

TIGER ED.™

For ages 6-12
Model 9-104-2

SPEAK & SPELL MATH

Instruction Manual



**TIGER ELECTRONICS
INC.®**

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180 Woodlands Parkway, Vernon Hills, Illinois 60061, U.S.A.

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Belvedere House, Victoria Avenue, Harrogate,
North Yorkshire HG1 1EL, England.

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9104201HVT1-1
PRINTED IN HONG KONG

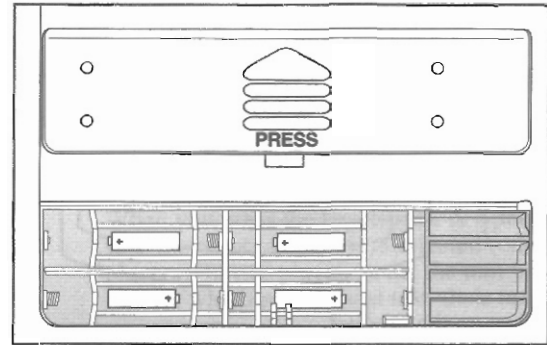


Speak & Spell® Math helps children learn and practice basic math skills at their own pace, with eight built-in activities that give them many hours of enjoyment, challenge and learning fun.

INSTALLING BATTERIES

The **Speak & Spell® Math** unit requires four “AA” batteries (not included). The battery compartment is located on the back of the unit.

1. To remove the battery compartment cover, press it down gently and slide it in the direction of the arrow.



2. Insert the batteries as shown in the diagram inside the battery compartment. Then slide the cover back into place.

Speak & Spell® Math may turn on when you insert the last battery. If so, it will be in the Calc mode. Press ON to clear the unit, and then select an activity. If you forget to turn OFF the unit, it shuts off automatically if not used for about three minutes. This feature helps batteries last longer.

CAUTION

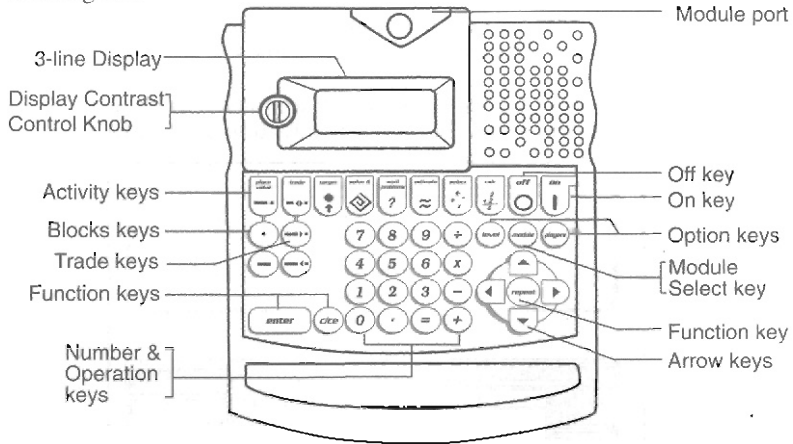
To avoid battery leakage :

1. Be sure to insert the batteries correctly and follow the toy and battery manufacturer’s instructions.
2. Do not mix old and new batteries. Do not mix alkaline, standard, or rechargeable batteries.
3. Always remove exhausted or dead batteries from the product.

power supply :
BATTERIES : 4 AA SIZE BATTERIES REQUIRED
ALKALINE BATTERIES RECOMMENDED
DO NOT USE RECHARGEABLE BATTERIES

KEY FUNCTIONS

Speak & Spell® Math offers activities designed to teach and reinforce basic math skills. Its game-like activities, musical sound effects, and speech make learning fun.



On Key - Turn on the product.

Off Key - Turn off the product.

Activity Keys - Let you select the activity to be played.
You can select an activity at any time.

3-line Display - Lets you see the whole problem as it is being entered, including the operation and answer.

Number and Operation Keys - Let you type numbers and select an operation.

Function Keys - Allow you to enter a calculation or number, repeat the last spoken instruction or statement, and clear an entry or a calculation.

Display Contrast Control Knob - Adjusts the display contrast to the necessary level of brightness.

Module Select Key - Switches between the built-in activities and additional word problems contained in a module (if one is inserted).

Module Port - Allows you to insert a new word-problem module (sold separately).

Option Keys - Let you select the level of challenge and the number of players for most activities.

Block Keys - Let you add to the “tens” and “ones” columns in the PLACE VALUE Activity.

Trade Keys - Let you trade “tens” and “ones” blocks in the TRADE Activity.

Arrow Keys - Allow you to move up, down, left or right in the display area.

Selecting an Activity

To select an activity, press ON and the activity key of your choice. **Speak & Spell® Math** then says the name of the activity and the level of play. Then the activity begins.

Levels/Players

At any time during play, you can select the level of challenge and the number of players for most activities.

Pressing LEVEL selects the level of challenge (1 is easiest; 3 is most difficult). Each time you press the key, the level advances by one until you reach the top level. Pressing LEVEL again returns to level 1. **Speak & Spell® Math** says the level you select.

Pressing PLAYERS selects the number of players. When you press the key, **Speak & Spell® Math** says the number of players selected (one or two players). In two player mode, the unit will announce which player must take their turn.

Entering an Answer

You must press the ENTER key each time you have entered your answer. Press ENTER only when you are sure of the answer you typed in the display.

Clearing an Entry

Before pressing ENTER, you can press the C/CE key once to clear the last entry made. You can then re-enter your answer.

Scoring

Speak & Spell® Math uses sound effects and speech to reward correct answers.

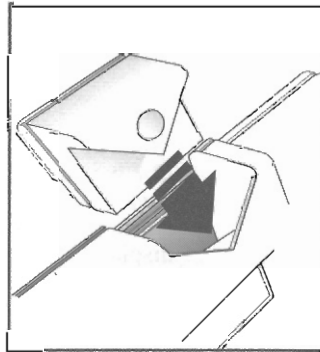
For all of the activities (except Estimation, Target, and Calculator) the player solves problems in rounds of five. After solving five problems, **Speak & Spell® Math** tells you your score: “You got five out of five right!”

When you answer correctly, **Speak & Spell® Math** says an encouraging phrase and the answer, and then presents a new problem. If there are two players, a problem is presented to Player Two.

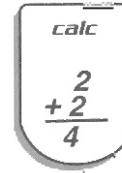
When you enter an incorrect answer, **Speak & Spell® Math** encourages you to try again. If your second try is incorrect, **Speak & Spell® Math** then says the correct answer while displaying it. A new problem is then presented. If there are two players, a problem is presented to Player Two.

Using a Module

You can switch between the built-in activities and the word problems in an expansion module (if one is installed). When you press MODULE, **Speak & Spell® Math** says the name of the module and switches to the word problems in the module.



To return to the built-in activities from a module, press MODULE again. The display will show **MAIN UNIT**. Please refer to the manual included with your expansion module for more details.



ACTIVITY DESCRIPTIONS:

The calculator lets you view a whole problem in the three-line display. It performs like most standard calculators except that it only gives whole-number answers. An answer from one problem must be re-entered to be used in another problem.

To select the Calculator, press **Calc** activity key.

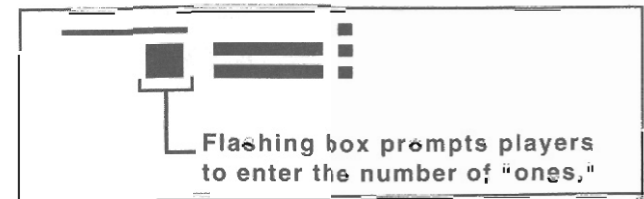
When you select Calculator, the display shows a zero in the top right corner of the display. You can add a maximum of four digits to four digits or subtract four digits from four digits. Multiplication is limited to a five-digit product. In division there can only be one-digit divisor and a four-digit dividend, and the remainder is always noted in the display (r 0 is a remainder of zero). If an answer is too large to be shown, **Speak & Spell® Math** says "Warning, warning," and **TOO BIG** is shown in the display. When you press the = key, the problem and its answer are spoken and displayed. If you press the wrong key while typing in your numbers, press **C/CE** once and then press the correct number. To clear the whole problem, press **C/CE** twice.



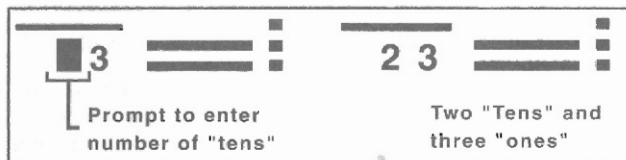
PLACE VALUE teaches the place-value system in representing one- and two-digit numbers. The object is to understand how many "ones" and how many "tens" a number has.

To select Place Value, press **Place Value** activity key.

In Level 1, the voice asks, "What number is this?" A certain number of blocks light up in the display. The small square blocks are "ones" and the rectangular blocks are "tens". **Note:** In math instruction, the blocks that we refer to as "ones" may be called "units" and the blocks that we refer to as "tens" may be called "longs" (1 long = 10 units). A flashing box appears in the "ones" place on the bottom line of the display. The blocks that represent the number of "ones" also flash.

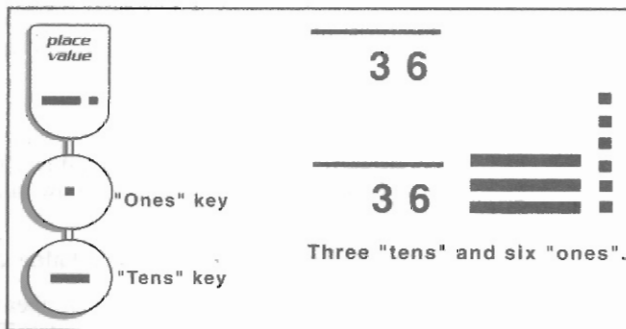


Give your answer by pressing the number key that represents the correct number of "ones". When you enter the number for "ones", it is announced ("three ones"). The flashing box then moves to the "tens" place. Enter the number of "tens". When you enter the "tens", it is also announced ("two tens").



Press ENTER to enter the answer.

When you play in level 2, **Speak & Spell® Math** asks "How many blocks?" and shows a number in the display.



Press the "ones" block key six times to light each "ones" block that you need. Press the "tens" block key three times to light each "tens" block that you need. When the lighted blocks match the value of the number, press ENTER to enter your answer.

In level 3, you are asked questions from Level 1 and Level 2.

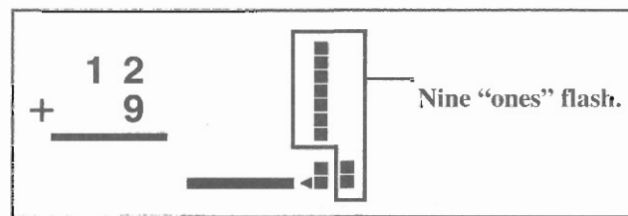
Note : You can use the C/CE key to clear numbers and blocks.



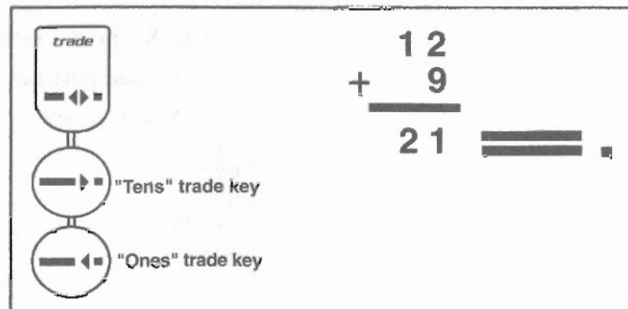
TRADE reinforces understanding of the place-value system. The object is to regroup the "ones" and "tens" blocks to reflect the answer.

To select Trade, press **Trade** activity key.

- Level 1 is addition
 - Level 2 is subtraction
 - Level 3 is a combination of addition and subtraction.
- When you begin at Level 1, **Speak & Spell® Math** asks you to "Make the **trade**", and an addition problem appears in the display. The numbers that make up the problem are represented by blocks. The group of blocks that represents the number on the second line of the display flashes. The non-flashing blocks represent the number on the first line of the display. An arrow is displayed between the "tens" and the "ones" blocks on the bottom row. This points in the direction you should trade.

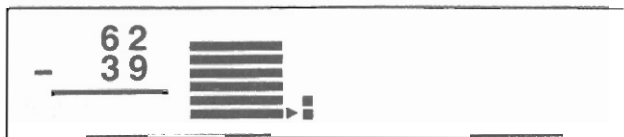


To trade "ones" for "tens", press the "ones" trade key. To trade "tens" for "ones", press the "tens" trade key. When you press a trade key, the blocks in the display change to reflect the trade. When the trade is complete, the arrow goes away and you can no longer trade blocks in that direction. The blocks that remain in the display stop flashing. They represent the answer. You are prompted, by the flashing box, to type in the number of "ones" and then the number of "tens".

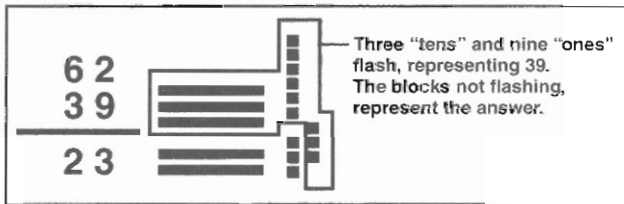


Press ENTER to enter your answer.

At Level 2, the voice asks you to "Make the trade". A subtraction problem is displayed. The number on the first line of the display is represented by the displayed blocks. The arrow points in the direction you should trade.



To trade "ones" for "tens", press the "ones" trade key. To trade "tens" for "ones", press the "tens" trade key. When you press a trade key, the blocks in the display change to reflect the trade. When the trade is complete, the arrow goes away and you can no longer trade blocks in that direction. A new set of blocks representing the number on the second line of the display flashes. The non-flashing blocks represent the answer. You are prompted, by the flashing box, to type in the answer, first the "ones" and then the "tens".



Press ENTER to enter your answer.

Level 3 is a combination of addition and subtraction problems.

Note: The C/CE key only clears numbers that you enter for the answer.



TARGET emphasizes logical reasoning and problem solving. The object is to be the first to arrive at a target number selected by **Speak & Spell® Math**.

To select Target, press **Target** activity key.

This activity begins with **Speak & Spell® Math** saying, "Use the numbers displayed to get to 23." **Speak & Spell® Math** chooses the target number and three other numbers players can add together to reach the target. The target number is displayed on the bottom line of the display, and the other three numbers appear on the right side of the display. Look for the number that will help you arrive at the target first, and type in that number. Then it's **Speak & Spell® Math's** turn or Player Two's turn to enter a number.

(Continued) The number that you enter is displayed on the first line of the display. Each number entered thereafter is flashed briefly on the second line of the display, before it is added to the last one entered, to show how close you are to the target. When the target is reached, a tune is played and the winner is announced. If the target is exceeded by a player, the opponent player wins.



SOLVE IT uses the place-value system to develop logical reasoning. The object is to arrange the displayed numbers to get the largest or smallest sum, difference, quotient, or product.

To select Solve It, press **Solve It** activity key.

When you play Solve It, you are asked to "Use the arrow keys. Find the largest (or smallest) positive solution." The numbers you can use to find a solution appear on the right side of the display. Underlines appear where you are to enter the numbers. The number of underlines depends on the level of play. A flashing box in the top right position prompts you to enter a number. (In division, a box flashes in the bottom right position).

Use the arrow keys to move to any underline you choose. Then press a number key to enter one of the displayed numbers. The number of underlines depends on the level of play. As you type a number, it leaves its position on the right and appears in the space you chose. The number you enter flashes until you move to the next valid position.

An incorrect move or key press results in a beep. If you change your mind, press C/CE to start over. Once you have entered all of the numbers and are certain of your answer, press ENTER.

Note: If you arrange the numbers correctly, the answer appears in the display and **Speak & Spell® Math** says the whole equation and the answer. After two incorrect tries, **Speak & Spell® Math** arranges the numbers correctly, displays the equation and answer and then says it.



WORD PROBLEMS tests your knowledge of basic mathematical terms and facts. The object is to listen to the word problems and type in the numerical answer.

To select Word Problems, press **Word Problems** activity key.

Speak & Spell® Math states the first question. The display is blank except for a zero in the last position of the bottom line. Listen to the question as many times as you need by pressing the REPEAT key. When you are ready to answer, type the numbers into the display. If you want to change your answer, press C/CE. When you are sure of your answer, press ENTER.

Note : The calculator is active during this activity, and can be used to help you determine the answers to some problems. You do not have to press **Calc**. When you are satisfied that a calculation is the correct answer, type it into the display and press ENTER.



ESTIMATE develops the ability to estimate answers to problems. The object is to estimate, as close as you can, the answer to a problem in as little time as possible.

To select Estimation, press **Estimation** activity key.

When you select Estimation, you are asked to "Estimate the answer." A complete problem without the answer appears in the display. Zeros that appear on the third line of the display represent digits you do not have to estimate. To the left of the zeros, a box flashes, prompting you to enter the first number. Key in your estimate of the answer, and press ENTER. Each problem is scored individually. When you press ENTER, the number of seconds and the score is displayed. Your score is based on how fast and how close your answer is to the correct answer. You have 60 seconds, maximum, to give your answer. The faster you give your answer, and the closer your estimate is to the correct answer, the higher your score is. If you do not estimate within 60 seconds, **Speak & Spell® Math** displays the time of 60 seconds and the score of zero. You only get one try on each problem.



SELECT helps you to recognize basic mathematical operations. The object is to select the correct operation (+ - x ÷) for a problem that is displayed with its answer.

To play Select, press **Select** activity key.

When you select this activity you are asked to "Choose the operation." The display shows the first problem with its answer. The operation symbols flash continually, one at a time, on the left side of the display until you choose one. Choose an operation by pressing one of the operation keys (+ - x ÷), or press ENTER when the operation symbol of your choice appears. The operation symbols stop flashing and the operation you chose is shown in the display.

INFORMATION TO THE USER

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device. Pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does not cause harmful interference to radio or television reception which can be determined by turning the equipment off and on. The user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

CAUTION: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

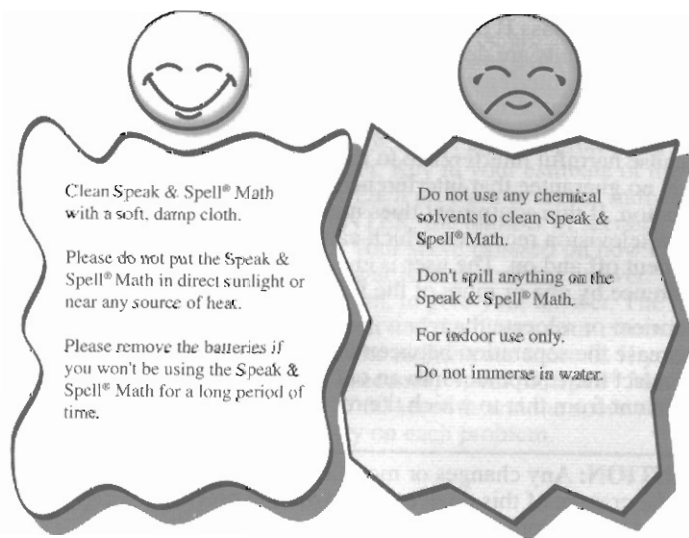
TROUBLESHOOTING

In the event of any screen malfunction, check the following:

1. Change batteries
 - 4 "AA" or LR06 size batteries required
 - Alkaline batteries recommended
2. Check the battery compartment cover to make certain it is secure.

If you are still having trouble after checking all of the above, please call our toll-free number at 1-800-TIGER ED and a representative will be happy to help you.

CARE INSTRUCTION



90-DAY LIMITED WARRANTY

Tiger Electronics, Inc. (TEI) warrants to the original consumer purchaser of any of its electronic games or toys that the product will be free of defects in material or workmanship for 90 days from the date of original purchase.

During this 90-day warranty period, the product will either be repaired or replaced (at our option) without charge to the purchaser, when returned either to the dealer with proof of the date of purchase or to TEI when returned prepaid and insured with proof of date of purchase.

Product returned to TEI without original receipt or after the 90-day warranty period has expired, but prior to one year from the original date of purchase, will be repaired or replaced (at our option) for a service charge of US\$20.00. Make check or money order payable to Tiger Electronics, Inc.

TEI will not be liable for loss of use of the product or other incidental or consequential costs, expenses, or damages incurred by the purchaser. Any implied warranties are limited in duration to the 90-day period from the original date of purchase.

All product returned must be shipped prepaid and insured for loss or damage to:

Tiger Electronics, Inc. Repair Dept.
980 Woodlands Parkway,
Vernon Hills, Illinois 60061 U.S.A.

1. Pack the product carefully in the original box or use a good-quality carton with packing materials.
2. Include a letter with a complete description of the defect, a check if product is beyond the 90-day warranty, and your printed name, address and telephone number.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state so the foregoing limitations may not apply to you. This warranty does not cover damages resulting from accident, unreasonable use, negligence, improper service or other causes not arising out of defects in material or workmanship.

