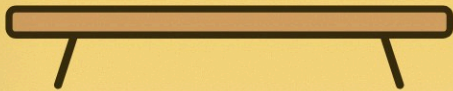
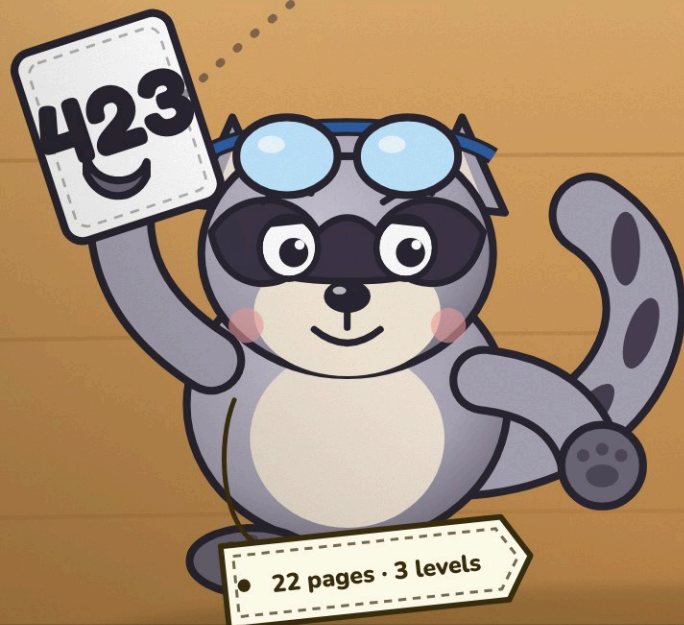


Place Value: Expanded Form to 1,000

TASK BOX



423



☒ $400 + 20 + 3$

☐ $400 + 30 + 2$

☐ $400 + 10 + 2$

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 PALETTES, ONE DECK

Sections 1 and 2 duplicate the identical deck: a tinted set suited to a laminated classroom box, plus an outline-only set suited to a photocopier or a take-home copy. Every tile stays plain text; nothing on a piece betrays its tier except the dot count tucked in the corner.

PRACTICE, NOT AN ASSESSMENT

Independent work practice paired with a logging sheet. It tallies cards where the honest expansion got circled and nothing beyond that; what that tally signifies for a given learner is your team's own judgment call.

Start Here — Three Steps

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



1

Print and cut

Print the reference sheet and the three card pages from the color set (pages 6–9) onto cardstock, or the ink-saver set (pages 11–14) onto plain paper. Laminate if the box is entering a rotation.

Snip along the dashed guides. Bag each tier separately; the dot count reunites a jumbled box without reading a single numeral.



2

Run the cards

Hand over one card and voice the same brief question every round (page 21). The learner totals each tile's three chunks and flags the match — a circle, a clothespin or a coin.

Begin at Level 1 unless the student already unpacks a three-digit figure into hundreds, tens and ones unaided; the answer key (page 16) catalogs every card.



3

Record and graph

Jot the date, the tier, cards correct and cards attempted on the data sheet (page 17) that same day, plus whatever assistance was offered, in your own words.

Chart the percentage on the graph (page 18). Mail the family sheet (page 20) home the week the box debuts.

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 three 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.

$$532 = 500 + 30 + 2$$

The hundreds digit tells how many groups of a hundred; the tens digit tells how many groups of ten; the ones digit tells how many are left over. All three, added up, make the whole number.

$$145 = 100 + 40 + 5$$

$$278 = 200 + 70 + 8$$

$$361 = 300 + 60 + 1$$

$$419 = 400 + 10 + 9$$

$$548 = 500 + 40 + 8$$

$$683 = 600 + 80 + 3$$

$$715 = 700 + 10 + 5$$

$$842 = 800 + 40 + 2$$

$$926 = 900 + 20 + 6$$

$$237 = 200 + 30 + 7$$

$$564 = 500 + 60 + 4$$

$$891 = 800 + 90 + 1$$

$$172 = 100 + 70 + 2$$

$$398 = 300 + 90 + 8$$

$$653 = 600 + 50 + 3$$

$$984 = 900 + 80 + 4$$

READING AN EXPANDED FORM

The hundreds digit, scaled by a hundred; the tens digit, scaled by ten; the ones digit, standing alone. Audit any tile by totaling its own three chunks — a sum that misses the target numeral disqualifies the tile, no matter how familiar its parts appear.

USING THIS PAGE AS A SUPPORT

Keep it propped beside the box. A learner who stalls finds a nearby worked line above and totals its three chunks the identical way. Jot on the data sheet whether the prop was needed (“reference out” in the help column), and retire it once a tier runs clean unaided.

THIS PAGE IS NOT A CARD

None of the 16 figures above belong to the box — every genuine card numeral is logged on the answer key instead (page 16). This sheet exists solely to demonstrate how a number unpacks into a hundreds chunk, a tens chunk and a ones chunk.

SAME PAGE, TWO COLORS

This support prints once per set — tinted tiles here, outline-only tiles in the ink-saver set — so whichever copy ends up in the box, the same prop sits beside it.

WHY THE FIRST TWO CHUNKS ALWAYS LAND ON ZERO

Every hundreds chunk shown here is a digit times a hundred, and every tens chunk is a digit times ten, so both close on a zero without exception — a leading or middle chunk that skips the trailing zero can be ruled out on sight.

WHAT TO DO IF A LEARNER JUMPS STRAIGHT TO GUESSING

Mask the choice row, point solely at the target numeral, and request the hundreds chunk, then the tens chunk, then the ones chunk spoken aloud before a single tile is revealed again.

CARDS

Level 1 Cards (Color)

6 cards, numbers 123–312, 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.

123 Which expanded form? $100 + 20 + 3$ $500 + 50 + 4$ • 1	156 Which expanded form? $500 + 30 + 3$ $100 + 50 + 6$ • 2
189 Which expanded form? $100 + 80 + 9$ $600 + 60 + 4$ • 3	234 Which expanded form? $600 + 50 + 7$ $200 + 30 + 4$ • 4
267 Which expanded form? $200 + 60 + 7$ $900 + 10 + 2$ • 5	312 Which expanded form? $900 + 80 + 6$ $300 + 10 + 2$ • 6

RUNNING A LEVEL 1 CARD

Hand over one card and ask the same short question every round: “Which of these truly belongs to this number?” The decoy on this opening tier is lifted wholesale from an unrelated number — wrong in its hundreds, its tens AND its ones — so a first attempt is nearly unmissable.

THE DOT CODE

One dot in the corner flags a Level 1 card. If the box ever gets jumbled, the dots sort it back without anyone reading a single numeral. Every card is logged on the answer key (page 16) by the small figure printed in its lower-left corner.

CARDS

Level 3 Cards (Ink-Saver)

6 cards, numbers 723–912, 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.

723 Which expanded form? $700 + 20 + 3$ $700 + 30 + 2$ $200 + 70 + 3$ $700 + 20 + 30$... 1	756 Which expanded form? $700 + 60 + 5$ $700 + 50 + 6$ $500 + 70 + 6$ $700 + 50 + 60$... 2
789 Which expanded form? $700 + 90 + 8$ $800 + 70 + 9$ $700 + 80 + 9$ $700 + 80 + 90$... 3	834 Which expanded form? $800 + 40 + 3$ $300 + 80 + 4$ $800 + 30 + 40$ $800 + 30 + 4$... 4
867 Which expanded form? $800 + 60 + 7$ $800 + 70 + 6$ $600 + 80 + 7$ $800 + 60 + 70$... 5	912 Which expanded form? $900 + 20 + 1$ $900 + 10 + 2$ $100 + 90 + 2$ $900 + 10 + 20$... 6

RUNNING A LEVEL 3 CARD

Four choices: the relocated-digit tile, a tile swapping which digit owns the hundreds spot and which owns the tens spot (723 as $200 + 70 + 3$, not $700 + 20 + 3$), and a tile with a phantom zero tacked onto its smallest chunk ($700 + 20 + 30$, not $700 + 20 + 3$), beside the honest one. Naming each chunk aloud, biggest first, is the habit this tier builds.

MIXING LEVELS IN ONE BOX

Once a learner is steady at Level 3, hand over a shuffled handful drawn from every tier at once; the dot count untangles it afterward. Log the session as “mixed” on the data sheet so the resulting percentage is read against the right pile.

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

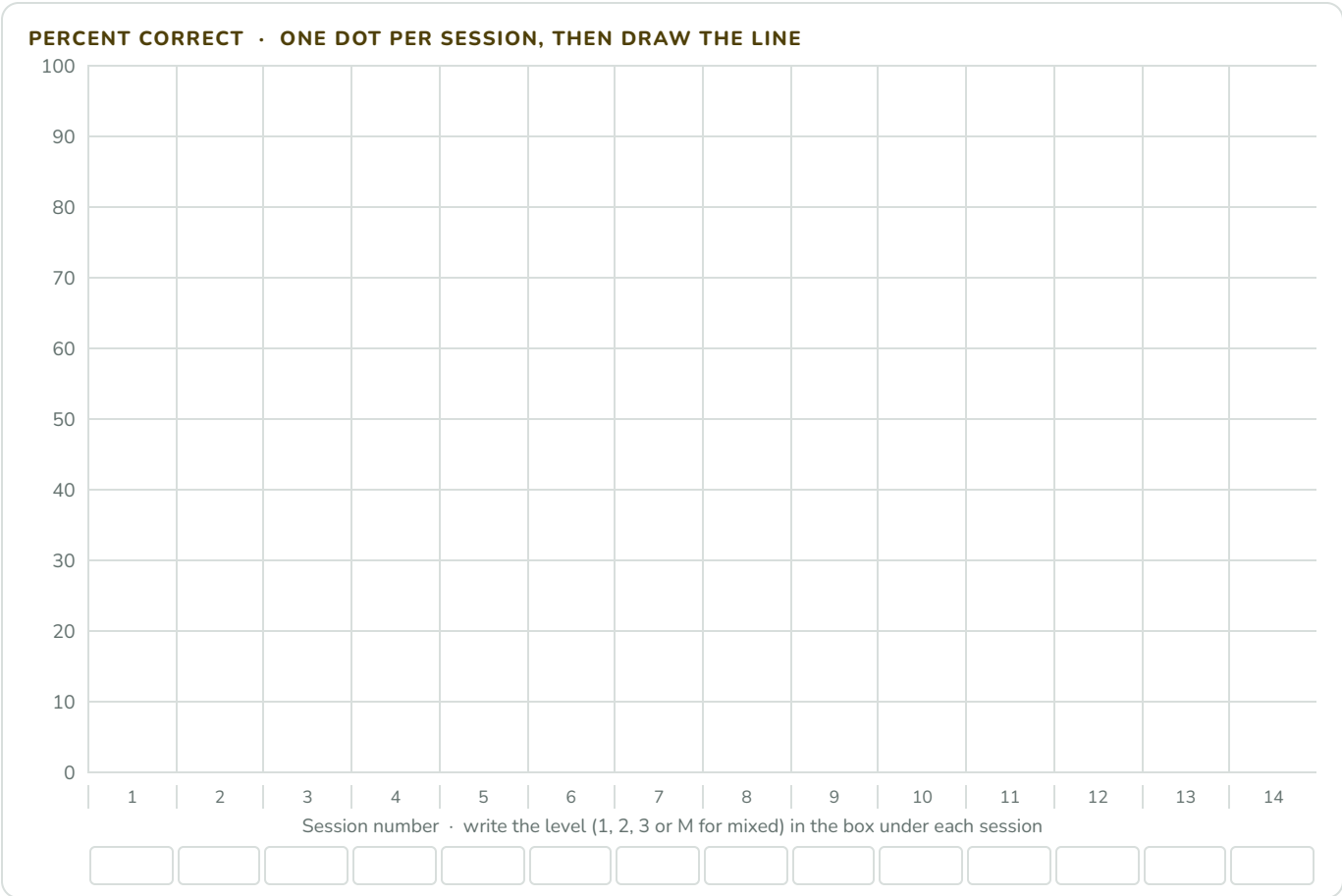
Write what you actually did — nothing, pointed to the reference page, added the three parts out loud together. Use the same short words every session so two rows can be compared. This file does not supply a prompt hierarchy or a fading rule; that is your team’s plan.

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.

Theo is a fictional learner, and so is every mark filled onto this sheet. 8 sessions logged against this box, advancing a tier whenever the percentage held at the team's own benchmark across two sessions running.

#	DATE	LEVEL	CARDS USED	CORRECT	GIVEN	PERCENT	HELP GIVEN
1	10/1	L1	1–6	2	6	33%	Said the hundreds part, then the tens, then the ones
2	10/3	L1	1–6	5	6	83%	None
3	10/8	L2	1–6	3	6	50%	Talked through the digit-swap tile together
4	10/10	L2	1–6	4	6	67%	Pointed to the hundreds, tens and ones separately
5	10/15	L2	1–6	6	6	100%	None
6	10/17	L3	1–6	3	6	50%	Talked through the swap and extra-zero tiles
7	10/22	L3	1–6	4	6	67%	Pointed to each part separately
8	10/24	L3	1–6	6	6	100%	None

READING THE NUMBERS

Session 1, Level 1: 2 of 6 cards, 33 percent. The opening Level 3 attempt landed at 3 of 6, 50 percent — a dip once the material got harder, exactly the shape to expect. The latest session sits at 6 of 6, 100 percent. Each percentage above is simply that row's correct tally divided by its attempted tally, rounded to the closest whole number.

A SENTENCE THIS SHEET COULD PRODUCE

"On the place value expanded form match task box (Level 3, four expanded forms to choose from), Theo circled the honest tile on 3 of 6 cards on 10/17 and 6 of 6 on 10/24 (assistance offered: none)."

HOW THE RESULTING GRAPH WOULD APPEAR

8 dots marching across, with a fresh line segment launching at every tier change (page 18); the tier box beneath each session reads 1, 1, 2, 2, 2, 3, 3, 3 for this particular table. The benchmark field would carry whatever figure Theo's team settled on, never a number supplied by this file.

WHAT THIS ILLUSTRATION IS NOT

A single fictional learner's 8 sessions. It forecasts nothing about how quickly any genuine student climbs between tiers and sets no typical pace for place-value mastery — its only job is showing how the data sheet, the graph and the phrase bank read once real figures populate them.

THE HELP COLUMN, FILLED IN

Every entry records what the adult actually did, in identical brief wording session after session — "none," "pointed to the reference sheet," "totaled the three chunks aloud together." None of these phrases labels Theo as a person. A row reading "none" in the help column alongside a 100 percent score is exactly what unaided independent work looks like on paper.