenge 9, "Debating about Franklin" and Challenge 10, "Celebrating Franklin."

Enrichment:

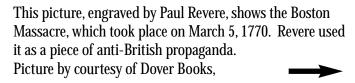
Optional materials to collect and display include

- familiar Franklin portraits from everyday life today, such as an enlargement of a \$100 bill, logos from the Franklin Templeton Fund and other corporations named for Franklin, and photographs of Franklin statues.
- students' artwork in honor of Franklin.
- student maps showing locations of places named for Franklin.
- collection of Franklin biographies and picture books.

ART FROM FRANKLIN'S TIME



This woodcut is the earliest known political cartoon printed in America. It was drawn by Benjamin Franklin, Its purpose was to convince the English colonies to unite in order to make peace with Indian tribes. Franklin failed in this effort. Picture by courtesy of Dover Books.







An early printed version of "Yankee Doodle." Picture by courtesy of Dover Books.





Tips for Timelines

Time lines are great learning tools, not only for history but also for math. You can also use time lines to display your art!

STEPS IN MAKING A TIME LINE

- Choose the space where you will display your time line. A bulletin board
 is a good choice. If there isn't one available, make a large folding screen
 out of several pieces of stiff cardboard or poster board, and display the
 screen across a table.
- Another choice is to use a single large piece of poster board or cardboard.
 You can also display a time line in a large scrapbook, carrying the time line over from page to page.
- Measure the width of your display space. Substract a space on each side for a margin. Then divide the remaining space by 5, 10, 12, or whatever number of years or months your time line covers.
- Mark off the base of your time line across its entire width. Add vertical lines at regular intervals to mark the years, months, or other intervals.

Write in the dates.

STANDARD TIME LINE SIZES

These measuring lines help you estimate how much space you will need.

• Five-Year Time Line (1 year=1 inch)



Tips for Timelines

STANDARD TIME LINE SIZES

These measuring lines help you estimate how much space you will need.

• Ten-Year Time Line (1 year=1/2 inch)



• One-Year Time Line (1 month=1/2 inch)





CHALLENGE 1: In His Own Words

CHALLENGE 2: Benjamin's Book List

CHALLENGE 3: Rewriting Franklin

CHALLENGE 4: Reinventing Franklin

CHALLENGE 5: Franklin on the Map

CHALLENGE 6: Revolutionary Times

CHALLENGE 7: Parallel Continents

CHALLENGE 8: Tech Then and Now

CHALLENGE 9: Debating About Franklin

CHALLENGE 10: Celebrating Franklin

Extra Reading Challenges

CHALLENGE 1 : IN HIS OWN WORDS

THE CHALLENGE: Read and analyze parts of books, essays, and letters written

by Franklin himself.

HOW TO STUDY :

• View, listen to, and read the material on the CD-ROM. Focus on what Franklin thought and said. Find direct quotes by using the Video Explorer and Glossary. Take notes.

• At the library, find a longer or complete collection of Franklin's writing. Add more details to what you learned on the CD-ROM.

WAYS TO MEET THE CHALLENGE:

• SCIENCE:

Read Franklin's letters to other scientists and their letters back to him. What subjects did they discuss? What scientific terms did they use? Write a report or create a display entitled "Franklin the Scientist." Your report should include direct quotes from Benjamin Franklin's writings.

HISTORY:

Read Franklin's account of his years in Philadelphia, including his activities as postmaster general and his efforts to help Britain during the Seven Years War. Write a report or create a display entitled, "Franklin the Colonial Leader." Include direct quotes from Franklin's writings.

• WRITING:

Read Franklin's pamphlet, "The Way to Wealth" or other excerpts from Poor Richard's Almanack. Make a poster illustrating sayings that you think are still wise advice today.

CHALLENGE 2 : BENJAMIN'S BOOK LIST

THE CHALLENGE: Read and report on one of the books Benjamin Franklin read as a young man.

HOW TO STUDY:

- Read or reread the text version of the story (Block B).
- Look for these author's names and titles in the Video Explorer and Glossary.
- Find one or more of the following books in the library: Cotton Mather, Essays To Do Good;
 Daniel Defoe, Essays on Projects; Robinson Crusoe; Joseph Addison, The Spectator;
 Paul Bunyan, Pilgrim's Progress; The Bible; Plutarch, Lives; Jonathan Swift, Gulliver's Travels.

WAYS TO MEET THE CHALLENGE:

Writing

Write a book report on one of the books Benjamin read. In your report, include your opinion on how the book influenced Franklin.

HISTORY AND BIOGRAPHY:

Do more research in the library, and write a report about the author of one of the books Benjamin read. In your report, tell how or why the author's life might have inspired Franklin.

CHALLENGE 3 : REWRITING FRANKLIN

THE CHALLENGE: Use music, poetry, or fiction to imagine what Benjamin Franklin would think and write about our life today.

HOW TO STUDY:

- View, listen to, and read the material on the CD-ROM. Focus on Franklin's public life.
 Find more information about Franklin by using the Video Explorer and Glossary.
 Take notes.
- At the library, find encyclopedia entries, books, and magazine articles about Franklin.
 Look for what he did and said about people, events, and issues.

Ways to meet the challenge:

POETRY:

Write a poem about a current event, like the one Franklin wrote about Blackbeard the Pirate.

PROSE:

Write your own list of rules by which you will try to live, just as Franklin did when he was young. Make a plan for following the rules.

Communications:

Imagine that Franklin suddenly reappears and agrees to a television interview. With a team of other students, act out the interview, asking "Dr. Franklin" to comment on events and issues in today's news.

Music:

Franklin always used popular media to convince people, so if he were alive today he'd probably try his hand at a rock song. What would such a song sound like? Compose a song for a rock star named "Poor Richard."

CHALLENGE 4 : REINVENTING FRANKLIN

THE CHALLENGE: Re-create one of Franklin's inventions or science experiments.

HOW TO STUDY:

- View, listen to, and read the material on the CD-ROM.
- At the library, find encyclopedia entries, books, and magazine articles about Franklin's experiments and inventions. Do more research in books on science projects.

WAYS TO MEET THE CHALLENGE:

- Science (Wind Energy):
 - Use a kite to propel yourself by wind power. Franklin did it while swimming, but you might want to add a kite to a skateboard, roller blades, or a bicycle. Document your efforts with a video or a written report.
- Science (Heat Energy):
 - Draw a diagram of how the Franklin stove worked. Your drawing should be labeled to show the flow of hot and cool air.
- Science (Electricity):
 - With the help of a book on electrical experiments, construct a Leyden jar and watch the sparks. Or build a small, battery-operated machine that creates an electrical charge.
- Science (Technology):
 - Use heavy cord or string to make a self-locking door or similar simple machine. Document your efforts with drawings, photos, or a video.

CHALLENGE 5 : FRANKLIN ON THE MAP

THE CHALLENGE: Create a map that honors Benjamin Franklin.

HOW TO STUDY:

- View, listen to, and read the material on the CD-ROM. Pay attention to the places Franklin lived, traveled, and worked.
- At the library, find encyclopedia entries, books, and magazine articles about places
 where Franklin lived. Read about their history during the years Franklin lived there.

WAYS TO MEET THE CHALLENGE:

GEOGRAPHY:

Draw or copy a map of the United States. With the help of an atlas, add stars to the map, showing locations of Franklin counties and towns named Franklin.

ART:

Draw a map of an imaginary state, island, or country named for Benjamin Franklin. Add names of towns, rivers, and other features. All the places should be named for people, ideas, or events in Franklin's life.

GEOGRAPHY AND MATH:

Do more research into the places Franklin traveled. Draw a map that shows the routes of his journeys, in both North America and Europe. Make a chart or diagram showing the number of miles he traveled.

CHALLENGE 6 : REVOLUTIONARY TIMES

THE CHALLENGE: Create time lines and charts that show changes in North America and

Europe during Benjamin Franklin's lifetime.

HOW TO STUDY :

- View, listen to, and read the material on the CD-ROM. In the Video Explorer and Glossary entries, look for information on the Enlightenment, the industrial revolution, the scientific revolution, the American Revolution, and the French Revolution.
- At the library, find encyclopedia entries, books, and magazine articles these revolutions and their results. Take notes on dates.

WAYS TO MEET THE CHALLENGE:

BIOGRAPHY:

Construct a parallel time line or chart that compares the life of Benjamin Franklin to the life of another scientist of his time. Put as many dates as possible on your time line.

BIOGRAPHY:

Write short reports or draw biographical posters honoring scientists who lived at the time of Franklin. Hot Tips: Look for the scientists' names in the histories of scientific subjects, such as geography, biology, astronomy, medicine, and chemistry.

World History:

Construct a time line or time table that shows important dates in the American and French Revolutions.

• SCIENCE:

Construct a time line or time table that shows important dates in the industrial and scientific revolutions.

ART AND MATH:

Create a time line that "explodes out" from the main time line and shows a shorter number of years, close up and in greater detail. On a time line of the American Revolution, for example, you might "blow up" the years 1775 to 1783.

CHALLENGE 7 : PARALLEL CONTINENTS

THE CHALLENGE: Compare North America to other continents during the 1700s.

HOW TO STUDY :

- View, listen to, and read the material on the CD-ROM. Notice names and dates related to the American colonies, England, and France.
- At the library, find encyclopedia entries, books, and magazine articles about world history between 1700 and 1800, in Europe, Asia, Africa, North and Central America, and South America.

WAYS TO MEET THE CHALLENGE:

World History:

Construct a parallel time line or chart that lists important events in the histories of Asia, Africa, North and Central America, and South America. Focus on the eighteenth century (1700 to 1799).

World History:

Construct a time line or time table of the Seven Years War, also called the Great War for Empire (in Spanish America, India, and southeast Asia) and the French and Indian War (in North America)

- WORLD HISTORY AND GEOGRAPHY:
 - Draw maps of the world before and after the Seven Years War.
- World History and Art:
 - Collect pictures of objects and artworks that were made and traded around the world during the 1700s. Create a display with the pictures, perhaps using a map as well.

CHALLENGE 8 : TECH THEN AND NOW

THE CHALLENGE: Compare the technology of Franklin's time to the technology of our own time.

HOW TO STUDY:

- View, listen to, and read the material on the CD-ROM. Look for these words in the text, Video Explorer, and Glossary: trades, printing, scientific revolution, industrial revolution.
- In the library, read and explore more about technology from 1700 until today.

WAYS TO MEET THE CHALLENGE:

• TECHNOLOGY:

Choose one of Benjamin Franklin's inventions or areas of expertise. Construct a time line of technological advances in stoves and furnaces, printing, electric power, postal service, or any other technology in which Franklin showed interest.

• TECHNOLOGY:

Write a pamphlet, similar to the ones Franklin wrote about his inventions, explaining the advantages of the computer, the Internet, or some other recent invention.

ARTS, CRAFTS, AND MATH:

Create a working model of a machine that was in use during Franklin's time. Hot Tip: Make it easy on yourself-choose a simple machine!

Math:

Create a chart or graph that compares technology then and now in terms of numbers. For example, compare the speed at which people traveled in Franklin's time and today, or the speed at which messages can be transmitted.

CHALLENGE 9 : DEBATING ABOUT FRANKLIN

THE CHALLENGE: Analyze ideas, issues, and problems about Benjamin Franklin that have not been solved by historians after 200 years.

HOW TO STUDY:

- View, listen to, and read the material on the CD-ROM. Look for information about Franklin's personality, his family, and his attitudes toward slavery.
- In the library, read and explore more about Benjamin Franklin. Look for evidence of problems and conflicts in his life.

WAYS TO MEET THE CHALLENGE:

World History:

How much did Franklin take part in the slave trade? Find biographies of Franklin and check index entries for "slaves" and "slavery." In addition, find books about slavery and check index entries for "Philadelphia" and "Pennsylvania." Write a report that summarizes your answer.

• BIOGRAPHY:

Why did Benjamin Franklin live apart from his wife and make a permanent break with his son? Scholars disagree. Find at least three biographies of Franklin. Find family information by checking the indexes of the books. Then write a report giving your opinion.

• HISTORY AND CRITICAL THINKING:

How much did the "real" Franklin resemble the Franklin created by himself, in his writings? Go back through the story on the CD, looking for clues on how Franklin's actions compared to his words. Do more research and write a report giving your opinion.

CHALLENGE 10 : CELEBRATING FRANKLIN

THE CHALLENGE: Use music, dance, and art to honor the achievements of Benjamin Franklin.

HOW TO STUDY:

- View, listen to, and read the material on the CD-ROM. What conclusions does the author draw about Benjamin Franklin? Do you agree with those conclusions?
- In the library, read and explore more about the life and times of Benjamin Franklin.

WAYS TO MEET THE CHALLENGE:

• SCULPTURE:

Collect pictures of monuments to Franklin. Visit any such sculptures that are near you. Make a clay model of a sculpture of your own.

• ARCHITECTURE:

Make architectural drawings and models of a building you would build in Franklin's honor.

- POETRY AND MUSIC:
 - Write a poem or ballad based on the sayings of Poor Richard.
- Drawing and painting:
 - Create your own portrait of Benjamin Franklin.
- DRAMA, MUSIC, AND DANCE:
 - Compose, rehearse, and perform a musical comedy about Franklin and his achievements. You might want to find a copy of the musical "1776" as an example.

Recommended Reading

ORIGINAL SOURCES

Franklin, Benjamin. The Autobiography and Other Writings. Signet (New American Library). Many editions.

This inexpensive paperback book is available in most bookstores and public libaries. It contains excerpts from Franklin's autobiography and from "The Way to Wealth," as well as a representative selection of his pamphlets and letters on scientific, political, and personal subjects.

PICTURES

Grafton, John. The American Revolution: A Picture Sourcebook. Dover Books (Pictorial Archives), 1975.

Copeland, F. Early American Trades Coloring Book. Dover Books, 1980.

Both of the above books belong to the Dover Pictorial Archive series, which are collections of copyright-free pictures.

BOOKS FOR TEACHERS

Wright, Esmond. Franklin of Philadelphia. Harvard, 1986.

This is only one of many excellent biographies of Franklin. This one was chosen for its well-rounded approach to various Franklin controversies, its extensive quotes from original source material, and its helpful chronology

Randall, Willard. A Little Revenge: Benjamin Franklin and His Son. Little, Brown, 1984.

This book is a fascinating, detailed look at Benjamin Franklin's private life and the many controversies that surround it, especially his relationships with his wife Deborah and his son William.

Recommended Reading

EXTRA READING FOR CHALLENGES

Forbes, Esther. Johnny Tremaine. Doubleday (Yearling), 1971.

Fritz, Jean. And Then What Happened, Paul Revere? Putnam, 1996.

Fritz, Jean. Can't You Make Them Behave, King George? Putnam, 1996

The History of Printmaking. Scholastic Voyages of Discovery, 1996.

Gardener, Robert. Science Project Ideas about Air. Enslow, 1997.

Green, Bernard. The Timetables of History. Simon and Schuster, 1990.

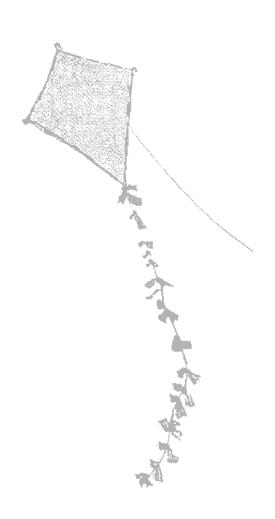
Green, Robert. King George III. Watts, 1997.

Lawson, Robert. Ben and Me: The Astonishing Life of Benjamin Franklin, as Written by his Good Mouse, Amos. Little, Brown, 1967.

Weber, Michael. Yorktown. 21st Century, 1997.

Judge, Joseph. Our Search for the True Columbus Landfall.

National Geographic magazine, November, 1986.



Puzzles

Find the Hidden Words

В	Α	Р	Р	R	E	N	Т	ı	С	E	S	Н	ı	Р
Е	L	В	0	S	T	0	N	K	ı	Т	Ε	U	S	E
N	E	ı	0	L	ı	G	Н	Т	N	ı	N	G	S	N
J	Α	F	R	E	S	S	Α	Υ	D	0	0	R	T	N
Α	T	0	R	0	D	I	N	٧	E	N	T	0	R	S
М	Н	С	I	E	Р	L	J	S	Р	E	N	D	ı	Υ
I	E	Α	С	L	Н	E	Р	С	E	I	D	L	E	L
N	R	L	Н	E	I	N	Α	ı	N	Р	E	М	Р	٧
F	Α	S	Α	С	L	С	М	E	D	Α	С	0	E	Α
R	Р	I	R	T	Α	E	Р	N	E	Р	L	N	T	N
Α	R	F	D	R	D	D	Н	С	N	E	Α	E	ı	I
N	0	R	W	ı	E	0	L	E	С	R	R	Υ	T	Α
К	N	Α	E	С	L	G	E	J	E	Р	Α	R	ı	S
L	С	N	Α	I	Р	0	T	Α	Х	Α	T	ı	0	N
I	L	С	L	T	Н	0	S	N	Α	T	I	0	N	S
N	U	E	T	Υ	I	D	L	0	N	D	0	N	S	I
С	В	E	Н	M	Α	I	L	Р	R	I	N	T	E	R

APPRENTICESHIP
BENJAMIN
FRANKLIN
BIFOCALS
BOSTON
DECLARATION
DOOR
ELECTRICITY

ESSAY
FRANCE
IDLE
INDEPENDENCE
INVENTOR
KITE
LEATHER APRON
CLUB

LIGHTNING LONDON MAIL MONEY NATIONS PAMPHLETS PAPER PARIS PENNSYLVANIA
PETITIONS
PHILADELPHIA
POOR RICHARD
PRINTER
ROD
SCIENCE

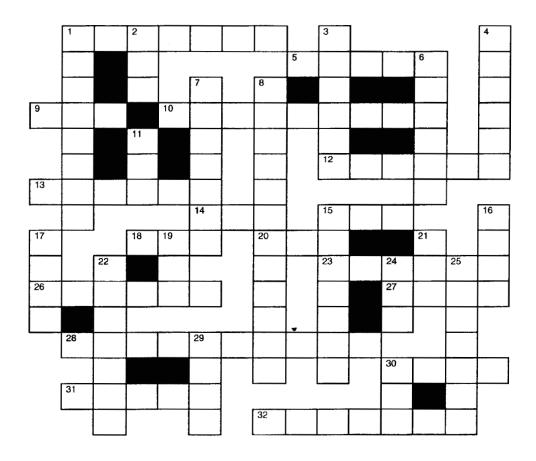
SILENCE DOGOOD SPEND TAXATION USE WEALTH

Answers to Hidden Words

B	A	Р	P	R	E	N	T	I	С	E	S	Н	ı	P
E		B	0	S	T	0	N	K		Т	E	U	S	E
N	E	ı	0		ı	G	Н	T	N	ı	N	G	S	N
J	A	F	R	E	S	(\$)	Α	Y	D	0	0	R	Т	N
A	Т	0	R	0	D		N	٧	E	N	Т	0	R	S
М	Н	С	ı	E	P	L	J	(§	Р	E	N	D	ı	Υ
I	E	Α	С	L	Н	E	P	С	E	(I	D	L	E	L
N	R	L	Н	E	I	N	Α	ı	N	P	E	M	P	V
F	A	S	Α	С	L	С	М	E	D	Α	С	0	E	A
R	Р	Ι	R	Т	Α	E	Р	N	E	Р	L	N	Т	N
Α	R	F	D	R	D	P	Н	С	N	E	А	E	I	I
N	0	R	W	ı	E	0	L	E	С	R	R	Y	Т	A
K	N	А	E	c	L	G	E	J	E	P	Α	R	I	S
L	C	N	Α	ı	Р	0	T	Α	Х	Α	Т	ı	0	Z
I	L	С	L	T	Н	0	S	N	Α	Т	ı	0	N	S
N	U	E	Т	Υ	I	D	Œ	0	N	D	0	N	S	ı
С	В	E	Н	M	A	ı	L	P	R	I	N	T	E	R

APPRENTICESHIP	ESSAY	LIGHTNING	PENNSYLVANIA	SILENCE
BENJAMIN	FRANCE	LONDON	PETITIONS	DOGOOD
FRANKLIN	IDLE	MAIL	PHILADELPHIA	SPEND
BIFOCALS	INDEPENDENCE	MONEY	POOR RICHARD	TAXATION
BOSTON	INVENTOR	NATIONS	PRINTER	USE
DECLARATION	KITE	PAMPHLETS	ROD	WEALTH
DOOR	LEATHER APRON	PAPER	SCIENCE	
ELECTRICITY	CLUB	PARIS		

Crossword Puzzle



ACROSS		DOWN	
1.	Harsh, unjust government	1.	Government collection of income
5.	Hooked up electrically	2.	Lightning conductor
9.	Raw material for candles	3.	Outdoor meal, with electric turkey
10.	Sky-sized electric sparks	4.	Scientific explanation
12.	Overseas territory	6.	Last name of Ben's first pen name
13.	British capital	7.	First name of Ben's first pen name
14.	New England fish	8.	City formed by Franklin
15.	communicating insect	11.	Where to go early, said Poor Richard
18.	Thirteen became this many.	15.	Modern spelling of Poor Richard's book
20.	Snakelike electric sea creature	16.	Set of ordered notes
23.	Jewelry given to show honor	17.	Flying toy used to prove Ben's big idea
26.	Written agreement between nations	19.	Tool for catching 14 and 20 across
27.	Change a written or printed document	21.	Large, folded stack of money
28.	Word to describe lightning's energy	22.	Rich, and wise if you went to bed early
30.	Great deed or accomplishment	24.	Ben's wife's nickname
31.	Ability to make others like you	25.	Book room
32.	Freedom	29.	Days, weeks, and years
		30.	Ben's headgear in Paris

Answers to Crossword Puzzle

T Y R A N N Y P H H H H N B B B T T Y R E C T R I C A L R T								· ——							
X D S P C O E W A X L I G H T N I N G O T B L I I I I O N Y L O N D </td <td></td> <td>Т</td> <td>Υ</td> <td>R</td> <td>Α</td> <td>N</td> <td>N</td> <td>Υ</td> <td></td> <td>Р</td> <td></td> <td></td> <td></td> <td>_</td> <td>Т</td>		Т	Υ	R	Α	N	N	Υ		Р				_	Т
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K O N E E E L W I I W E L M E D A L S T R E A T Y P A E D I T E A F B B B B B E L E C T R I C A L R	L	0	N	D	0	N		Α					D		
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