n-first · Paper-puzzle order

Complete source (staff reference): Original fictional label numbers: 507, 570, 750. Chosen amount to represent: 507. Two pretend card groups contain 38 and 27 cards. A separate pretend project needs 73 labels and has 29 ready. These are supplied mathematical quantities, not actual stock, price, creation or a child result. All quantities can be read aloud; no object handling is required.

Question: Put 507, 570, 750 in numerical order. Show or direct a labelled number line and explain one comparison.

Complete key and accepted variations: Order: 507 < 570 < 750. A labelled line with relevant hundred reference points and consistent equal intervals can show this order; exact pixel position is not a compulsory measurement. Explain comparison by hundreds then tens/ones, not digit width.

Component criterion: Orders all numerals by magnitude, supports a comparison and uses a meaningful labelled line.

Specific unrelated next teaching: If highest digit decides order, use unrelated192/219 with named hundreds. If line positions unlabelled, make a new200→300 scale before another placement.

Question: Show 507 using hundreds, tens and ones. Show a different valid partition and explain the zero in its standard form.

Complete key and accepted variations: 507 = 5 hundreds0 tens7 ones = 4 hundreds10 tens7 ones. Check 500+0+7 = 400+100+7. Other nonnegative whole-unit partitions summing507 accepted. Zero is no tens in standard form, not no total value.

Component criterion: Names standard places, keeps zero meaning and preserves value in a distinct alternate partition.

Specific unrelated next teaching: If exchange changes value, use unrelated34:3 tens4 ones↔2 tens14 ones and recount. If zero removed, compare204/240; do not teach by revealing this held amount.

Question: How many cards are in the two groups together? Show your chosen number sentence and strategy. Check it.

Complete key and accepted variations: 38+27=65 cards. Example partition 30+20+8+7=65; regroup the ones where useful. Counted marks, bridge or another valid own strategy accepted. Inverse check 65−27=38.

Component criterion: Chooses join/addition model and a valid conserved strategy/check, with card meaning.

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Specific unrelated next teaching: If a bridge double-counts, split unrelated18+5 as+2 then+3; if concatenation occurs, recombine20+10+7+6. Ask for a new inverse check after teaching.

Question: How many more labels does the separate project need? Choose a representation and strategy; explain and check what your answer means.

Complete key and accepted variations: 29+?=73, or73−29=44. Count up 29→30(+1)→73(+43); parts sum44. A correctly represented other strategy is accepted. Answer44 more labels, checked by29+44=73, not need+ready. No actual supplies/delivery.

Component criterion: Selects the missing part, represents/solves/checks it and communicates contextual meaning.

Specific unrelated next teaching: If need+ready is used, model unrelated25 needed/17 ready with a missing portion. If no units, ask what8 would count in that new model; choose a fresh ordinary problem afterwards.

Record honestly: full source familiarity/exposure; question and actual first response/method; reading/scribing/handling access; mathematical hints/device answers; observed child choices versus adult operations; actual teaching/source/date; interval before next source; initial versus supported revision; unattempted/uncaptured fields. No hypothetical learner score or attained level.

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