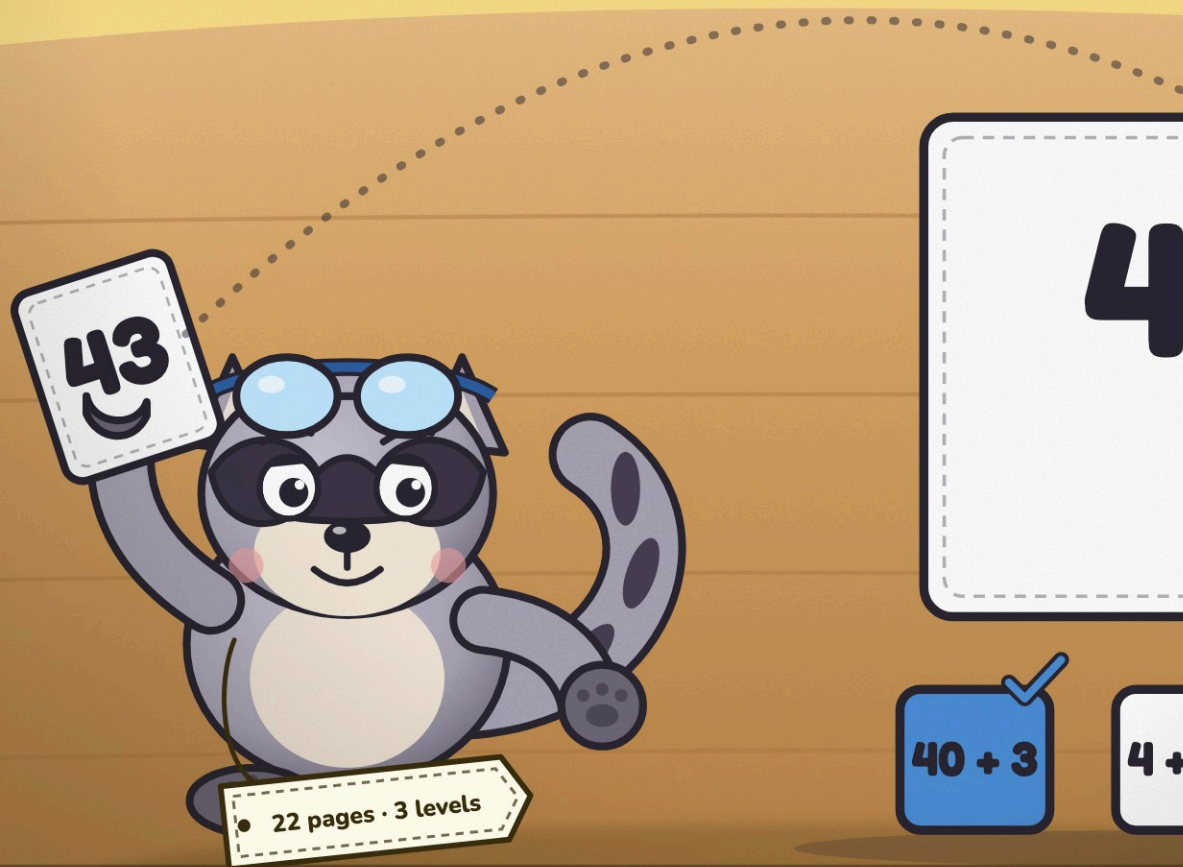
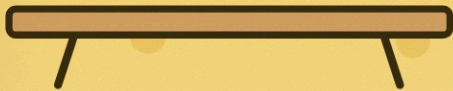


Place Value: Expanded Form Match

TASK BOX



☒ $40 + 3$

☐ $4 + 30$

☐ $40 + 1$

What Is Inside, and Where

Before you begin

PAGE 4



**Start Here —
Three Steps
START HERE**

4

01 The Color Set

PAGES 6–9



**Expanded Form
Reference (Color)**

REFERENCE

6



**Level 1 Cards
(Color)**

CARDS

7



**Level 2 Cards
(Color)**

CARDS

8



**Level 3 Cards
(Color)**

CARDS

9

02 The Ink-Saver Set

PAGES 11–14



**Expanded Form
Reference (Ink-
Saver)**

REFERENCE

11



**Level 1 Cards (Ink-
Saver)**

CARDS

12



**Level 2 Cards (Ink-
Saver)**

CARDS

13



**Level 3 Cards (Ink-
Saver)**

CARDS

14

03 Key, Data and Home

PAGES 16–21



**Answer Key and
Card List**

REFERENCE

16



**Task Box Data
Sheet**

LOG

17



Percent Graph

TRACKER

18



Filled Example

EXAMPLE

19



Practice at Home

NOTES

20



Phrase Bank

REFERENCE

21

TWO TILE COLORS, ONE BOX

Sections 1 and 2 are the same cards twice: a color-accent set for a laminated classroom box, a black-and-white outline set for a photocopier or a copy that goes home. Every tile is plain text; nothing on a card says its level except a dot code in the corner.

PRACTICE, NOT A TEST

Independent work practice with a data sheet attached. It counts cards with the right expanded form marked and nothing else; what that means for a student is your team's call.



START HERE

Start Here — Three Steps

Ninety seconds of reading. The cards need scissors and nothing else.



1

Print and cut

Print the reference page and the three card pages from the color set (pages 6–9) on cardstock, or the ink-saver set (pages 11–14) on plain paper. Laminate if the box will live in a rotation.

Cut along the dashed lines. Keep each level in its own bag; the dot code puts a mixed-up box back together.



2

Run the cards

Hand over one card and say the same short line each time (page 21). The child checks each tile by adding its two parts and marks the match — a circle, a clothespin or a chip.

Start at Level 1 unless the student already breaks a two-digit number into tens and ones without help; the answer key (page 16) has every card.



3

Record and graph

Write the date, the level, cards correct and cards given on the data sheet (page 17) the same day, and what help was given in your own words.

Plot the percent on the graph (page 18). Send the family page (page 20) home the week the box is new.

WHAT THIS FILE IS

A fillable PDF with cut-apart target-numeral and expanded-form matching cards built in, plus the data pages behind them. The cards are a print task (a tile is circled, clipped or covered); the data sheet, graph, family page and headers take typing. It works offline, with no account or subscription, and prints the same on every machine.

WHAT THIS FILE IS NOT

It is not an editable online slideshow or word-processor document, and it is not a test of anything. It carries no prompt hierarchy, fading schedule or mastery rule; it describes how to run the cards already printed and how to count what happened.

THE RULE EVERY PAGE IN THIS FILE FOLLOWS

Nothing here decides what a percent means for a student, when to move up a level, or what the goal should say. Every one of those is a blank you fill from your own team's plan and your district's wording.

IF SOMETHING DOES NOT WORK

A field will not hold my typing. Open the file in Adobe Acrobat Reader (free) or Preview, not a browser tab.

A student marks a tile without adding its parts. That is expected at first; model saying the two parts out loud, then put it on the student. The **Ask a Question** tab on the product page reaches me, and a fix is a free update.

CONFIDENTIALITY, AND WHERE THIS FILE LIVES

A filled-in data sheet, graph or example-style note is a student record: initials only on anything that leaves your hands, first name only on the family page. The cards and reference page live in the box; the data sheet and graph stay in the student's folder so the trend is the first thing anyone finds.

REFERENCE

Expanded Form Reference (Color)

One worked example, plus 16 more at a smaller size. Print once, laminate, keep it with the box.

$$47 = 40 + 7$$

The tens digit tells how many groups of ten; the ones digit tells how many are left over. Together, added up, they make the whole number.

$$23 = 20 + 3$$

$$38 = 30 + 8$$

$$54 = 50 + 4$$

$$76 = 70 + 6$$

$$62 = 60 + 2$$

$$39 = 30 + 9$$

$$17 = 10 + 7$$

$$64 = 60 + 4$$

$$90 = 90 + 0$$

$$28 = 20 + 8$$

$$73 = 70 + 3$$

$$59 = 50 + 9$$

$$31 = 30 + 1$$

$$48 = 40 + 8$$

$$70 = 70 + 0$$

$$96 = 90 + 6$$

READING AN EXPANDED FORM

The tens digit, multiplied by ten, plus the ones digit, by itself. Check any tile by adding its own two parts: if the sum is not the number on the target tile, it is not the right choice, however close the parts look.

USING THIS PAGE AS A SUPPORT

Lay it beside the box. A child who is unsure finds a close example above and adds its two parts the same way. Note on the data sheet whether it was out ("reference out" in the help column), and put it away once a level runs clean without it.

THIS PAGE IS NOT A CARD

None of the 16 numbers above are cards in the box — every card number is listed on the answer key instead (page 16). This page only shows how a number splits into a tens part and a ones part.

SAME PAGE, TWO COLORS

This reference is printed once in each set — accent-colored tiles here, black-on-white tiles in the ink-saver set — so either copy of the box has the same support beside it.

WHY THE TENS PART ALWAYS ENDS IN ZERO

Every tens part printed on this page and in the box is the tens digit times ten, so it always ends in a zero — a tile that does not end in zero in its first part is never the right choice.

WHAT TO DO IF A CHILD SKIPS STRAIGHT TO GUESSING

Cover the choice tiles, point only at the target numeral, and ask for the tens part and the ones part out loud before any tile is shown again.

CARDS

Level 1 Cards (Color)

6 cards, numbers 12–27, two expanded forms to choose from. Print on cardstock, cut along the dashed lines. This is the color set; the same cards are on page 12 in the ink-saver set.

12 Which expanded form? 10 + 2 50 + 7 • 1	15 Which expanded form? 60 + 8 10 + 5 • 2
18 Which expanded form? 10 + 8 40 + 3 • 3	21 Which expanded form? 70 + 6 20 + 1 • 4
24 Which expanded form? 20 + 4 50 + 9 • 5	27 Which expanded form? 80 + 4 20 + 7 • 6

RUNNING A LEVEL 1 CARD

Hand over one card and say the same short line every time: “Which one really adds up to this number?” The wrong choice on this level is a completely different number’s expansion, different in both digits, so the first cards are nearly impossible to miss.

THE DOT CODE

One dot in the corner means a Level 1 card. If the box gets mixed up, the dots put it back together without reading a number. Every card is listed on the answer key (page 16) by the small number in its bottom-left corner.

CARDS

Level 3 Cards (Ink-Saver)

6 cards, numbers 82–93, four expanded forms to choose from. Print on cardstock, cut along the dashed lines. This is the ink-saver (black and white) set; the same cards are on page 9 in the color set.

82 Which expanded form? 80 + 2 8 + 20 800 + 2 80 + 6 ... 1	84 Which expanded form? 8 + 40 80 + 4 80 + 7 800 + 4 ... 2
85 Which expanded form? 800 + 5 80 + 1 80 + 5 8 + 50 ... 3	87 Which expanded form? 80 + 3 800 + 7 8 + 70 80 + 7 ... 4
91 Which expanded form? 90 + 1 900 + 1 90 + 4 9 + 10 ... 5	93 Which expanded form? 9 + 30 90 + 3 900 + 3 90 + 7 ... 6

RUNNING A LEVEL 3 CARD

Four choices: the digit-swap tile, a tile that scales the tens digit by a hundred instead of a ten (400 + 7 instead of 40 + 7), and a nearby number's real expansion, alongside the right one. Adding each tile's two parts out loud, tens first, is the habit this level rewards. Three dots mark this level.

MIXING LEVELS IN ONE BOX

A student who is solid at Level 3 can be given a scrambled handful pulled from all three levels at once; the dots sort it back afterward. Record the level as "mixed" on the data sheet so the percent is read against the right cards.

LOG

Task Box Data Sheet

One row per session. It measures one thing: cards with the correctly expanded form marked. Plot the percent on page 18.

STUDENT

GOAL (YOUR DISTRICT'S OWN WORDING)

CRITERION (YOUR TEAM SETS IT)

#	DATE	LEVEL	CARDS USED	CARDS CORRECT	CARDS GIVEN	PERCENT	HELP GIVEN	INITIALS
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

FIGURING THE PERCENT

Cards correct divided by cards given, times 100, rounded to the nearest whole number. A card is correct when exactly one tile is marked and it actually adds up to the target numeral; a card with two marks, or none, counts as given and not correct. “Cards used” is the card numbers handed over that session.

THE HELP COLUMN IS YOUR OWN CODE

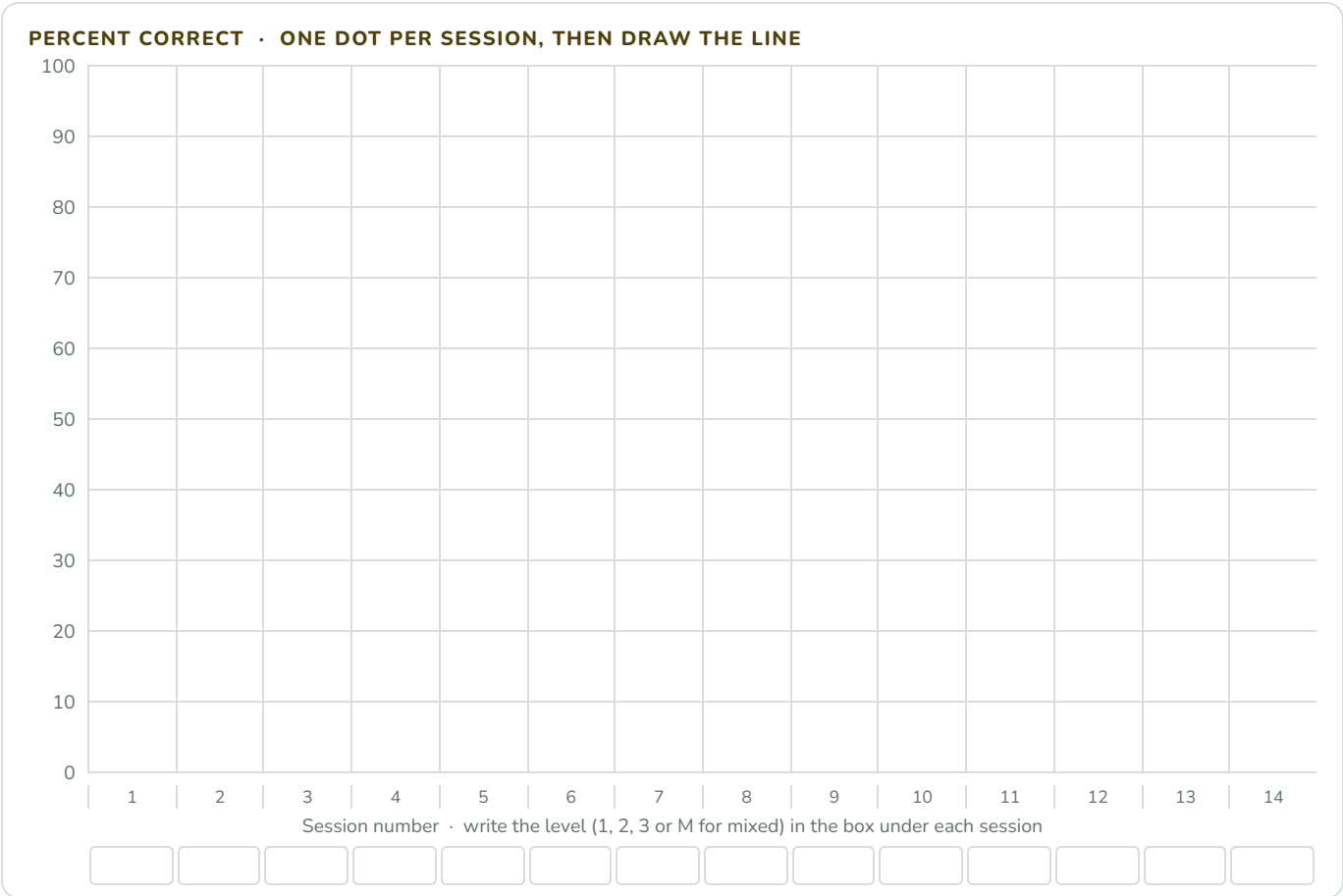
Write what you actually did — nothing, pointed to the reference page, added the two parts out loud together. Use the same short words every session so two rows can be compared. This file does not supply a prompt hierarchy or a fading rule; that is your team’s plan.

TRACKER

Percent Graph

Fourteen sessions across, 0 to 100 percent. One graph per student per task box.

STUDENT	TASK BOX	CRITERION (YOUR TEAM SETS IT)



A LEVEL CHANGE IS A BREAK IN THE LINE

When the level goes up, expect the percent to dip — that is a harder set, not a lost skill. Start a fresh line segment at each level change so the graph is read within a level, not across one.

SETTING THE CRITERION FIELD

This page prints no target and no typical rate. Write the criterion your team agreed to in the field above before the first session, from the goal on the data sheet (page 17), so every dot is read against the same line.

BRINGING THIS PAGE TO A MEETING

A line is easier to read across a table than a column of percents. Copy or screenshot this page for a progress report or a family conference; the raw rows stay on the data sheet.

THREE FLAT SESSIONS

Three sessions in a row flat or falling within one level is a reason to read the help column and the notes on the data sheet, not a reason to wait for a fourth. This page counts what is plotted; it does not decide what a flat line means.

EXAMPLE

Filled Example

SAMPLE · INVENTED STUDENT

Every number in the read-out is re-counted straight from the table above.

Marisol is invented, and so is every mark on this page. 8 sessions on this task box, moving up a level when the percent held at the team's criterion for two sessions running.

#	DATE	LEVEL	CARDS USED	CORRECT	GIVEN	PERCENT	HELP GIVEN
1	9/9	L1	1–6	3	6	50%	Pointed to the tens digit, then the ones
2	9/11	L1	1–6	6	6	100%	None
3	9/16	L2	1–6	3	6	50%	Talked through the digit-swap tile together
4	9/18	L2	1–6	4	6	67%	Pointed to the tens and ones separately
5	9/23	L2	1–6	6	6	100%	None
6	9/25	L3	1–6	3	6	50%	Talked through the swap and hundreds tiles
7	9/30	L3	1–6	4	6	67%	Pointed to the tens and ones separately
8	10/2	L3	1–6	6	6	100%	None

READING THE NUMBERS

Session 1, Level 1: 3 of 6 cards, 50 percent. The first Level 3 session was 3 of 6, 50 percent — a dip on a harder set, which is the expected shape. The most recent session is 6 of 6, 100 percent. Every percent above is that row's own correct count divided by its given count, rounded to the nearest whole number.

A LINE THIS SHEET COULD WRITE

"On the place value expanded form match task box (Level 3, four expanded forms to choose from), Marisol marked the right tile on 3 of 6 cards on 9/25 and 6 of 6 on 10/2 (help given: none)."

HOW THE GRAPH WOULD LOOK

8 dots across, with a fresh line segment starting at each level change (page 18); the level box under each session reads 1, 1, 2, 2, 2, 3, 3, 3 for this table. The criterion field would hold whatever Marisol's team wrote, not a number this file supplies.

WHAT THIS EXAMPLE IS NOT

One invented child's 8 sessions. It does not predict how quickly any real student moves between levels and sets no typical rate for place value — it exists only to show how the data sheet, the graph and the phrase bank read once real numbers are on them.

THE HELP COLUMN, FILLED IN

Every entry is what the adult did, in the same short words each time — "none," "pointed to the reference page," "added the two parts out loud together." None of them is a label for Marisol. A row that reads "none" on the help column and 100 percent on the score is what independent work looks like on paper.