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K to the 8th Power

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*Lab directors and teachers now have access to comprehensive technology courseware that reinforces state and national academic standards. This software bridges the gap between what is taught in the classroom and what students do in a typical school computer lab.*

## FEATURES

**Technology Education**

**Standards-Based Curriculum**

**Easy-to-Use**

**Fun for Students**

**Flexible Lesson Formats**

**Student Tracking and Reporting**

**Designed for Technology Coordinators and Lab Directors**

Many computer literacy goals are met with the K to the 8th Power curriculum at the seventh grade level. These computer literacy goals are met as students work through exercises on a computer. Academic content is reinforced as students go through these activities.

Computer literacy areas covered include working in cooperative groups using technology solutions, using electronic media to create a report, demonstration of advanced use of the major applications used in business, development of a slide show, and demonstration of appropriate use of information gathered from the Internet.

The majority of exercises that students perform while learning about computers also connect back to objectives of standards-based tests. As students learn about technology, they also enhance their academic abilities in math, reading and written language.

The software is easy to administer, easy-to-use, and fun for students. Lessons are made up of easy-to-follow instructions in a wide variety of formats. Games, puzzles, labs and activities are all developed to keep the students interest while developing computer literacy skills.

The software also comes with a built-in mechanism for tracking student progress through each subject and each grade level. Teachers can monitor their students performance as they move through the curriculum with an easy-to-use Learning Management System (LMS).

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*For specific information about the seventh grade curriculum and more detail about product features, read on!*



Lesson Name	Academic Summary	Technology Summary
<b>Common Multiples</b>	In this lesson students will learn to find the least common multiple and the greatest common factor for a set of numbers. Students are shown examples of how to find the least common multiple and greatest common factor. They play a quiz game to demonstrate understanding of these concepts.	Students are given a number of problems from this lesson they must solve using Microsoft Excel. Students also learn a number of Excel formatting techniques.
<b>Consumer Problems</b>	Students are consumers and need to be able to solve consumer math problems. This lesson gives students examples of typical consumer problems and shows them how to solve the problems. Students create their own consumer math problems in the activity.	Students will use Microsoft Excel to create and solve three new word problems. Students also learn a number of Excel formatting techniques.
<b>Describe Setting, Plot, and Theme</b>	Students learn to identify the setting, plot, and theme in literature. Students will hear and read two famous poems that contain these characteristics. The beginner version uses "Puff the Magic Dragon" and "The Highwayman" and the advanced version uses "The Charge of the Light Brigade" and "The Highwayman."	Students will create a Microsoft PowerPoint presentation with slides describing the setting, plot, and theme of "The Highwayman."
<b>Distinguish Between Fact and Opinion</b>	This lesson will teach students how to distinguish fact from opinion by reading online newspapers and magazines.	Students will use Microsoft Word to answer the questions given in the lesson. Students are directed to several online magazine Web sites and asked questions about each site.
<b>Equivalent Fractions</b>	This lesson teaches students to compare, order, and determine equivalent fractions. One way to compare fractions is to express them as fractions with the same denominator. Students learn to find the least common denominator, common multiples, and least common multiple.	Students use Microsoft PowerPoint to develop a presentation on equivalent fractions. Students solve a given problem and then create two more problems using PowerPoint.
<b>Expository Writing</b>	This lesson teaches how to write an expository essay using research on Japan. Students learn how to organize the essay, develop an outline or diagram, and how to write the essay.	Students will use Web sites to research the Samurai Warriors of Japan. They will write an expository paragraph using Microsoft Word.
<b>How to Use a Thesaurus</b>	Students learn how to use a thesaurus to improve word choices in writing. Students will access two Web sites with online thesauruses. A game will help reinforce the concepts presented in this lesson.	Students will download a document from the K to 8 Resource Library and save it to their local hard drive. The students will open the document and replace the highlighted words with new words from the thesaurus in Microsoft Word.

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<b>Identify Main Ideas and Summarize</b>	Students will review the importance of being able to find main ideas and to summarize. The lesson will help students learn how to find main ideas and summarize. Students will visit Web sites to look for main ideas. Students will also read and summarize African folk tales.	After reading African folk tales the students will be directed to copy and paste text from a story into a Microsoft Word document. They will be asked to identify the main ideas and supporting details.
<b>Idioms and Analogies</b>	This lesson teaches idioms and analogies. Students learn the difference between literal and figurative meanings and view examples of common idioms. There is a game to test the student's recognition of famous idioms. The first student activity asks students to explain the meanings of idioms. The second section of the lesson teaches analogies. Students learn how to answer test questions that use word analogies, and then they learn how to apply analogies within literature. A speech from Shakespeare's play "Julius Caesar" is used in the second student activity.	Students perform two technical activities using Microsoft Word. During the first activity students copy and paste sentences into Microsoft Word and then change the idiom phrase (highlighted in yellow and in italics) to the literal meaning. The second student activity asks the student to write an analogy that compares the reasons Brutus gave for assassinating Caesar to the reasons the American government gave for going to war against Saddam Hussein in Iraq in 2003.
<b>Mean, Median, Mode, and Range</b>	This lesson will introduce students to the common measures of central tendency: mean, median, and mode. Students will learn to find the mean, median, mode, and range to describe a set of data.	Students use Microsoft Excel to calculate the range, mean, median, and mode of presidents ages, a sporting event and temperatures of major cities.
<b>Narrative Writing</b>	This lesson teaches students how to write a narrative essay. Students are given a choice of topics and methods related to a personal narrative.	Students will use Microsoft Word to write a personal narrative. Students first choose the event and the method and then write a personal narrative using the formatting guidelines given.
<b>Organize Ideas for Writing</b>	This lesson teaches students how to organize ideas for writing. They learn how to use graphic organizers and outlines for different types of writing. Several popular writing techniques are discussed.	Students will use Microsoft Word to create an outline. Students will be given a list of subjects to sort based on the main idea or sub idea of the subject. Students are shown how to create a formal outline and how to format the outline.
<b>Perimeter and Area</b>	In this lesson students will learn how to find the perimeter and area of a rectangle, triangle, and circle. Students are shown the formula for finding the area and perimeter of each shape. After looking at an example of each formula students practice what they have learned by taking a quiz on each formula and shape.	Students will use Microsoft Excel to create a simple floor plan. The floor plan will have five rooms. Students will calculate the area and perimeter for each room.
<b>Persuasive Writing</b>	This lesson teaches students how to develop persuasive writing skills. Students will write an editorial on a current topic. They read online newspapers and magazines to find examples of persuasive writing.	Students will use Microsoft Word to create a two column document. They will write an editorial on a topic of their choice.
<b>Read and Comprehend Sources</b>	This lesson teaches students how to use print and online sources to do research on a topic. Students research sources on Julius Caesar.	Students will use Microsoft Word to create a document. Students are given a wide range of questions that need encyclopedias, almanacs, maps, the Internet, dictionaries, and a thesaurus to find the answers.
<b>Read Textual, Functional, and Recreational Materials</b>	This lesson teaches students the difference between textual, functional, and recreational materials. Students practice reading and understanding information from each type.	Students will use Microsoft Word to answer the questions given in the lesson. Students are given questions about textual, functional, and recreational materials that they must answer using their word processor.

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<b>Recognize Actions and Motives of Characters</b>	Students will learn how to recognize the reason that characters in literature act in certain ways. The lesson teaches how to analyze characters and find the clues for their motives.	Students will use Microsoft PowerPoint to create a presentation about Black Beauty. Students answer questions about the thoughts, motives, and actions of characters in this story.
<b>Revise and Edit Writing</b>	Students will review how to edit writing for capitalization, punctuation, spelling, and grammar. They will practice editing for each type of error.	Students will write a letter using Microsoft Word. They will exchange letters with another student and edit. Students will then turn off the auto correct feature in Microsoft Word and write a brief story. The story will have no punctuation or capitalization. Students will edit each other's work.
<b>Revise Writing for Correct Organization</b>	Students will learn how to revise writing that is incorrect in sequence and organization. They will practice recognizing and rewriting organizational mistakes.	Students will use Microsoft Word to create a document on the death of Egyptian society. Students are given 12 paragraphs on the subject and they must rearrange the paragraphs into the correct order.
<b>Root Words From Science</b>	Students will learn the roots of scientific words. They will learn how to define words based on the root word and suffixes.	Students will copy and paste a list of science words into an Microsoft Excel spreadsheet. They will use an online dictionary to look up the meaning of the words. The students will record the root word, word origin, and definition for each word.
<b>Similes and Metaphors</b>	Students learn how to recognize and use similes and metaphors. They will read and listen to a poem by Carl Sandburg, in addition to sonnets and other writings by William Shakespeare. These will show examples of famous similes and metaphors.	Students will copy and paste some of Shakespeare's writings into a Microsoft Word document. They will highlight the metaphors in green and the similes in yellow.
<b>Solve Word Problems</b>	In this lesson students learn to choose the correct operation to solve word problems. Students are shown examples of each type of word problem and how they are solved. Students practice solving word problems and then create their own word problems for other students to solve.	Students will use Microsoft Excel to create a spreadsheet. Students are assigned the task of buying toys from Amazon.com to be given away at a festival. Students record the toy type, quantity, and pricing in their spreadsheet and calculate totals. Students compare totals with a given budget and make adjustments to their spreadsheets.
<b>Two-Step Word Problems</b>	Students will review how to solve a word problem. Students are shown how to solve two-step word problems using addition, subtraction, multiplication, and division. After taking a quiz to practice solving two-step word problems, students create their own word problems.	Students use Microsoft Excel to calculate shipping rates of several clothing manufacturers. Students then create two of their own problems and switch papers with another student in the class for solving each problem.
<b>Use Print and Electronic Resources</b>	Students learn how to search print and electronic sources to locate books and articles. Students research Julius Caesar in order to practice their skills.	Students will answer a series of questions covering the locations, types, and purposes of various sources of information on Julius Caesar. They will record and format their answers in a Microsoft Word document.
<b>Write a Report on Tornadoes</b>	This lesson teaches students how to write a report on tornadoes using charts, graphs, spreadsheets, and presentation software. Students research the Internet, compile the data, and write the report.	Students will use Microsoft Excel to chart data about tornadoes and create graphs. Students will import the charts and graphs into a Microsoft PowerPoint report.