



## **User Guide**

Creacube is copyright © 2026 by the American Printing House for the Blind.

All rights reserved. This publication is protected by Copyright and permission should be obtained from the publisher prior to any reproduction, storage in a retrieval system, or transmission in any form or by any means electronic, mechanical, photocopying, recording, or otherwise, unless where noted on specific pages. For information regarding permission email: [info@aph.org](mailto:info@aph.org).

Printed in the United States of America

Catalog Number: 1-08485-00



## **WARNING:**

**CHOKING HAZARD – Small parts. Not intended for children ages 5 and under without adult supervision.**

# Table of Contents

Power and Charging.....	4
Precautions .....	5
Get Started with Creacube .....	5
Difficulty Settings.....	9
Counting Mode .....	12
Times Table Songs .....	13
Bomb Game .....	14
Volume Control and Night Mode .....	15
Language Setting .....	15
Serial Number .....	16
Reset .....	16
Version Notes .....	16

## Power and Charging

To turn on Creacube, press and hold the number 1 on the face with red numbers 1 through 9. The device will start in standby mode. To turn off Creacube, press and hold 1 again while in standby mode.

During a game, if no buttons are pressed for five minutes, Creacube will enter standby mode. If no buttons are pressed for another five minutes while in standby mode, Creacube will automatically turn off.

A USB-A-to-USB-C cable is included with this product. Use this cable or any compatible USB-A-to-USB-C one to connect Creacube to a USB-A port on a computer or use an AC adapter with a 5V DC output to charge the battery. An LED indicator next to the charging port on Creacube will change from red to green once Creacube is fully charged. When fully charged, Creacube provides approximately three or more hours of operation, though actual usage time may vary.

When turning on the device, the battery level is indicated through vibrations:

- Below 20% – Creacube shuts off. It can be used while plugged into a charger.
- Below 40% – One vibration.
- Below 70% – Three vibrations.
- Above 70% – Five vibrations.

## Precautions

- Clean the product with a soft, dry cloth.
- Do not apply excessive force to the product, including the buttons.
- Do not disassemble, compress, or puncture the product.
- Avoid strong impacts, such as dropping the product from a high place.
- If the device emits smoke, unusual noises, or odors, or if it is dropped or damaged, turn off the power immediately.
- Do not expose the product to temperatures above 140 °F (or 60 °C) (e.g., leaving the product inside a car during hot weather).
- Do not expose the product to moisture (e.g., precipitation, high humidity, wet environments such as bathrooms or swimming pools).
- Young children must use the product under adult supervision.
- The product contains small parts (e.g., screws), which pose a choking hazard if swallowed.

## Get Started with Creacube

Thank you for choosing Creacube! Creacube is an innovative electronic tool designed to make practicing basic math facts engaging for kindergarten and early elementary school students. This handheld cube features numbers in both print and braille on its sides. It

presents students with random drill problems in preset difficulty levels using audio prompts. Students interact with Creacube by rotating the device to find and submit the correct answers, after which they receive encouraging feedback.

In addition to enhancing math skills in addition, subtraction, multiplication, and division, Creacube introduces students with blindness to braille numerals, fostering familiarity and confidence in using braille. This versatile tool is an excellent supplement to classroom instruction, helping students of all vision levels improve their math fact fluency in an interactive and inclusive way.

Creacube was designed and produced by CREACUBE CO. LTD, a company in the Republic of Korea. This accessible version of Creacube is distributed in the United States by APH.

Follow these steps to quickly start using Creacube:

### 1. Turning on Creacube

On the face with red numbers 1 to 9, press and hold 1 to turn on Creacube. The device starts in standby mode.

### 2. Selecting a calculation mode

On the same face as the one with the numbers, press and hold one of the following *even* numbers:

- 2 for addition mode
- 4 for multiplication mode
- 6 for division mode

- 8 for subtraction mode

### 3. Playing the game

Once in your chosen calculation mode, Creacube presents math problems. Find the correct answer on the cube and press it to submit. To repeat a problem, shake the cube after Creacube has fully presented the problem and then try again. Students have three chances to answer each question. After two incorrect attempts, the correct answer lights up as a clue. (This feature is not accessible for students who cannot see the lights.) After three incorrect attempts, Creacube skips to the next problem.

### 4. Changing modes during a game

To switch to another mode, press and hold 1 to return to standby mode. Then, press and hold the button that corresponds to the desired mode (2 for addition, 4 for multiplication, 6 for division, or 8 for subtraction).

### 5. Turning off Creacube

To turn off Creacube, press and hold 1 to enter standby mode, then press and hold 1 again to power off.

### 6. Automatic standby and power off

If no buttons are pressed for five minutes during a game, Creacube enters standby mode. If no buttons are pressed for another five minutes in standby mode, Creacube automatically turns off.

### 7. Additional features in standby mode

Pressing and holding one of these *odd* numbers in standby mode provides access to:

- 3 – Difficulty levels
- 5 – Multiplication table songs
- 7 – Volume control
- 9 – Night mode

Refer to the sections below for details on each feature.

## 8. Number arrangement and accessibility

The numbers on Creacube are arranged to support learning multiplication tables. Each face of Creacube has a unique color to help students locate number groups. The faces of the cube are organized so that the multiples of 1, 2, and 3 each occupy their own face: red for multiples of 1, orange for multiples of 2, and yellow for multiples of 3. On the remaining three faces, the middle and bottom rows display the multiples of 4 (the face with blue buttons), 5 (the face with purple buttons), and 6 (the face with green buttons), while the top rows are reserved for the multiples of 7 (the face with blue buttons), 8 (the face with purple buttons), and 9 (the face with green buttons). To complete the multiplication tables, numbers greater than 3 also rely on the multiples of smaller numbers. Over time, familiarization with this layout can help children learn their number identification more quickly.



For students who are blind, teachers are encouraged to add tactile markers (e.g., a textured strip along the top edge of each face) to enhance accessibility.

## **Difficulty Settings**

To adjust the difficulty level of problems presented in the basic four calculation modes, follow these steps:

1. On the face with red numbers 1 to 9, press and hold 1 to turn on Creacube and enter standby mode.
2. Press and hold 3 to enter difficulty settings. (You can assign each operation its own difficulty setting.)
3. Select the operation you want to adjust by pressing 2 for addition, 4 for multiplication, 6 for division, or 8 for subtraction.
4. Each operation has nine difficulty levels. Press a number from 1 to 9 to select the desired level. The device then goes back to the standby mode.
5. You can now select an operation to practice by pressing and holding 2 for addition, 4 for multiplication, 6 for division, or 8 for subtraction.

Each game consists of a set of 10 questions. Players earn the following rewards based on their performance:

- 8 or more correct answers – “Sun” acquired
- 6 or 7 correct answers – “Moon” acquired

- 5 or fewer correct answers – “Star” acquired

To check accumulated Sun, Moon, and Star rewards, the device must be connected to an app. This feature is currently not supported by APH (refer to the Version Notes section of this guide).

By default, all operations start at Level 1. After earning three consecutive Suns at their current level, demonstrating mastery, students advance to Creacube’s next level within the same operation.

Difficulty levels of addition include:

1. Adding 1 with results being less than or equal to 9
2. Adding 2 with results being less than or equal to 9
3. Adding 1, 2, or 3 with results being less than or equal to 9
4. Adding a single-digit number to a two-digit number (without regrouping)
5. Adding a single-digit number to multiples of 10 (e.g., 10, 20, 30, ...)
6. Adding two-digit numbers (without regrouping)
7. Adding a single-digit number to a two-digit number (small numbers, with regrouping)
8. Adding a single-digit number to a two-digit number (great numbers, with regrouping)
9. Adding two-digit numbers (with regrouping)

Difficulty levels of subtraction include:

1. Subtracting 1 or 2 with results being less than or equal to 8
2. Subtracting single-digit numbers with a difference of 1 or 2
3. Subtracting single-digit numbers
4. Subtracting a single-digit number from a two-digit number (without regrouping)
5. Subtracting two-digit numbers (without regrouping)
6. Subtracting two-digit numbers (with and without regrouping) (1)
7. Subtracting a single-digit number (with and without regrouping)
8. Subtracting a single-digit number from a two-digit number (with regrouping)
9. Subtracting two-digit numbers (with and without regrouping) (2)

Difficulty levels of multiplication include:

1. Multiplication table: 1 times table
2. Multiplication table: 2 times table
3. Multiplication table: 3 times table
4. Multiplication table: 4 times table
5. Multiplication table: 5 times table
6. Multiplication table: 6 times and 7 times tables
7. Multiplication table: 8 times and 9 times tables
8. Multiplying two-digit numbers by 2 and 3
9. Multiplying two-digit numbers by 4, 5, and 6

Difficulty levels of division include:

1. Dividing one- or two-digit numbers by 2
2. Dividing one- or two-digit numbers by 3
3. Dividing one- or two-digit numbers by 4
4. Dividing one- or two-digit numbers by 5
5. Dividing one- or two-digit numbers by 6 or 7
6. Dividing one- or two-digit numbers by 8 or 9
7. Dividing two-digit numbers by a single-digit number (where the quotient is 10, 20, 30, ...)
8. Dividing two-digit numbers by 2 or 3
9. Dividing two-digit numbers by numbers between 4 and 9

## **Counting Mode**

In counting mode, Creacube prompts students to press random numbers. This mode is designed for young children learning numbers and can be especially useful for students who are blind and learning braille numerals.

To enter counting mode, press and hold 1 on the face with red numbers 1 to 9 to turn on Creacube and enter standby mode. On the face with yellow numbers 3, 6, 9, ..., press and hold 21 to enter counting mode. Then, return to the face with red numbers 1 to 9 and select the number range for practice:

- Press 1 to practice numbers 1 through 9.

- Press 2 to practice numbers 10 through 29.
- Press 3 to practice all numbers on the cube.

## **Times Table Songs**

To access the times table songs mode on Creacube, press and hold 1 on the face with red numbers 1 to 9 to turn on Creacube and enter standby mode. Press and hold 5 to enter the Times Table Songs mode. Then, press and hold 1, 2, or 3 to play the corresponding song:

- 1 – Times Table Song: Practices the multiplication table
- 2 – Five Valley Song: Focuses intensively on the 5 times table
- 3 – Ten Valley Song: Practices the multiplication table backward

During the Times Table Song or Ten Valley Song, if you want to move to another stage, press and hold the desired stage number (2 through 9 on the face with red numbers 1 to 9).

LED lights turn on in sync with the Times Table Song only. Students who can see the lights can play a button-pressing game. Press the corresponding buttons to turn off the lights in order. If all lights are turned off before the song ends, the game is successfully completed. This game may be difficult for students who are blind, as they do not have enough time to locate numbers without visual cues.

Students who play the game earn rewards based on their performance:

- 9 out of 9 multiplication tables completed – “Sun” acquired

- 6 out of 9 multiplication tables completed – “Moon” acquired
- 3 out of 9 multiplication tables completed – “Star” acquired

To check accumulated Sun, Moon, and Star rewards, the device must be connected to an app. This feature is currently not supported by APH (refer to the Version Notes section of this guide).

## **Bomb Game**

In the Bomb Game, students solve randomly selected problems from the full set stored in Creacube. The operations are mixed. If a correct answer is not chosen within the time limit set by the user, an explosion sound is played.

To start the Bomb Game:

1. Power on and enter standby mode by pressing and holding 1 on the face with red numbers 1 to 9.
2. Enter Bomb Game mode by pressing and holding 9 on the face with yellow numbers 3, 6, 9, etc.
3. On the same face, select a difficulty level:
  - Press 3 for Basic
  - Press 6 for Medium
  - Press 9 for Advanced
4. Still on the same face, press any number button to set the timer, which can range from 3 to 27 seconds.

The game will begin once the timer is set, and a math problem will appear. Find the correct answer and press the corresponding button. To repeat a problem, shake the cube after the problem has been fully presented. A problem can be announced no more than three times.

To end the game, press and hold 1 on the face with red numbers 1 to 9 to return to standby mode.

## **Volume Control and Night Mode**

On the face with red numbers 1 to 9, press and hold 1 to turn on Creacube and enter standby mode. Press and hold 7 to change the volume to the next level. Repeat this step to cycle through the three volume settings: silent, quiet, and loud.

In standby mode, press and hold 9 to turn on Night mode. While night mode is active, button presses do not produce sound. To turn off Night mode, press and hold 1 on the face with red numbers 1 to 9 and enter standby mode. If no buttons are pressed for ten minutes in night mode, Creacube will automatically turn off.

## **Language Setting**

Creacube supports four languages: English, Spanish, Chinese, and Korean. To switch to the next language in this sequence, press and hold 1 on the face with red numbers 1 to 9 to turn on Creacube and enter standby mode. Then, press and hold 6 on the face with yellow numbers 3, 6, 9, ... to change the language.

## **Serial Number**

To check the device's serial number, press and hold 1 on the face with red numbers 1 to 9 to turn on Creacube and enter standby mode.

Then, on the face with yellow numbers 3, 6, 9, ..., press and hold 24 to hear the serial number.

## **Reset**

If Creacube behaves abnormally, try resetting the device to resolve the issue. On the face with yellow numbers 3, 6, 9, etc., press and hold the number 27 for nine seconds to reset Creacube.

## **Version Notes**

Creacube was designed and produced by CREACUBE CO., LTD., a company based in the Republic of Korea. The physical component of the accessible version of Creacube, or “the cube,” is distributed in the United States by APH. Additional resources for using this tool, such as a mobile app that works with the physical cube, are provided by CREACUBE. However, these resources are currently inaccessible to users who are blind or low vision and are therefore not included in APH’s offering.

Because these resources are neither developed nor supported by APH, inquiries regarding them should be directed to CREACUBE CO., LTD. APH may consider collaborating with CREACUBE CO., LTD. in the future to make the app and related resources accessible to users who are blind or low vision.





**AMERICAN  
PRINTING  
HOUSE** 

**1839 Frankfort Avenue  
Louisville, Kentucky 40206  
502-895-2405 • 800-223-1839  
aph.org • info@aph.org**