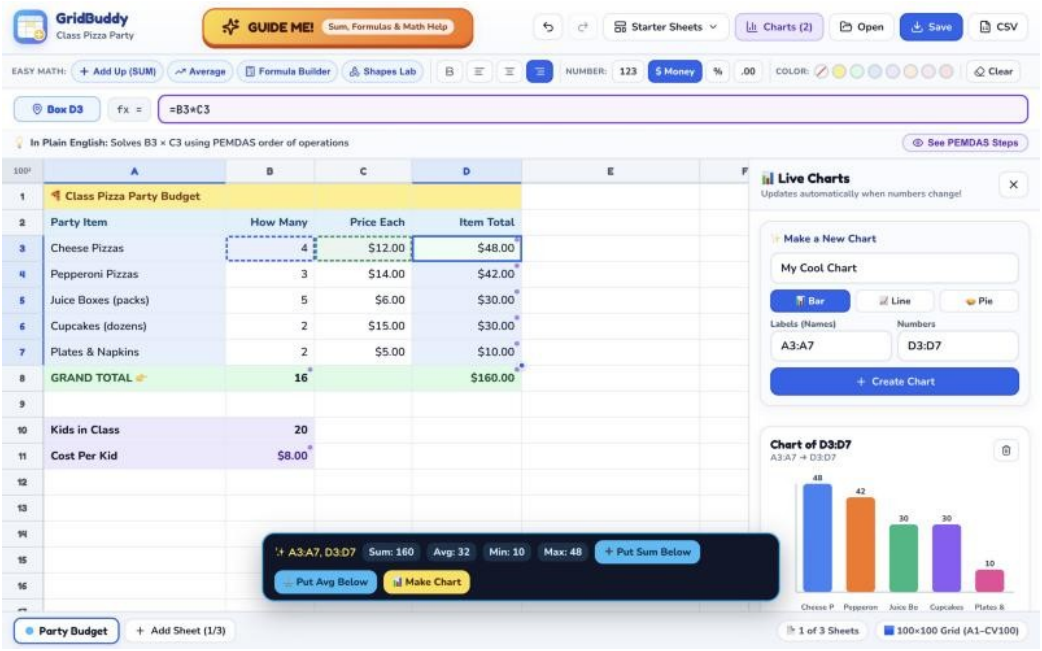
GridBuddy

ZERO TO HERO

A friendly, step-by-step lesson plan for brand-new spreadsheet users



GridBuddy's starter sheet: a Class Pizza Party budget with a live chart.

11	4	40+	0
short levels	practice missions	math tools	experience needed

Open GridBuddy free in any browser: **navesink.net/gridbuddy**

Nothing to install, no account, and your sheets stay on your own computer.

Welcome, future spreadsheet hero!

Spreadsheets look scary: thousands of tiny boxes, strange codes like **#DIV/0!**, and menus full of words nobody explains. GridBuddy was built to be the opposite. It has a giant **GUIDE ME!** button, explains every formula in plain English, and tells you about mistakes in friendly words. This lesson plan walks you from "What's a cell?" all the way to building a two-sheet business plan with charts.

Every skill you learn here works in Excel, Google Sheets and Numbers too. GridBuddy just makes the first steps a lot friendlier.

How to use this plan

- **Go in order.** Each level builds on the one before. Most take 15–25 minutes.
- **Keep GridBuddy open next to this page** and do every step as you read it. Clicking beats reading!
- **Do the Try It! boxes.** They're where the learning sticks. Answers are on the Answer Key page at the back.
- **Earn your badges.** Tick off each level on the Hero Badge Tracker at the end.
- **Can't undo the world, but you can undo GridBuddy:** press **Ctrl+Z** (Windows) or **⌘+Z** (Mac) any time something goes sideways.

FOR GROWN-UPS & TEACHERS • Running this as a class or at home?

- Plan one or two levels per session: Levels 0–4 make a great first week, 5–10 a second. Grade 3 and up can do everything here; younger kids do well with Levels 0–3 and the Practice Missions.
- Use a computer with a keyboard and mouse or trackpad (phones work, but it's cramped). Each level's **Check Yourself** box makes a handy exit ticket.

Your hero roadmap

Level	You'll learn	Badge
0	What a spreadsheet is, and a tour of the GridBuddy screen	Explorer
1	Clicking, typing, moving around and fixing mistakes	Box Boss
2	Your first formula: making the sheet do the math	Formula Starter
3	Adding up lists with SUM and ranges	Sum Champion
4	Order of operations (PEMDAS) and the Formula Builder	PEMDAS Pro
5	Making it look good: money, percents, bold and crayon colors	Style Star
6	Average, median, biggest, smallest: quick statistics	Stats Detective
7	Turning numbers into live bar, line and pie charts	Chart Artist
8	Geometry with the Shapes Lab	Shape Shifter
9	Power moves: drag-to-fill, copy and paste, and multiple sheets	Power User
10	Saving, opening and sharing, plus your Hero Project	SPREADSHEET HERO

LEVEL

0

Meet the Grid

What is a spreadsheet, anyway?

About 15 minutes ★ **Badge: Explorer**

BY THE END OF THIS LEVEL YOU CAN...

- ✓ explain what a spreadsheet is in one sentence
- ✓ find any box by its **address**, like **B3**
- ✓ point to the main parts of the GridBuddy screen

A spreadsheet is a giant smart table

Picture a sheet of graph paper. Each little square can hold a word, a number, or a **formula**: an instruction like "add these up." When a number changes, every answer that uses it updates by itself. That's the magic.

- **Columns** run up and down and are named with letters: A, B, C...
- **Rows** run side to side and are numbered: 1, 2, 3...
- Every box (grown-ups say **cell**) has an **address**: its column letter and then its row number. The box in column B, row 3 is **B3**. Just like the game Battleship!

	A	B	C
1			
2			
3		B3 lives here!	

Open GridBuddy

1. Open a web browser and go to **navesink.net/gridbuddy**.
2. The first time, GridBuddy opens a **Class Pizza Party** budget so you have something fun to poke at. Perfect!
3. Tip: bookmark the page so it's one click away next time.

Tour the screen

Part of the screen	What it does
Title box (top left, next to GridBuddy)	The name of your spreadsheet. Click it to rename.
GUIDE ME! (big pulsing button)	Your helper. Wizards, a Formula Builder, a Shapes Lab, Practice Missions and a Math Dictionary.
Undo / Redo arrows	Take back a mistake or bring it back.
Starter Sheets	Load a fresh blank sheet or a fun ready-made project.
Charts	Open the chart drawer.

Open / Save / CSV	Open a saved file, save your work, or export for Excel and Google Sheets.
Easy Math bar	One-click Add Up (SUM), Average, Formula Builder and Shapes Lab, plus bold, alignment, number styles and crayon colors.
Formula bar + **In Plain English**	Shows what's really inside the selected box, and explains formulas in everyday words.
The grid	100 columns × 100 rows of boxes: A1 all the way to CV100.
Sheet tabs (bottom)	Up to 3 sheets in one file, like pages in a notebook.

TRY IT! • Address hunt

1. Click the box that says **Cheese Pizzas**. Look at the left of the formula bar: what address does it show?
2. Now click **D3**. What number is in it? Look at the formula bar: is it a plain number or something starting with =?
3. Find the box at column **C**, row **5**. What's in it?

CHECK YOURSELF

Explain to someone (or a stuffed animal!) what **B7** means.

LEVEL 1

Click, Type, Move

Get comfy driving around the grid.

About 15 minutes ★ **Badge: Box Boss**

BY THE END OF THIS LEVEL YOU CAN...

- ✓ type words and numbers into boxes
- ✓ move with the mouse, arrow keys, **Enter** and **Tab**
- ✓ fix, erase and undo mistakes like a pro

Start fresh: click **Starter Sheets** and choose **Fresh Blank Sheet** (it's at the top of the list).

Typing into a box

1. Click a box. A blue outline shows it's selected.
2. Just start typing. You don't need to double-click first.
3. Press **Enter** to save and jump **down** one box, or **Tab** to save and jump **right**.
4. Changed your mind while typing? Press **Esc** to cancel.

Your moving and fixing toolkit

To do this...	Press or click...
Move one box	**Arrow keys**, or just click the box
Fix what's in a box	Select it, then press **Enter** or **F2**, or double-click it
Erase a box	Select it and press **Delete** or **Backspace**
Erase lots of boxes	Drag across them, then press **Delete** (or click **Clear** on the Easy Math bar)
Undo / Redo	**Ctrl+Z** / **Ctrl+Y** (Mac: ⌘+Z / ⌘+Y) or the arrow buttons
Make a column wider	Drag the right edge of its letter at the top of the grid
Select a bunch of boxes	Drag across them, or hold **Shift** and press arrow keys

TRY IT! • Your favorite things list

1. In **A1** type **My Favorite Snacks** and press Enter.
2. In **A2** to **A5**, type four snacks (press Enter after each).
3. Click **B1**, type **Stars**, then put a number from 1 to 5 next to each snack in **B2:B5**.
4. Oops on purpose: click **A3**, press Delete, then press **Ctrl+Z** (⌘+Z) to bring it back.
5. Make column A wider so your snack names fit.

HERO TIP • Words left, numbers right

GridBuddy (like every spreadsheet) lines words up on the left and numbers on the right. If a number sits on the left, it might have a stray space or letter in it, so it won't count in math.

CHECK YOURSELF

Without using the mouse, move from A1 to C4 and type your name there.

LEVEL 2

Your First Formula

Let the sheet do the math for you.

About 20 minutes ★ Badge: Formula Starter

BY THE END OF THIS LEVEL YOU CAN...

- ✓ start a formula with the = sign
- ✓ do math with plain numbers and with box addresses

✓ read the **In Plain English** helper and watch answers update live

The secret password is =

Anything that starts with an equals sign is a **formula**. GridBuddy works it out and shows the **answer** in the box, while the formula bar shows the **recipe**.

Math	Type this	You'll see
Add	`=8+4`	12
Subtract	`=8-4`	4
Multiply	`=8*4`	32
Divide	`=8/4`	2
Power (8 squared)	`=8^2`	64

Tip: you can also type the friendly symbols × and ÷ if you have them, but the * and / keys are on every keyboard.

The real power: use addresses, not numbers

Open **Starter Sheets ▸ Class Pizza Party**. Click **D3** and look at the formula bar: it says **`=B3*C3`**. That means "how many" × "price each." Under the formula bar, **In Plain English** explains it in words.

	A	B	C	D
2	Party Item	How Many	Price Each	Item Total
3	Cheese Pizzas	4	$12.00	`=B3*C3`
4	Pepperoni Pizzas	3	$14.00	`=B4*C4`

TRY IT! • Watch the magic

1. Click **B3** (How Many cheese pizzas) and change **4** to **6**. Press Enter.
2. Look at **D3**. It changed by itself, from $48.00 to $72.00! The total at the bottom changed too.
3. Change it back to 4 (or press Ctrl+Z).
4. Click an empty box and type **`=C3+C4`**. What does it add up? Read the In Plain English line.

HERO TIP • Click instead of typing addresses

While typing a formula, after the = or a + sign, **click a box** and GridBuddy types its address for you. Each box you use gets a colored outline so you can see exactly what the formula is looking at.

UH-OH? • My formula shows as words!

If you see `B3*C3` sitting in the box as text, you forgot the = at the start. Click the box, press Enter, and add it.

CHECK YOURSELF

Why is `=B3*C3` better than typing `=4*12`? (Hint: what happens when the numbers change?)

LEVEL

3

Add It All Up

SUM: the most-used spreadsheet tool on Earth.

About 20 minutes ★ Badge: Sum Champion

BY THE END OF THIS LEVEL YOU CAN...

- ✓ write a **range** like **B3:B6** ("B3 through B6")
- ✓ add up a list three different ways
- ✓ complete **Mission 1: Sum the Snacks!**

Ranges: a whole group of boxes at once

A colon between two addresses means "everything from here to there." **B3:B6** is B3, B4, B5 and B6. **A1:C2** is a little rectangle of six boxes.

Three ways to add up a list

Way	How	Best for
1. Type it	In the box under your list, type `=SUM(B3:B6)` and press Enter.	Learning how formulas really work
2. Add Up (SUM) button	Click **Add Up (SUM)** on the Easy Math bar. GridBuddy walks you through it on the grid, step by step.	Your first few tries
3. Magic selection bar	Drag across the numbers. A dark bar pops up showing **Sum, Avg, Min and Max**. Click **Put Sum Below**.	Going fast

TRY IT! • Mission 1: Sum the Snacks!

1. Click **GUIDE ME!**, then the **Guided Practice Missions** tab.
2. Pick **Add Up Movie Snacks** and click **Start Mission!**
3. Click the glowing yellow box **B7** and type `=SUM(B3:B6)`. (Stuck? Press **Fill It For Me!** to watch.)
4. Enjoy the confetti. What's the total?

TRY IT! • Back to your snack list

Open your Level 1 favorite-snacks sheet (or make it again). Under your Stars column, add up all the stars using a different way than you used in the mission.

HERO TIP • SUM keeps working when you add rows

If you put new numbers inside the range (say you change B5), SUM picks them up automatically. That's why spreadsheets beat calculators for lists.

CHECK YOURSELF

How many boxes are in the range **C2:C9**?

LEVEL 4

PEMDAS Power

Who goes first? The order of operations.

About 25 minutes ★ Badge: PEMDAS Pro

BY THE END OF THIS LEVEL YOU CAN...

- ✓ predict the answer to formulas that mix + − × ÷ and ^
- ✓ use **parentheses** to make something happen first
- ✓ use **See PEMDAS Steps** and the **Formula Builder**

Please Excuse My Dear Aunt Sally

Letter	Means	Example
P	Parentheses first	(2+3)
E	Exponents (powers)	2^3 = 8
M D	Multiply and Divide, left to right	6*2/3

A S	Add and Subtract, left to right	10-4+1

Formula	Answer	Why
`=2+3*4`	14	Multiply first: 3×4 = 12, then 2 + 12
`=(2+3)*4`	20	Parentheses first: 2+3 = 5, then 5×4
`=10-2^2*2`	2	2^2 = 4, then 4×2 = 8, then 10 – 8

See every step with the X-Ray

Click any box with a formula, then click **See PEMDAS Steps** under the formula bar. The **PEMDAS Step-by-Step X-Ray** shows the formula being solved one step at a time. It's brilliant for checking homework.

Build formulas like LEGO

Click **Formula Builder** on the Easy Math bar (or **GUIDE ME! ▸ PEMDAS Formula Builder**). Click boxes on the sheet and colorful math bricks to snap a formula together, with a live preview of the answer before you drop it in.

TRY IT! • Predict, then prove

1. On a blank sheet, write down your guess for each formula in the second table above, **before** typing it.
2. Type each one into a box. Were you right? Use **See PEMDAS Steps** on any you missed.
3. Do **Mission 2: Master PEMDAS Parentheses** in Guided Practice Missions. Type `=B2*(B3+B4)` in B6.
4. Challenge: make a formula using 2, 3 and 4 (each once) that equals **14**, and another that equals **20**.

UH-OH? • Can't ÷ 0

Dividing by zero is impossible, so GridBuddy shows ⚠ **Can't ÷ 0** instead of a cryptic code. Check the box you're dividing by: it's probably empty or zero.

CHECK YOURSELF

What does `=20-10/2` equal? Explain why it isn't 5.

LEVEL 5

Make It Look Great

Money, percents, bold and crayon colors.

About 15 minutes ★ **Badge: Style Star**

BY THE END OF THIS LEVEL YOU CAN...

- ✓ show numbers as money, percents or with two decimals
- ✓ make headings bold and line text up
- ✓ color-code boxes with crayon fills and rename your sheet

Formatting changes how a number **looks**, never what it **is**. 0.25 shown as 25% is still 0.25 inside, so the math stays right.

Button (Easy Math bar)	What it does	12.5 becomes
123	Plain automatic number	12.5
$ Money	Dollars and cents	$12.50
%	Percent	1250% (0.125 becomes 12.5%)
.00	Always two decimal places	12.50
B	Bold	**12.5**
Align buttons	Left, center or right	—

Crayon colors

Sunny Yellow	Mint Green	Sky Blue	Lavender	Peach	Bubblegum	Soft Red

Select boxes, then click a crayon on the Easy Math bar. **No Fill** takes the color off again.

TRY IT! • Dress up your snack sheet

1. Click the **title box** at the top and rename your spreadsheet **My Snack Ratings**.
2. Make row 1 **bold** and give it a **Sunny Yellow** fill.
3. Add a column **C** called **Price** with a price for each snack, and click **$ Money** on those boxes.
4. Color your favorite snack's row **Mint Green**.

HERO TIP • A color code everyone can read

Pick a system and stick with it: one color for headings, one for numbers you type in, one for answers that come from formulas. GridBuddy's starter sheets use pale green for formula answers.

CHECK YOURSELF

If a box shows **$3.00**, what number is really inside it?

LEVEL

6

Stats Detective

Find the middle, the biggest and everything in between.

About 20 minutes ★ Badge: Stats Detective

BY THE END OF THIS LEVEL YOU CAN...

- ✓ use **AVERAGE, MEDIAN, MODE, MIN, MAX, RANGE** and **COUNT**
- ✓ pick the right one for the question you're asking
- ✓ complete **Mission 4: Quiz Average!**

Tool	Answers the question...	Example
AVERAGE	What's the typical value? (add up, divide by how many)	`=AVERAGE(B2:B5)`
MEDIAN	What's in the middle when sorted?	`=MEDIAN(B2:B5)`
MODE	Which number shows up most?	`=MODE(B2:B9)`
MAX / MIN	What's the biggest / smallest?	`=MAX(B2:B5)`
RANGE	How far apart are the biggest and smallest?	`=RANGE(B2:B5)`
COUNT	How many numbers are there?	`=COUNT(B2:B5)`

You can also type **MEAN** or **AVG** instead of AVERAGE. GridBuddy knows them all.

TRY IT! • Mission 4: Quiz Average!

1. In **GUIDE ME! ▸ Guided Practice Missions**, start **Find Your Quiz Average**.
2. The quiz scores are 88, 94, 90 and 96. In **B6** type `=AVERAGE(B2:B5)`.
3. Now, in empty boxes, find the **MEDIAN**, **MAX**, **MIN** and **RANGE** of the same scores.

TRY IT! • The Easy 1-2-3 Wizards

Open **GUIDE ME! ▸ Easy 1-2-3 Wizards** and try **Find the Middle (Median)** and **Count How Many Numbers**. The wizard highlights what to click on the grid, so you learn by doing.

HERO TIP • Quick peek without a formula

Just drag across some numbers. The magic bar shows Sum, Avg, Min and Max instantly. Use **Put Avg Below** when you want to keep the answer.

WHY IT MATTERS • Average vs. median

Scores of 90, 92, 94 and 4 have an average of 70 but a median of 91. One weird number drags the average way down, while the median stays put. Real scientists pick carefully!

CHECK YOURSELF

Open **Starter Sheets ▸ Game Scores & Stats**. Which game had the most points? Use a formula to prove it.

LEVEL

7

Chart Artist

Turn boring numbers into pictures.

About 20 minutes ⋆ Badge: Chart Artist

BY THE END OF THIS LEVEL YOU CAN...

- ✓ make a chart in one click from selected boxes
- ✓ build a chart in the **Charts** drawer with labels and numbers
- ✓ choose between **bar**, **line** and **pie** charts

The one-click way

1. Open **Starter Sheets ▸ Class Pizza Party**.
2. Drag down the item names **A3:A7**.
3. Hold **Ctrl** (Mac: ⌘) and drag down the totals **D3:D7**. Now two separate blocks are selected.
4. Click **Make Chart** on the magic bar. A live bar chart appears!

The Charts drawer way

Click **Charts** in the top bar. Give your chart a title, choose a type, then fill in **Labels (Names)** (like **A3:A7**) and **Numbers** (like **D3:D7**) and click **Create Chart**. Charts **update automatically when numbers change!**

Chart	Use it when you want to...	Example
Bar	Compare amounts side by side	Points scored by each player
Line	Show change over time	Your height each birthday
Pie	Show parts of a whole	How the party money was split up

TRY IT! • Chart your snacks

1. In your snack sheet, make a **bar chart** of the star ratings.
2. Change one rating and watch the chart move.
3. Make a **pie chart** of your snack prices. Which snack takes the biggest slice?
4. Open **Lemonade Stand (2 Sheets)** and find its **Cups Sold Each Day** chart. Would a line chart work better? Why?

HERO TIP • Pick boxes that aren't next to each other

Hold **Ctrl** (Windows) or ⌘ (Mac) while you click or drag to add more boxes to your selection. Names in one column + numbers in another = the perfect chart.

CHECK YOURSELF

You tracked the temperature every day for a week. Which chart type should you use?

LEVEL 8

Shape Shifter

Geometry without the headache.

About 20 minutes ★ **Badge: Shape Shifter**

BY THE END OF THIS LEVEL YOU CAN...

- ✓ use the **Shapes Lab** to drop area and volume formulas in your sheet
- ✓ use **AREA_CIRCLE**, **AREA_RECT**, **PYTHAG** and friends
- ✓ complete **Mission 3: Pizza Area!**

Click **Shapes Lab** on the Easy Math bar (or **GUIDE ME! ▸ Geometry Shapes Lab**). Pick a shape, see a picture with its parts labeled, type the sizes (or box addresses like **B3**), and GridBuddy drops a live formula into the selected box.

Tool	Finds	Example	Answer
`AREA_RECT(w, h)`	Area of a rectangle	`=AREA_RECT(8, 5)`	40
`PERIM_RECT(w, h)`	Distance around a rectangle	`=PERIM_RECT(8, 5)`	26
`AREA_TRI(b, h)`	Area of a triangle	`=AREA_TRI(10, 6)`	30
`AREA_CIRCLE(r)`	Area of a circle	`=AREA_CIRCLE(7)`	153.94
`CIRCUMFERENCE(r)`	Distance around a circle	`=CIRCUMFERENCE(7)`	43.98
`PYTHAG(a, b)`	Long side of a right triangle	`=PYTHAG(3, 4)`	5

`VOL_BOX(l, w, h)`	Volume of a box	`=VOL_BOX(5, 4, 3)`	60

Older students: **SIN**, **COS** and **TAN** work in **degrees**, so `=SIN(30)` gives 0.5. There's also **DIST**, **SLOPE**, **VOL_CYLINDER**, **VOL_SPHERE** and **VOL_CONE**.

TRY IT! • Mission 3: Pizza Area!

1. Start **Find the Area of a Giant Pizza** in Guided Practice Missions.
2. In **B3** type `=AREA_CIRCLE(B2)` to work out π × radius².
3. Bonus: a 12-inch pizza has a radius of 6. A 16-inch has a radius of 8. Use AREA_CIRCLE to find how much **more** pizza the 16-inch is.

TRY IT! • Measure your room

Measure your bedroom floor (or a table) in feet. Put the width in **B2** and length in **B3**, then use `=AREA_RECT(B2, B3)`. How many square feet of carpet would you need?

CHECK YOURSELF

Open **Starter Sheets ▸ Geometry Shape Lab**. Change one measurement. What updates?

LEVEL 9

Power Moves

Work like a pro: fill, copy and multiple sheets.

About 25 minutes ★ **Badge: Power User**

BY THE END OF THIS LEVEL YOU CAN…

- ✓ copy a formula down a whole column with **drag-to-fill**
- ✓ continue number patterns automatically
- ✓ use up to **3 sheets** and link them together

Drag-to-fill: the time machine

Select a box and look for the tiny square at its bottom-right corner: the **fill handle**. Drag it down or across.

- **Formulas slide along.** Drag `=B3*C3` from D3 down to D7 and it becomes =B4*C4, =B5*C5… automatically.
- **Patterns continue.** Type 2 and 4 in two boxes, select both, and drag: GridBuddy fills 6, 8, 10…

Copy and paste

Ctrl+C copies and **Ctrl+V** pastes (Mac: ⌘+C / ⌘+V). Formulas you paste shift to fit their new spot, just like fill.

More than one sheet

- Click **+** next to the sheet tabs at the bottom to add a sheet (up to **3**).
- **Double-click** a tab to rename it. Click the small × to remove one.
- To use a number from another sheet, type the sheet name, **!**, then the address: **`=Supplies!B6`**. If the sheet name has a space, put it in single quotes: **`='Sheet 2'!A1`**.

TRY IT! • Run a lemonade stand

1. Open **Starter Sheets ▸ Lemonade Stand (2 Sheets)**.
2. On the **Sales** sheet, click **D8**. It says **`=Supplies!B6`**: it's grabbing the supply cost from the other sheet.
3. Click the **Supplies** tab and make lemons cost **$15** instead of $12. Go back to Sales. What happened to FINAL PROFIT?
4. Add a **Monday** row to Sales by copying the Sunday row and changing the cups. Does your total include it? (Hint: you may need to stretch the SUM range.)

HERO TIP • Times table in 30 seconds

Type 1 in A2 and 2 in A3, select both and drag down to A13. In B2 type **`=A2*7`** and drag it down. You just built the 7 times table!

UH-OH? • Loop!

If a box tries to use its own answer (like **`=A1+1`** typed into A1), GridBuddy shows **Loop!**. Point the formula at different boxes.

LEVEL **10**

Save, Share and Become a Hero

Keep your work and show it off.

About 30 minutes ★ **Badge: SPREADSHEET HERO**

BY THE END OF THIS LEVEL YOU CAN...

- ✓ save your work to a file and open it again
- ✓ export to CSV for Excel, Google Sheets or Numbers
- ✓ plan and build your own Hero Project from scratch

Button	What it does
Save	Downloads a **.gridbuddy** file with all your sheets, formulas, colors and charts. Keep it somewhere safe!

Open	Opens a .gridbuddy file you saved earlier, right where you left off.
CSV	Exports the current sheet as a .csv file that any “real” spreadsheet app can open.

HERO TIP • Save early, save often

GridBuddy works in your browser and keeps everything on your own computer. Click **Save** whenever you finish a chunk of work, and give the file a name you’ll recognize later, like **snack-ratings.gridbuddy**.

Your Hero Project

Pick one, or invent your own. Your project must use **everything** in the checklist below.

Project idea	What you’d track
Dream Birthday Party	Guests, food, decorations, cost of each, total budget, cost per guest
Allowance Tracker	Money in, money spent, savings each week, a line chart of savings growing
Sports Season Stats	Points per game, average, best and worst games, a bar chart
Plant Growth Journal	Height every few days, how much it grew, a line chart
Design a Garden	Shapes of flower beds, area of each, total area, cost of soil

Hero Project checklist

☐ A clear title and bold headings	☐ At least 5 rows of real data
☐ At least one formula using box addresses	☐ A SUM
☐ One statistics tool (AVERAGE, MEDIAN, MAX…)	☐ Money or percent formatting
☐ A crayon color code	☐ A chart that tells a story
☐ Two sheets linked with Sheet!Box	☐ Saved as a .gridbuddy file

FOR GROWN-UPS & TEACHERS • Show-and-tell

Have each hero present their project in two minutes: what question it answers, one formula they’re proud of, and what the chart shows. Change a number live and let the class watch everything update.

Hero Cheat Sheet

Print this page and keep it next to your keyboard.

Keyboard shortcuts

Do this	Windows	Mac
Save and move down / right	Enter / Tab	Return / Tab
Edit a box	Enter or F2	Return or F2
Cancel typing	Esc	Esc
Erase	Delete or Backspace	Delete
Undo / Redo	Ctrl+Z / Ctrl+Y	⌘+Z / ⌘+Y
Copy / Paste	Ctrl+C / Ctrl+V	⌘+C / ⌘+V
Grow a selection	Shift + arrows	Shift + arrows
Add boxes to a selection	Ctrl + click	⌘ + click

Favorite formulas

Formula	What it does
`=B2+B3`	Adds two boxes
`=SUM(B2:B9)`	Adds up a whole list
`=AVERAGE(B2:B9)`	The average (mean)
`=MEDIAN(B2:B9)`	The middle number
`=MAX(B2:B9) / =MIN(B2:B9)`	Biggest / smallest
`=COUNT(B2:B9)`	How many numbers
`=ROUND(B2, 2)`	Rounds to 2 decimal places
`=PERCENT(18, 20)`	What percent 18 is out of 20 (gives 90)
`=AREA_CIRCLE(B2)`	Area of a circle with radius B2
`=Supplies!B6`	Box B6 from the sheet named Supplies

Friendly error decoder

GridBuddy says	It means	Fix it by
⚠ Can't ÷ 0	You divided by zero (or an empty box)	Check the box you're dividing by
Loop!	A formula uses its own answer	Point it at other boxes

Math Mode Only	That function isn't one of GridBuddy's math tools	Check GUIDE ME! ▸ All 35+ Math Tools
Outside 100×100	An address past CV100	Use a box inside the grid
⚠ Negative √	Square root of a negative number	Use a positive number

Every error message has a hint. Click the box and read the explanation, or open **GUIDE ME! ▸ All 35+ Math Tools** to search for any function and use **Try in Box**.

Hero Dictionary

Word	Kid-friendly meaning
Spreadsheet	A smart table that does math for you
Cell / box	One little square in the grid
Column	A line of boxes going up and down, named with a letter
Row	A line of boxes going side to side, named with a number
Address	A box's name: column letter + row number, like C4
Range	A group of boxes, like B2:B9
Formula	An instruction that starts with = and works out an answer
Function	A ready-made math tool like SUM or AVERAGE
Formula bar	The strip above the grid that shows what's really inside a box
Fill handle	The tiny square on a selected box you drag to copy
Sheet	One page of boxes; a file can have up to 3 in GridBuddy
CSV	A simple file type every spreadsheet app can open

Answer key

Level	Answers
0	Cheese Pizzas is in A3. D3 shows $48.00 and holds the formula =B3*C3. C5 holds $6.00 (juice box packs). B7 = column B, row 7.
2	When B3 becomes 6, D3 becomes $72.00. =C3+C4 adds the two prices: $26.00. Addresses keep working when numbers change; typed numbers don't.
3	Movie snacks total $23.00. C2:C9 holds 8 boxes.
4	=2+3*4 is 14, =(2+3)*4 is 20, =10-2^2*2 is 2. =20-10/2 is 15 because divide happens before subtract.
5	$3.00 is really just the number 3.
6	Quiz average 92, median 92, max 96, min 88, range 8.

7	Temperature over a week: a line chart, because it shows change over time.
8	12-inch pizza ≈ 113.10 sq in, 16-inch ≈ 201.06 sq in: about 87.96 sq in more (nearly double!).
9	Lemons at $15 raise supplies to $28.50, so FINAL PROFIT drops from $91.50 to $88.50.

Hero Badge Tracker

Tick a badge when you finish its level and its Check Yourself question.

☐ 0 Explorer	☐ 1 Box Boss	☐ 2 Formula Starter	☐ 3 Sum Champion
☐ 4 PEMDAS Pro	☐ 5 Style Star	☐ 6 Stats Detective	☐ 7 Chart Artist
☐ 8 Shape Shifter	☐ 9 Power User	☐ 10 SPREADSHEET HERO	☐ ★ Hero Project shown off!

Hero name: _____ Date: _____

You did it. Go make something add up!