

Homework without the hassle

Sukindi is an Australian learning platform that supports Teachers, Parents and Students with an interactive homework app and downloadable resources.



Scan to start your
free 7-day trial

www.sukindi.com.au



Collection Builders - Year 1

Table of Contents	
Presentation: Collection Builders — 24 slides	
Teacher quick-start and five lesson plans (2–7)	
Display: Equal groups (8)	
Display: Count groups and reference sequences (9)	
Display: Full groups and singles (10)	
Display: Our full 120 collection (11)	
Worksheet 1: Are the groups equal? (12–13)	
Worksheet 2: Pairs to totals (14–15)	
Worksheet 3: Five in every group (16–17)	
Worksheet 4: Five-groups and singles (18–19)	
Worksheet 5: Ten-groups to a total, A/B (20–23)	
Worksheet 6: Tens with singles (24–25)	
Worksheet 7: Choose a grouping and count (26–27)	
Worksheet 8: Check and recount (28–29)	
Worksheet 9: Classroom report, A/B (30–33)	
Game 1: Collection Builders — rules (34)	
Game 1: Model and regroup the same set (35)	
Game 1: Four grouping sheets (36–39)	
Game 1: Five counter banks — 120 pieces (40–44)	
Game 1: Task cards C1–C12 (45–46)	
Game 1: Two checking guides (47–48)	
Game 1: Student record and sample answers (49–50)	
Game 2: Classroom Supply Counts — rules (51)	
Game 2: Story cards S1–S12 (52–53)	
Game 2: Choose my grouping mat (54)	
Game 2: Count once workflow mat (55)	
Game 2: Record and sample answers (56–57)	
Game 2: Supply checking guide (58)	
Quiz: Collection Builders — 22 slides	
Assessment: Collection Builders (59–66)	
Rubric: Collection Builders (67)	



Teacher quick-start

Learning focus

Year 1 students organise real collections into equal groups of 2, 5 or 10, count every full group once, include leftover singles and quantify collections through 120. Begin with familiar one-to-one counting within 20.

Prepare one complete set

Print the PDF at Actual size / 100%. For Collection Builders, prepare rules and model (pages 34–35), all four grouping sheets (36–39), all five counter banks (40–44), task cards (45–46), separate checking guides (47–48) and record sheets (49–50). Cut the 120 pieces; one pair shares and resets this set. Extra group sets are optional.

The second game

Classroom Supply Counts (51–58) reuses those same 120 pieces and four sheets. Include both story-card pages, both empty mats, the record and checking guide. The decision/workflow mats manage a few counters or a counting step; the full collection uses all four grouping sheets.

Teach, practise, check

Use the five 45-minute lessons (3–7), 24-slide presentation references (8–11) and practice/answers (12–33). Keep red answer sheets and checking guides away from unsolved tasks. An answer page follows each student sheet. The 22-slide quiz has 10 questions and separate explained reveals.

Support access

Read instructions and choices aloud. Students may speak, point, move counters, draw, use pictures or a communication device; an adult may record their response. Cutting, handwriting and fluency are not counting criteria. Give mathematical modelling during teaching; record mathematical hints separately during assessment.

Observe and reason

Collect free practical evidence across lessons 3–5, using pages 59–66 and rubric 67. Hide totals and preparation labels. Record the actual range, including a separate 120 collection observation. Use the first missed or repeated group/single to choose the next teaching step. The quiz informs feedback; it does not replace actual collection evidence.

Lesson 1: Equal groups count objects

45 minutes • goal

Make and check pairs, distinguish the number of groups from the number of objects, and count each pair once. Success: each pair has 2; four pairs give 8 objects with 2, 4, 6, 8.

Materials

Presentation slides 2–6; references 8–9; student pages 12 and 14 with answers 13 and 15 kept separate; complete Collection Builders kit 34–50. Prepare a loose collection of 8 counters and cards C1–C3.

5 min — retrieve

Show 8 loose counters without telling the total. Ask, “How can you make sure you count each counter once?” Students touch or move one object for each number. Observe missed or repeated objects before teaching the correction.

10 min — model

Make 3 pairs. Check 2 in each; contrast with groups of 2, 3, 2. Ask, “What is the same in equal groups?” Model 4 pairs: point to one pair for each 2, 4, 6, 8. Ask, “4 tells the groups; 8 tells all the counters.”

10 min — guide

Build card C2 together: 9 pairs. Students check both counters in every pair. Mark each pair as counted while using 2, 4, 6, 8, 10, 12, 14, 16, 18. Ask, “How many objects in each group? How is that different from the number of groups?”

15 min — apply

Partners use C1–C3: Builder makes equal pairs, Checker checks/counts, then check the guide, reset and swap. Students independently complete selected rows of the equality and pairs sheets; account actions on the recorded explanations as well as writing.

5 min — exit and feedback

Show 4 fresh pairs. Ask why the total is 8 rather than 4. Record equality, count-once actions and total. If groups were counted as objects, count the 2 in one pair, then connect it to the next cumulative count; check transfer with a fresh collection.

Support / challenge

Start with 4–10 real counters and a clear counted/not-counted boundary. Read and record responses without giving a total. Challenge: reorganise 18 as 3 fives and 3 singles, checking that no objects were added or removed. Record access separately from mathematical hints.

Lesson 2: Fives and leftover singles

45 minutes • goal

Check five in every full group, count cumulatively by 5 and count each leftover single after the last full-group value. Success: 8 fives reach 40; 3 singles give 41, 42, 43.

Materials

Presentation 7–10; references 9–10; practice pages 16 and 18, answers 17 and 19; Collection Builders kit, especially C4–C6 and checking guide 47. Prepare 30 and 43 actual counters with answers out of view.

5 min — retrieve

Students build 4 pairs and tell both the group count and object total. Ask them to show how a count-once action protects the total.

10 min — model

Arrange 30 as 6 fives. Check five actual counters in each group: count 5, 10, 15, 20, 25, 30. Next build 43 as 8 fives and 3 singles. Say the last full-group count, 40, before counting 41, 42, 43. Explain that 3 singles are not a full group of 5.

10 min — guide

Give a collection with one unequal five-group. Ask, “Does every five-group have five? Which group needs checking?” Repair it using the pieces and an answer label. Together count 4 fives and 3 singles: 20, then 21, 22, 23. Ask, “What must we do after the full groups?”

15 min — apply

Pairs build/count C4–C6, using the fix kit when needed. The Checker verifies group size and marks each counted group, then counts singles, record a total, use the separate guide, reset and swap students count. Repeat the fives and fives-with-singles practice, showing or recording their count.

5 min — exit and feedback

Show 8 fives and 3 singles. Ask what happens after 40. Look for 41, 42, 43 with each single included only. If a student says 45, return to the 3 actual singles and explain why they cannot count as a full five; check a fresh example.

Support / challenge

Begin with 2–4 fives and the complete counting reference. Allow pointing, counter movement and adult recording. Challenge: regroup the same 43 as 4 tens and 3 singles; justify the unchanged total. Record any mathematical cue and give one specific next action.

Lesson 3: Tens and the full collection

45 minutes • goal

Verify a full ten-frame, count full tens through 120 and include singles after 110. Success: 12 full frames hold 120 actual counters; 11 full frames and 7 singles total 117.

Materials

Presentation 11–14; references 10–11; practice 20–25; all four grouping sheets and five banks; C7–C12, guide 48. Fresh independent count 2: A on 61 (answer 62 separate); practical guide 65 and observation record 66.

5 min — retrieve

Count 4 fives and 3 singles. Students show the last full-group value and the point at which counting changes to ones.

10 min — model

Count all 10 objects in one full frame before naming a ten. Use the actual complete set on all four sheets: 3 full frames per sheet, 12 altogether. Point to each frame for 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120. Ask, “How do we know every frame is full?”

10 min — guide

Build 11 full tens and 7 separate singles. Count to 117 through 117; never name the unfinished group another ten. Regroup some tens into fives/pairs, checking actual objects. Establish that the full 120 collection can become 24 fives or 60 pairs without adding or removing objects; use guided reference counting.

15 min — apply and observe

Pairs use C7–C12 and the tens practice; share/reset the supplied set. Assign fresh count 2: A after practice. While other students complete stations, observe a few students with the unknown full collection using neutral prompts from 65. Record actual 120 evidence on 66; continue remaining observations in lessons 4–5.

5 min — exit and feedback

Ask a student to locate the last full group counted and name its cumulative value. Check whether the student counts objects rather than frames. For a missed/repeated frame, return to that action; mark it counted once and use a fresh similar collection.

Support / challenge

Begin with 3 or 6 full tens, then return to the taught 120 range. Read and record responses; students make the mathematical decisions. Challenge: verify the same full set as 24 fives or 60 pairs. Fluent spoken pair counting is not an access prerequisite.

Lesson 4: Choose, build and check

45 minutes • goal

Choose a useful grouping, count every object once and check a fresh classroom supply total. Success: correct equal groups, cumulative count, singles and an object-based check; more than one grouping may work.

Materials

Presentation 15–18; practice 26–29; Classroom Supply Counts kit 51–58 plus the same four sheets and 120 pieces. Prepare fresh 35 and stories S4, S8–S10. Independent count 2: B on 63 (answer 64 separate); guide 65, record 66.

5 min — retrieve

Students show how a full ten differs from leftover singles. Briefly recount a full-frame collection while marking each frame once.

10 min — model

Offer 35 loose counters. Try equal groups of 5, count to 35 and explain the choice; a different correct grouping with singles is accepted. Use the choice to test a few counters, then build the full collection on the grouping sheet. Read without announcing its total. Model six fives reaching 30, then 7 singles.

10 min — guide

Use the count-once workflow: point to/check one group and mark the corresponding sheet group counted. Repair Sam's claim on the check-and-recount sheet: 5 pairs are 10 objects, 6 fives are 30, 9 tens and 3 singles are 93. Ask, "How did your check rule out a missed group or single?"

15 min — apply and observe

Partners build/count stories including 10 (106), S8 (117) and S9 (120). Count full groups, singles, record/tell, then check the guide, reset and swap. Complete selected grouping/error action and fresh count 2: B. Continue individual actual-collection observation while others use complete stations.

5 min — extend feedback

Students demonstrate a check that would reveal a skipped group or omitted single. Record the check, not merely the correct numeral. Give feedback such as, "After 100, include each of the six singles," then check transfer with a fresh story.

Support / challenge

Use a smaller fresh story and adult reading before returning to 120. Accept actions, pointing or adult recording. Challenge: compare 106 as 10 tens plus 6 with 21 fives plus 1; preserve all objects. Separate access from mathematical cues in the observation record.

Lesson 5: Show and explain my total

45 minutes • goal

Show a fresh count, explain or demonstrate a check and identify a useful next step. Draw on independent work and actual collection evidence through 120; the quiz is one source of feedback.

Materials

Presentation 19–24; classroom report/answers 30–33; 22-slide quiz; independent count 1 on 59 (answer 60 separate); earlier independent counts 61 and 63; practical guide 65, observation record 66, rubric 67 and complete counting stations.

5 min — retrieve

Show 4 fresh pairs. Ask for the group count, group size and object total. Students point to each pair for 2, 4, 6, 8 and explain why 4 is not the total.

10 min — model and guide

Build 7 full ten-frame packs and 6 singles from the classroom report. Ask for the count before revealing 70, then 71–76. Compare with four full columns five and 2 singles (22). Students show a check and begin the fresh report; include its full two-ten-frame collection (120).

10 min — quiz and feedback

Read all 10 short quiz questions and choices. Students point, speak or record, then view each separate explained reveal. Discuss the difference between groups and objects, count-once, singles and regrouping. Revisit any specific error with actual counters; avoid using one percentage as a pass rule.

15 min — independent evidence

Students complete fresh count 1 (ones and 7 fives), independently or with neutral reading/recording support. Other students use the two complete counting stations and finish earlier classroom report work. Review evidence from lessons 3–4 and observe only the remaining targeted students with the fresh 47 and actual 120 probes. Do not attempt a whole-class individual interview in this period.

5 min — review and next step

Ask, “Show how you counted all these objects. How could you check?” Use the rubric to give one concrete next action: check equal size, mark each group once or continue singles after the last full-group count. Record the actual range and strategy demonstrated.

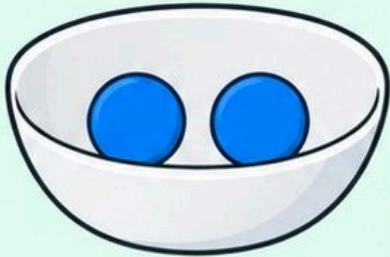
Support / challenge

Read/scribe without supplying group size, sequence or total. Accept counter actions, pointing, speech, pictures or a device. Smaller probes diagnose needs; retain separate evidence for the full 120 collection. Challenge: justify why rearranging the same collection cannot change its total when nothing is added or removed.

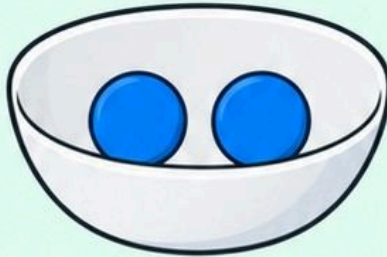
Equal groups

Equal means the same number in each group.

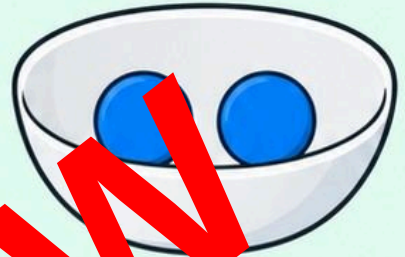
Equal groups



2



2



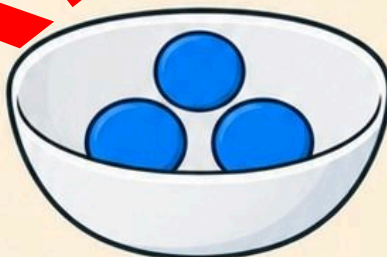
2

There are 3 groups. Each group has 2 counters.

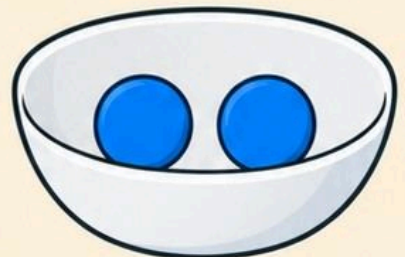
Not equal



2



3

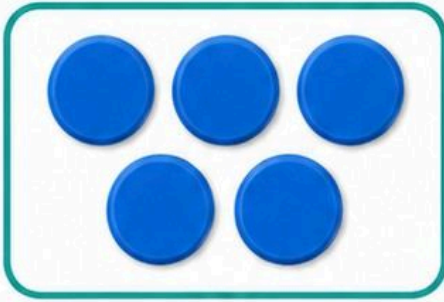


2

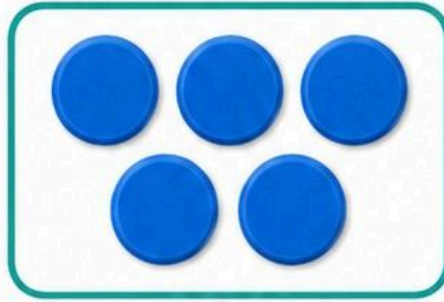
The middle group has a different number.

Count the counters in each group to check.

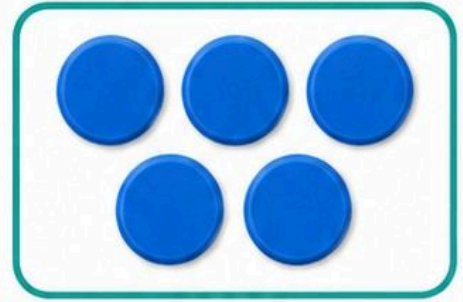
Count groups to count objects



5



10



15

Count each full group once. There are 15 counters altogether.

Count by 2

2, 4, 6, 8, 10, 12, 14, 16, 18, 20
22, 24, 26, 28, 30, 32, 34, 36, 38, 40
42, 44, 46, 48, 50, 52, 54, 56, 58, 60
62, 64, 66, 68, 70, 72, 74, 76, 78, 80
82, 84, 86, 88, 90, 92, 94, 96, 98, 100
102, 104, 106, 108, 110, 112, 114, 116, 118, 120

Count by 5

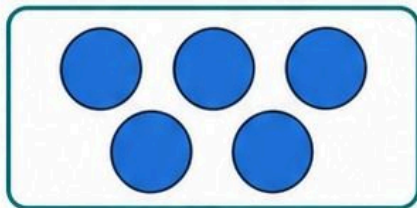
5, 10, 15, 20, 25, 30, 35, 40
45, 50, 55, 60, 65, 70, 75, 80
85, 90, 95, 100, 105, 110, 115, 120

Count by 10

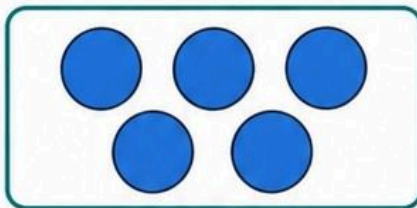
10, 20, 30, 40, 50, 60
70, 80, 90, 100, 110, 120

Full groups and singles

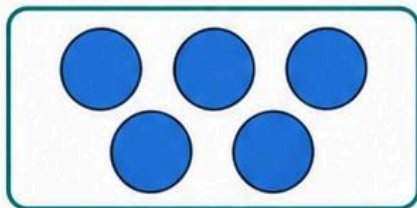
Groups of 5



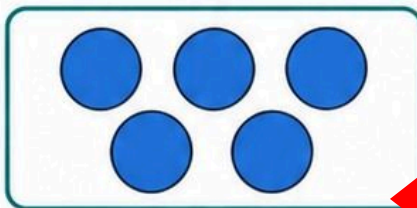
5



10



15



20

Singles



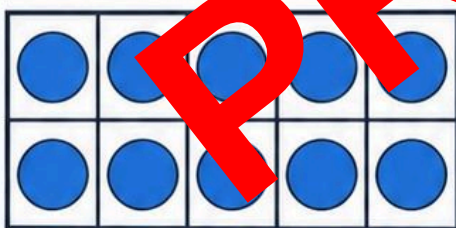
21

22

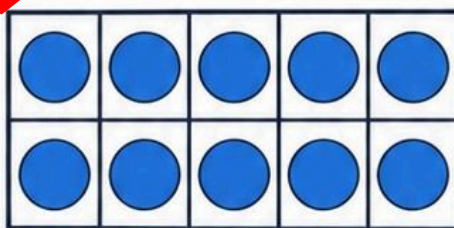
23

4 full groups of 5 and 3 singles
20, then 21, 22, 23. Total: 23

Groups of 10 (ten-frames)



10



20

Singles



21

22

23



24

25

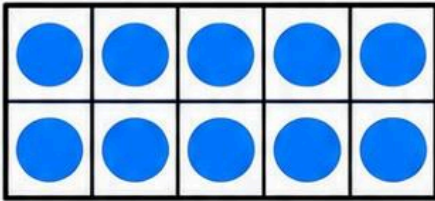
26

2 full groups of 10 and 6 singles
20, then 21, 22, 23, 24, 25, 26. Total: 26

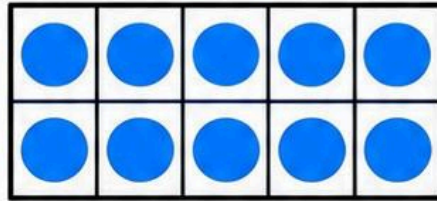
Count each full group once. Then count each single once.

Our full collection

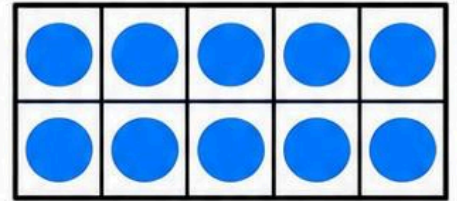
Count each full ten-frame once.



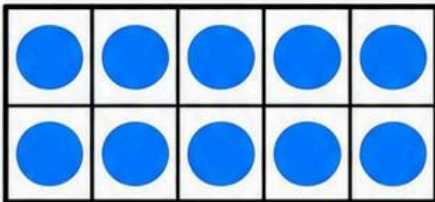
10



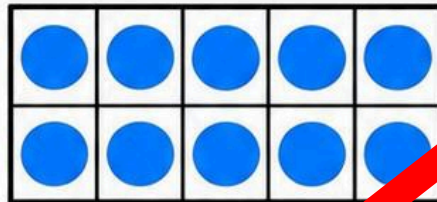
20



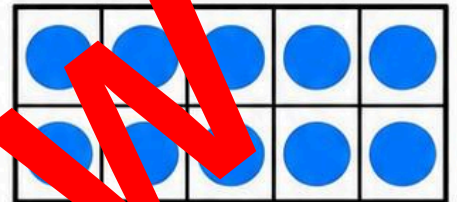
30



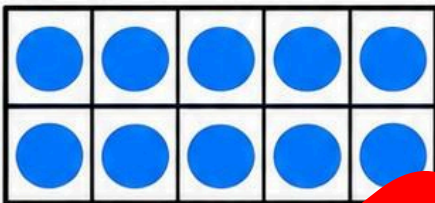
40



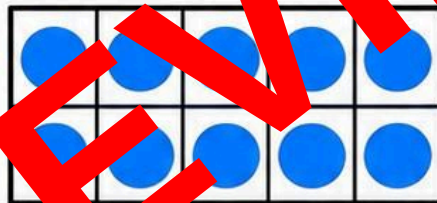
50



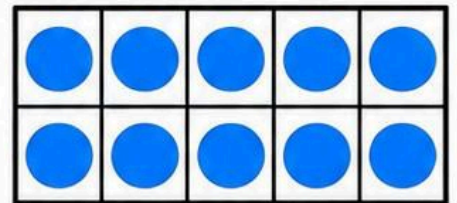
60



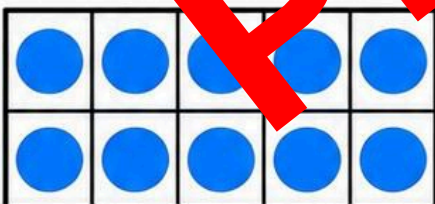
70



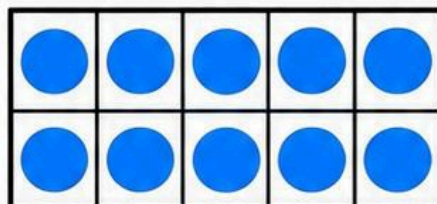
80



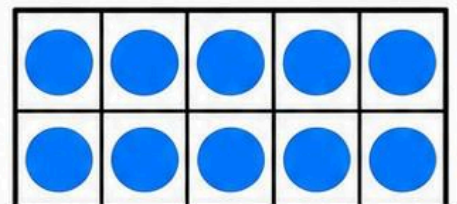
90



100



110



120

12 groups of 10. Total: 120 counters.

The same 120 counters can make 24 groups of 5 or 60 pairs.

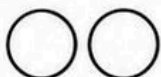
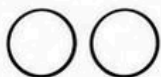
Check as you move one group at a time. Keep every counter.

Name: _____

Are the groups equal?

Count each group. Circle or point to your choice.

1.



☐ Equal

☐ Not equal

My check: _____

2.

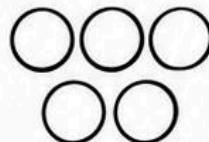
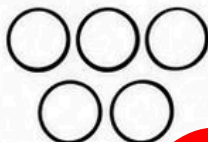


☐ Equal

☐ Not equal

My check: _____

3.

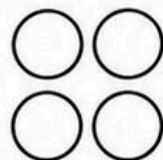
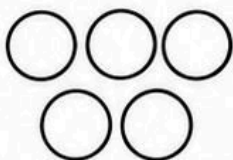
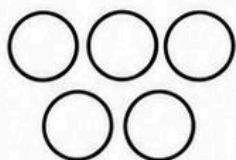


☐ Equal

☐ Not equal

My check: _____

4.



☐ Equal

☐ Not equal

My check: _____

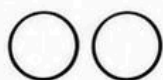
An adult can read and record. You can show your check with counters.

Name: ANSWERS

Are the groups equal?

Count each group. Circle or point to your choice.

1.



☒ Equal

☐ Not equal

My check: 2 in each group

2.

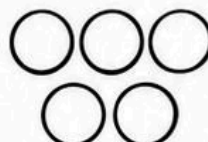
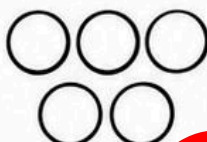


☐ Equal

☒ Not equal

My check: 2, 3, 2: the middle group is different

3.

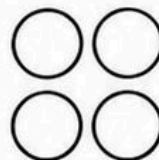
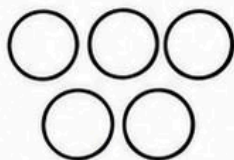
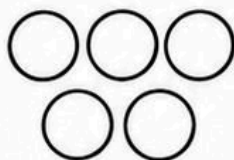


☒ Equal

☐ Not equal

My check: 5 in each group

4.



☐ Equal

☒ Not equal

My check: 5, 5, 4: the last group is different

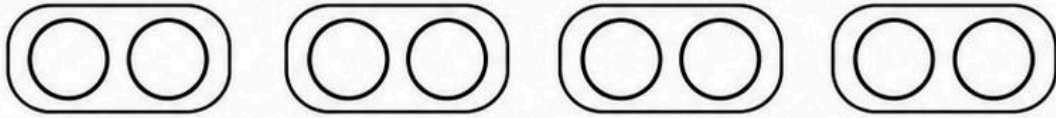
An adult can read and record. You can show your check with counters.

Name: _____

Pairs to totals

Count each pair once. How many counters altogether?

1.



Counters in each group: _____

Number of groups: _____

My count: _____

Total counters: _____

2.



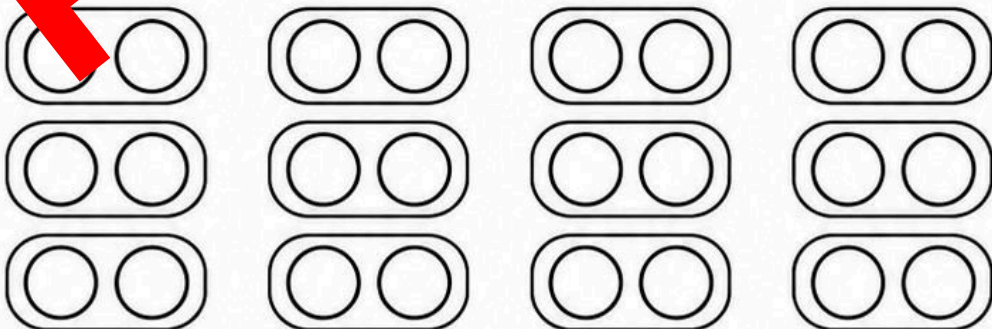
Counters in each group: _____

Number of groups: _____

My count: _____

Total counters: _____

3.



Counters in each group: _____

Number of groups: _____

My count: _____

Total counters: _____

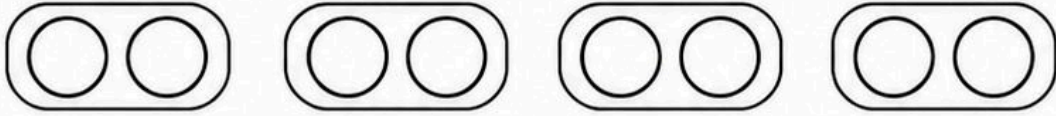
You can point, speak or move counters. An adult can record.

Name: **ANSWERS**

Pairs to totals

Count each pair once. How many counters altogether?

1.



Counters in each group: 2

Number of groups: 4

My count: 2, 4, 6, 8

Total counters: 8

2.



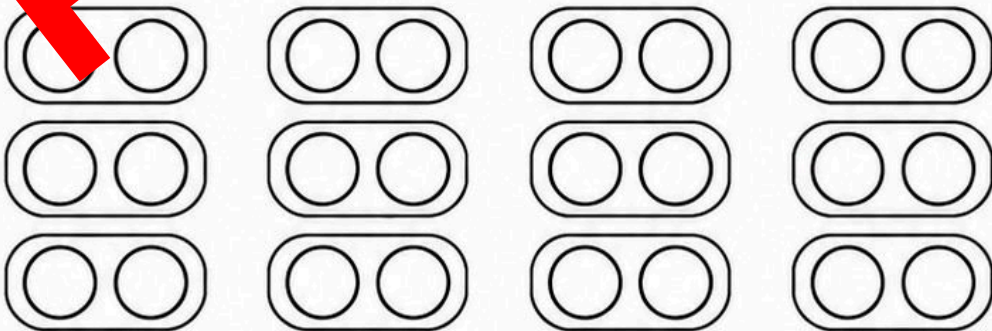
Counters in each group: 2

Number of groups: 9

My count: 2, 4, 6, 8, 10, 12, 14, 16, 18

Total counters: 18

3.



Counters in each group: 2

Number of groups: 12

My count: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

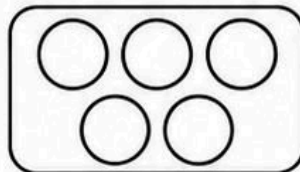
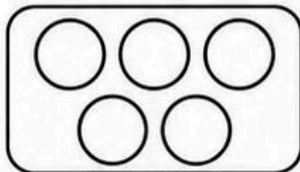
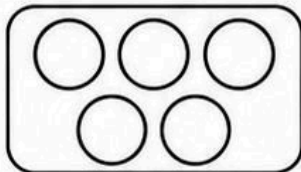
Total counters: 24

You can point, speak or move counters. An adult can record.

Name: _____

Five in every group

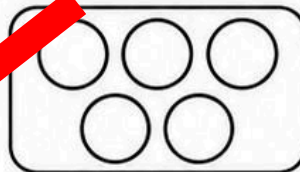
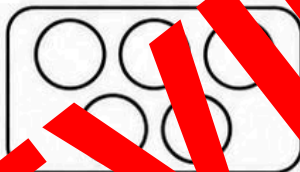
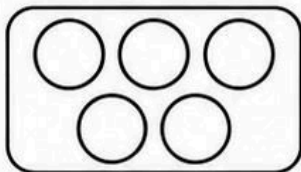
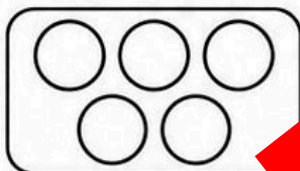
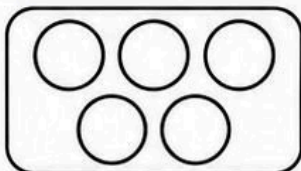
Check each group. Count by 5. Find the total.



Number of full groups: _____

My count: _____

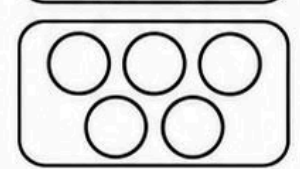
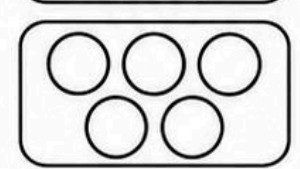
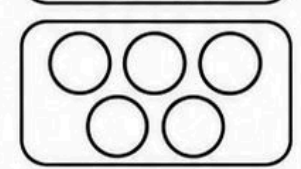
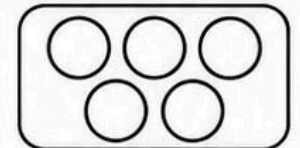
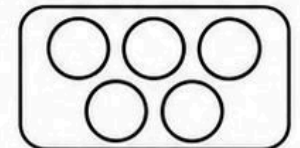
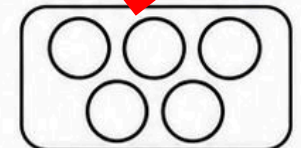
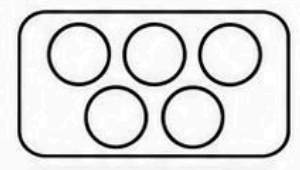
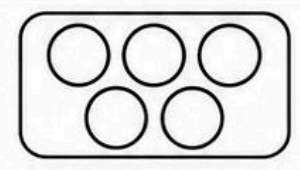
Total counters: _____



Number of full groups: _____

My count: _____

Total counter: _____



Number of full groups: _____

My count: _____

Total counters: _____

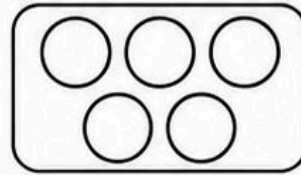
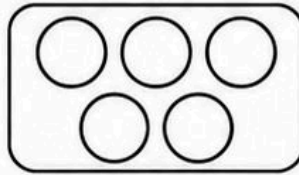
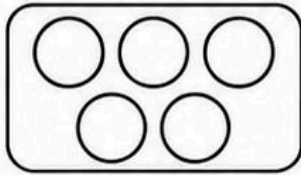
You may speak, point or show your count. An adult can record.

Name: _____

ANSWERS

Five in every group

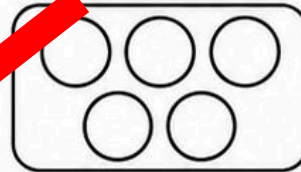
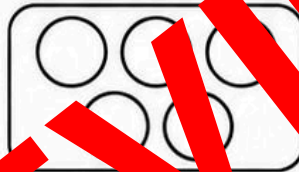
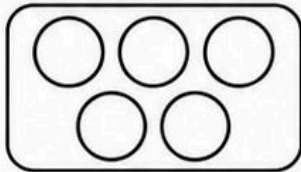
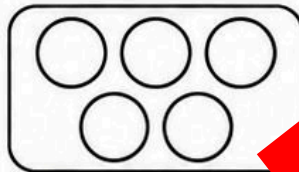
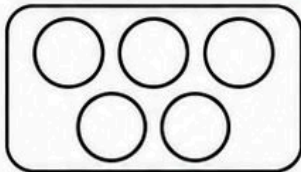
Check each group. Count by 5. Find the total.



Number of full groups: 3

My count: 5, 10, 15

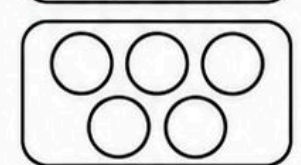
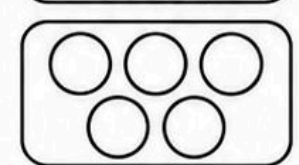
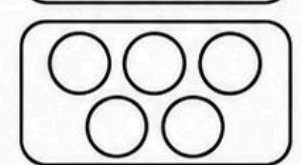
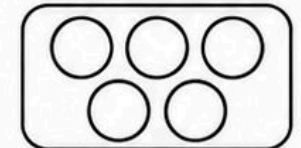
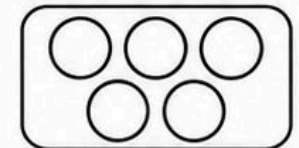
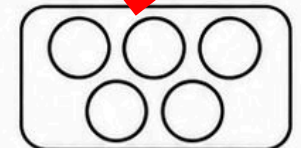
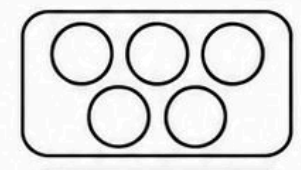
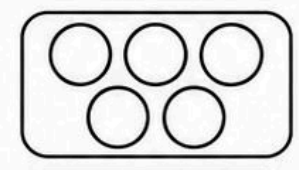
Total counters: 15



Number of full groups: 6

My count: 5, 10, 15, 20, 25, 30

Total counters: 30



Number of full groups: 9

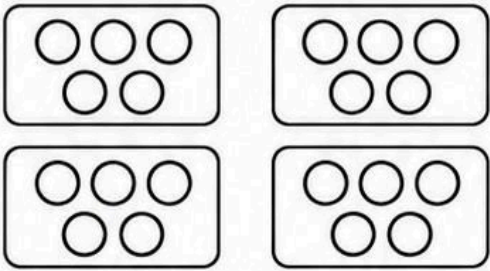
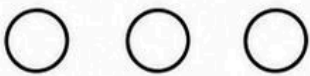
My count: 5, 10, 15, 20, 25, 30, 35, 40, 45

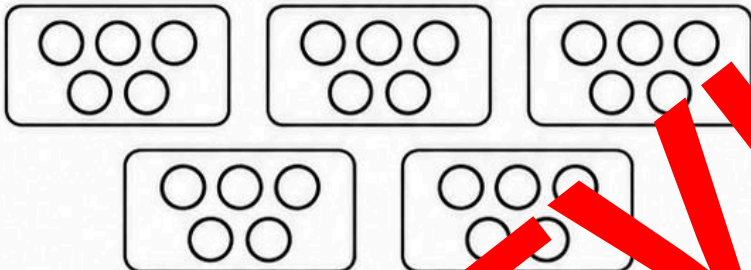
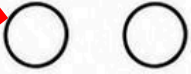
Total counters: 45

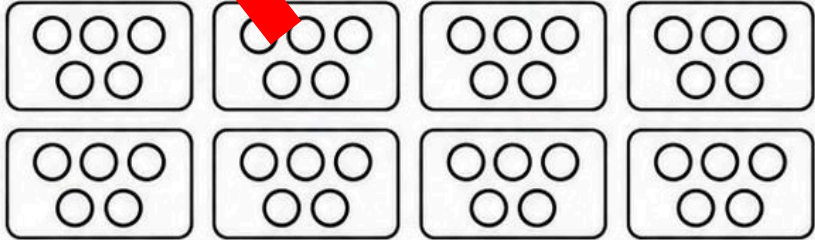
You may speak, point or show your count. An adult can record.

Five-groups and singles

Name: _____

Groups of five	Singles
	
Full groups: _____ Last full-group count: _____	
Singles: _____ Total counters: _____	
My count: _____	

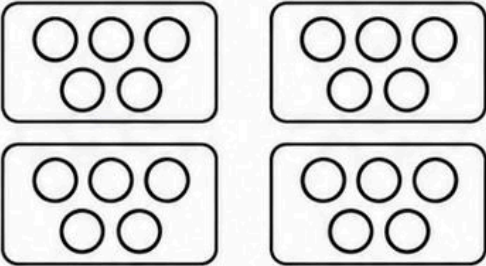
Groups of five	Singles
	
Full groups: _____ Last full-group count: _____	
Singles: _____ Total counters: _____	
My count: _____	

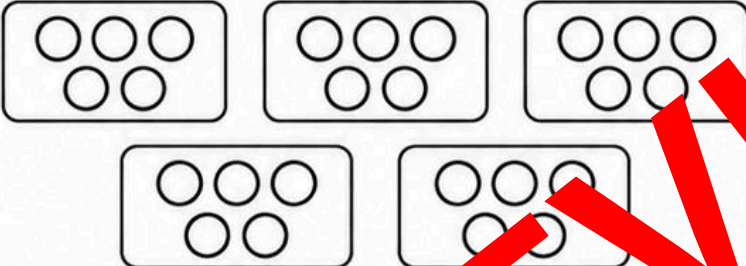
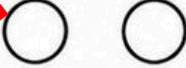
Groups of five	Singles
	
Full groups: _____ Last full-group count: _____	
Singles: _____ Total counters: _____	
My count: _____	

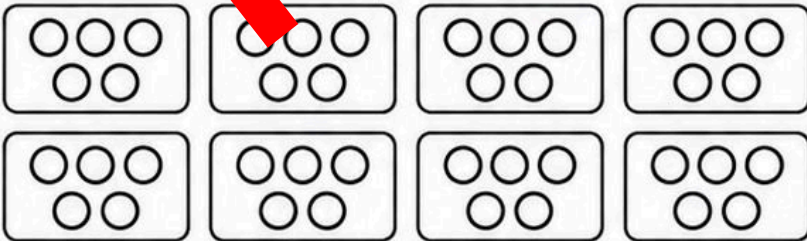
You can show or tell your count. An adult can record.

Five-groups and singles

Name: **ANSWERS**

Groups of five	Singles
	
Full groups: 4	Last full-group count: 20
Singles: 3	Total counters: 23
My count: 5, 10, 15, 20, then 21, 22, 23	

Groups of five	Singles
	
Full groups: 5	Last full-group count: 25
Singles: 2	Total counters: 27
My count: 5, 10, 15, 20, 25, then 26, 27	

Groups of five	Singles
	
Full groups: 8	Last full-group count: 40
Singles: 3	Total counters: 43
My count: 5, 10, 15, 20, 25, 30, 35, 40, then 41, 42, 43	

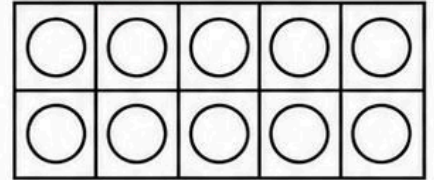
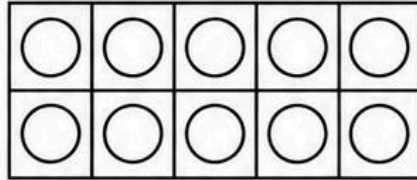
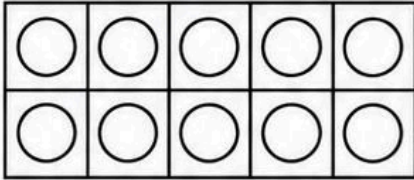
You can show or tell your count. An adult can record.

Ten-groups to a total: A

Name: _____

Check each full ten-frame. Count by 10.

1.

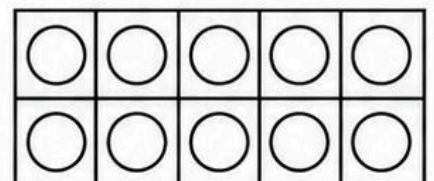
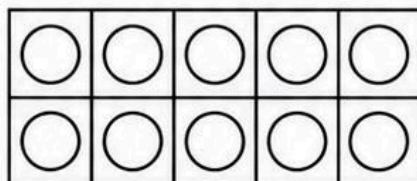
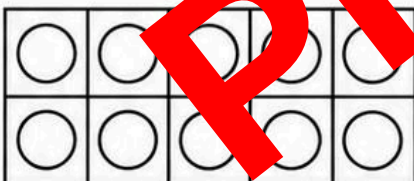
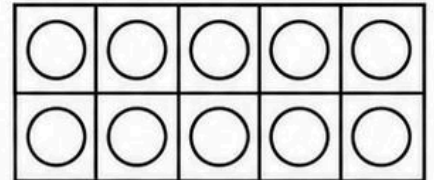
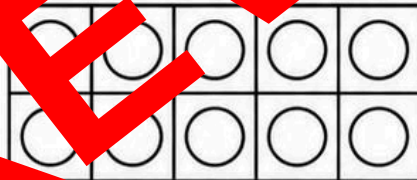
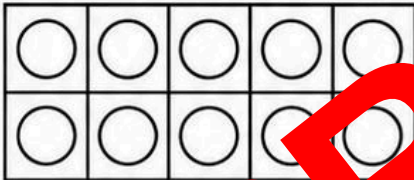


Number of full groups: _____

My count: _____

Total counters: _____

2.



Number of full groups: _____

My count: _____

Total counters: _____

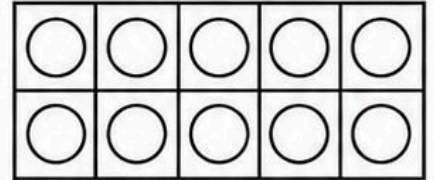
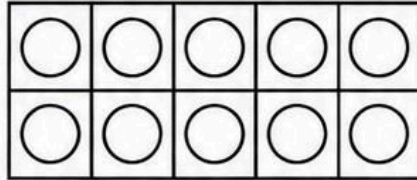
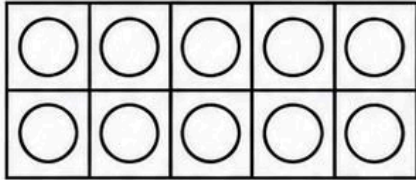
You can show or tell your count. An adult can record.

Ten-groups to a total: A

Name: **ANSWERS**

Check each full ten-frame. Count by 10.

1.

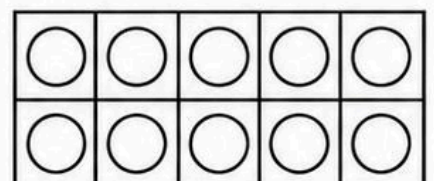
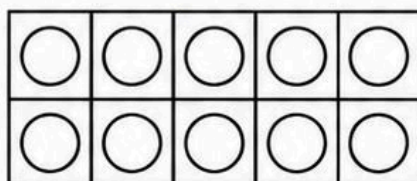
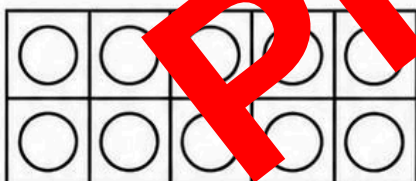
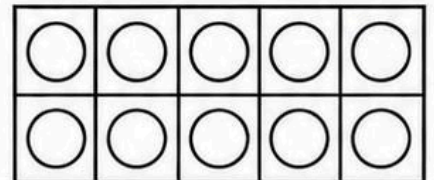
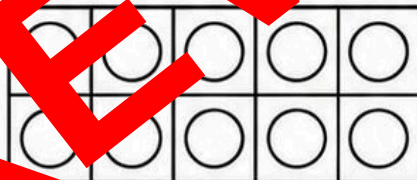
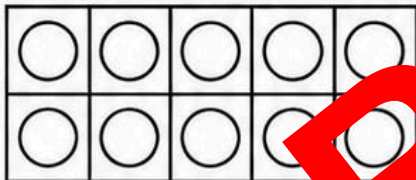


Number of full groups: **3**

My count: **10, 20, 30**

Total counters: **30**

2.



Number of full groups: **6**

My count: **10, 20, 30, 40, 50, 60**

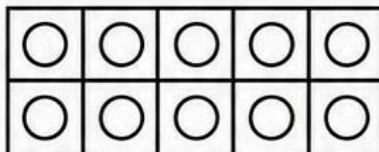
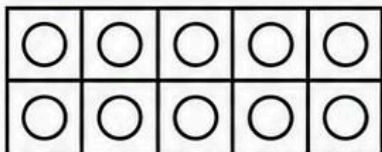
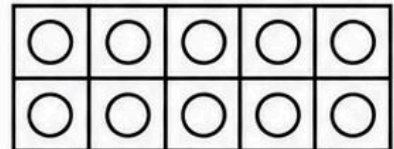
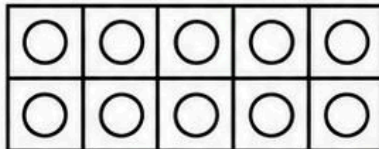
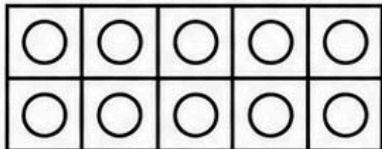
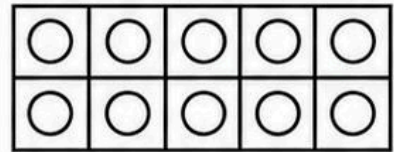
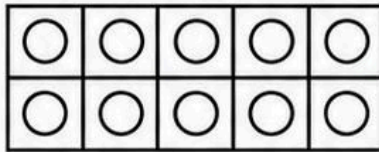
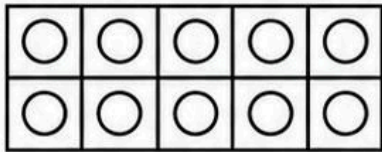
Total counters: **60**

You can show or tell your count. An adult can record.

Name: _____

Ten-groups to a total: B

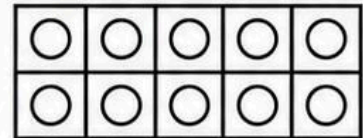
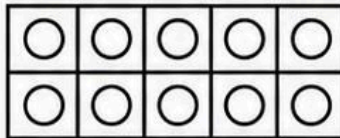
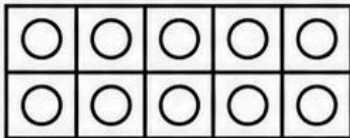
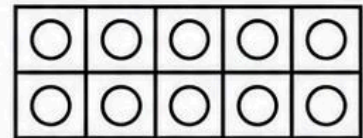
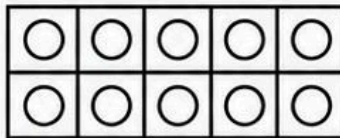
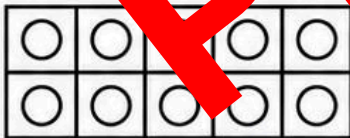
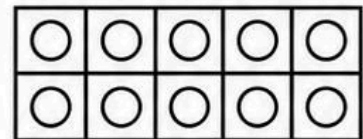
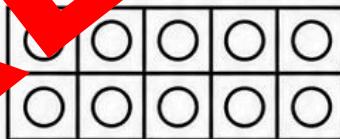
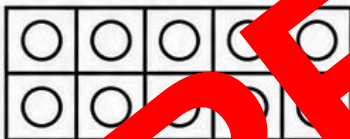
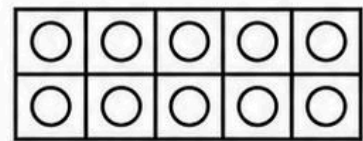
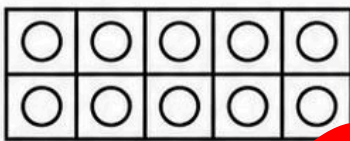
Check each full ten-frame. Count by 10.



Number of full groups: _____

My count: _____

Total counters: _____



Number of full groups: _____

My count: _____

Total counters: _____

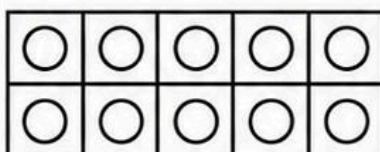
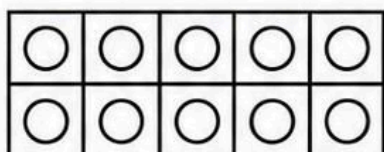
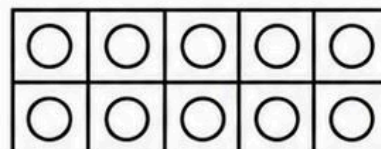
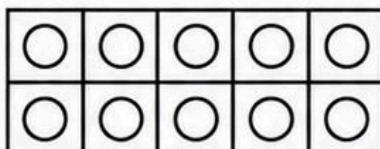
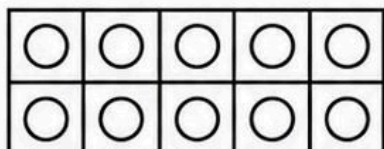
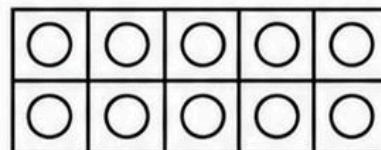
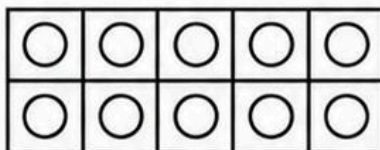
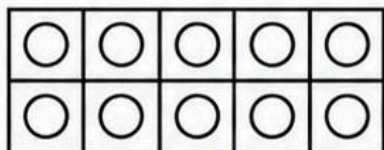
You can speak or point. An adult can record your count.

Name: _____

ANSWERS

Ten-groups to a total: B

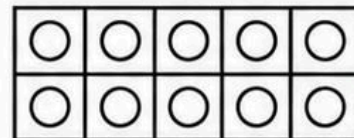
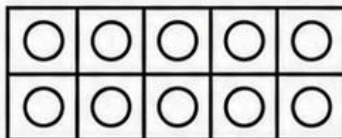
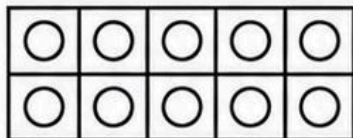
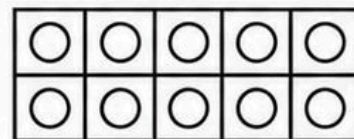
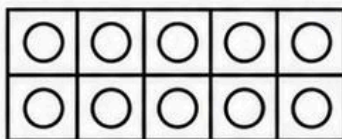
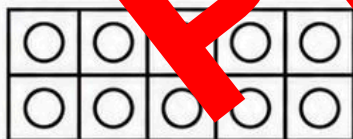
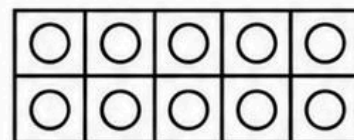
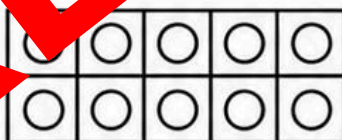
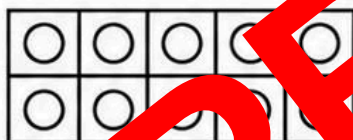
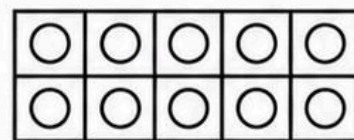
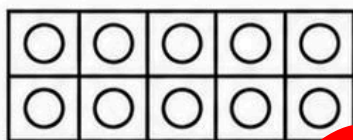
Check each full ten-frame. Count by 10.



Number of full groups: 9

My count: 10, 20, 30, 40, 50, 60, 70, 80, 90

Total counters: 90



Number of full groups: 12

My count: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120

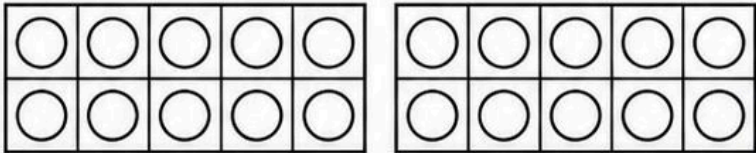
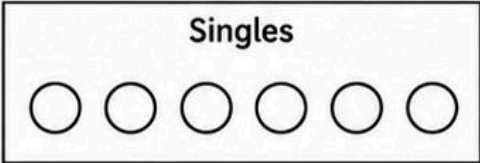
Total counters: 120

You can speak or point. An adult can record your count.

Name: _____

Tens with singles

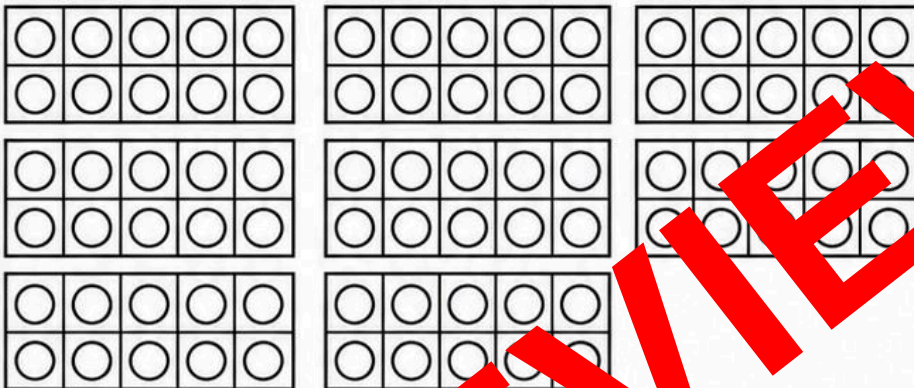
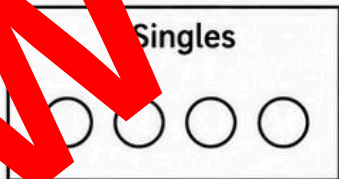
Count the full tens. Then count the singles.

1.  

Full groups: _____ Last full-group count: _____

Singles: _____ Total counters: _____

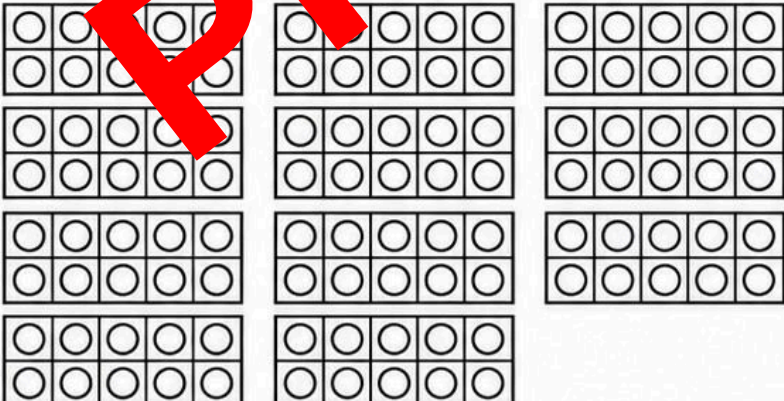
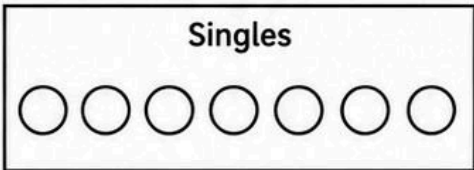
My count: _____

2.  

Full groups: _____ Last full-group count: _____

Singles: _____ Total counters: _____

My count: _____

3.  

Full groups: _____ Last full-group count: _____

Singles: _____ Total counters: _____

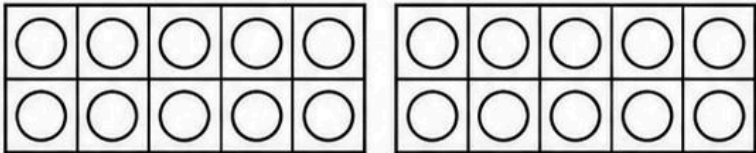
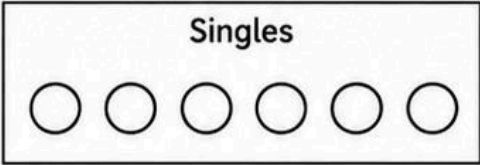
My count: _____

Show or tell your count. An adult can record.

Name: _____ **ANSWERS**

Tens with singles

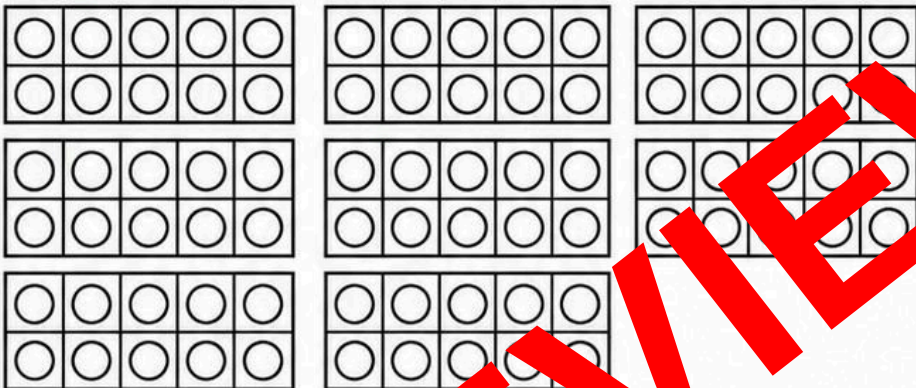
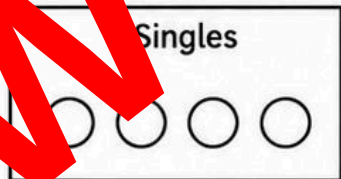
Count the full tens. Then count the singles.

1.  

Full groups: 2 Last full-group count: 20

Singles: 6 Total counters: 26

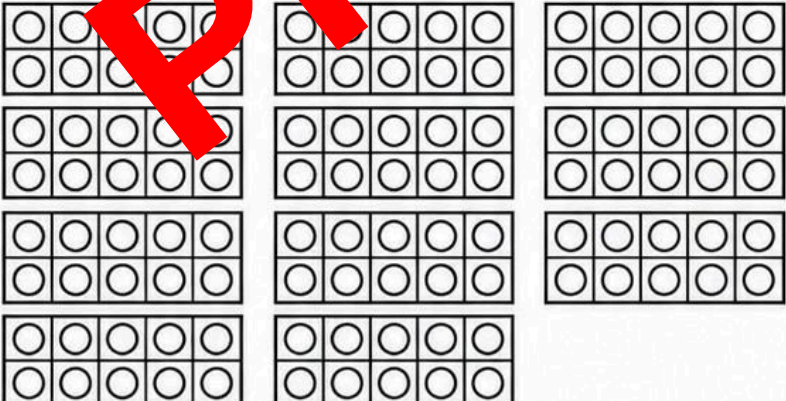
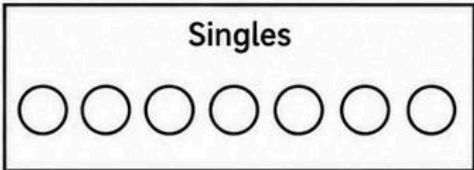
My count: 10, 20, then 21, 22, 23, 24, 25, 26

2.  

Full groups: 8 Last full-group count: 80

Singles: 4 Total counters: 84

My count: Tens to 80; then 81, 82, 83, 84

3.  

Full groups: 11 Last full-group count: 110

Singles: 7 Total counters: 117

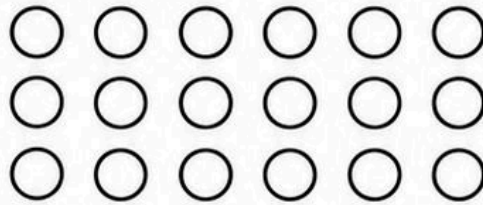
My count: Tens to 110; then 111, 112, 113, 114, 115, 116, 117

Show or tell your count. An adult can record.

Name: _____

Choose a grouping and count

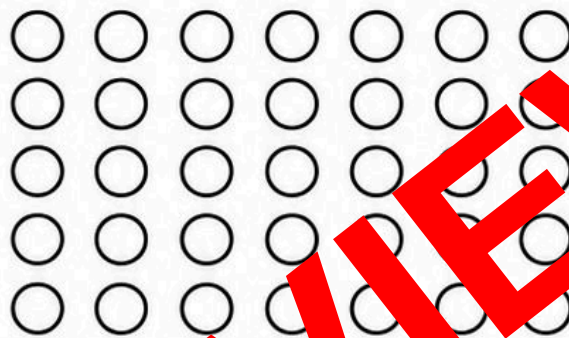
Make equal groups of 2, 5 or 10. Count all the counters.



My group size: _____ Full groups: _____ Singles: _____

My count: _____

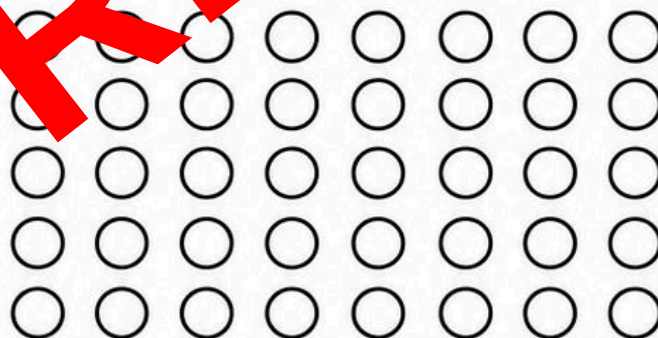
Total counters: _____



My group size: _____ Full groups: _____ Singles: _____

My count: _____

Total counters: _____



My group size: _____ Full groups: _____ Singles: _____

My count: _____

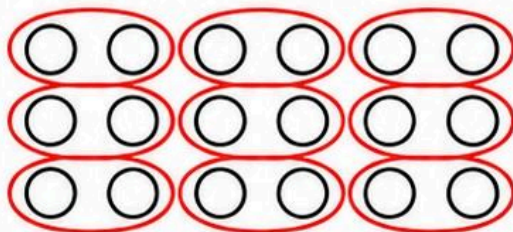
Total counters: _____

Show or tell how you checked your groups.

Name: ANSWERS Valid samples

Choose a grouping and count

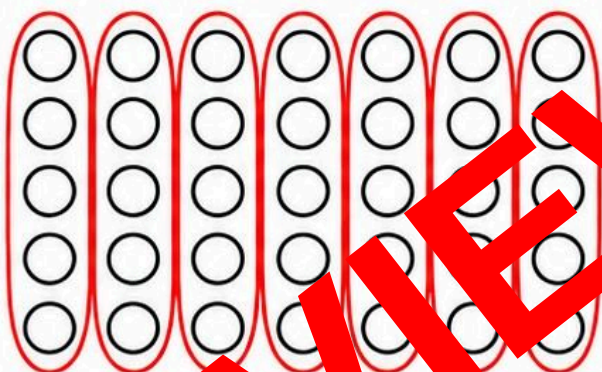
Make equal groups of 2, 5 or 10. Count all the counters.



My group size: 2 Full groups: 9 Singles: 0

My count: 2, 4, 6, 8, 10, 12, 14, 16, 18

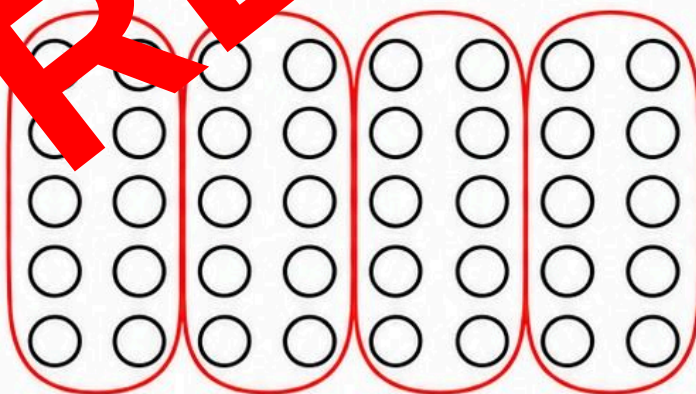
Total counters: 18



My group size: 5 Full groups: 7 Singles: 0

My count: 5, 10, 15, 20, 25, 30, 35

Total counters: 35



My group size: 10 Full groups: 4 Singles: 0

My count: 10, 20, 30, 40

Total counters: 40

Show or tell how you checked your groups.

I checked each group and counted every counter once.

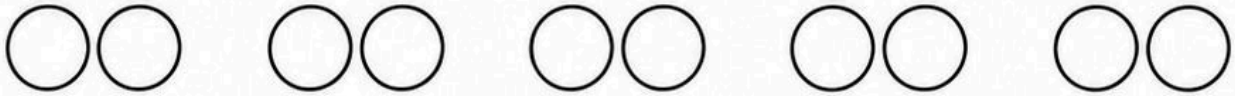
Other correct groups and leftover counts are accepted.

Name: _____

Check and recount

Check these counts. Show the correct total.

1. Sam says: 5 counters.

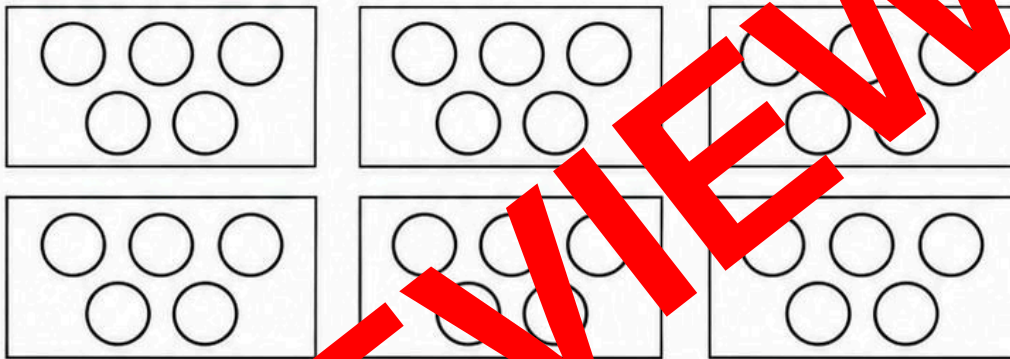


My count: _____

Correct total: _____

What went wrong? _____

2. Sam says: 25 counters.

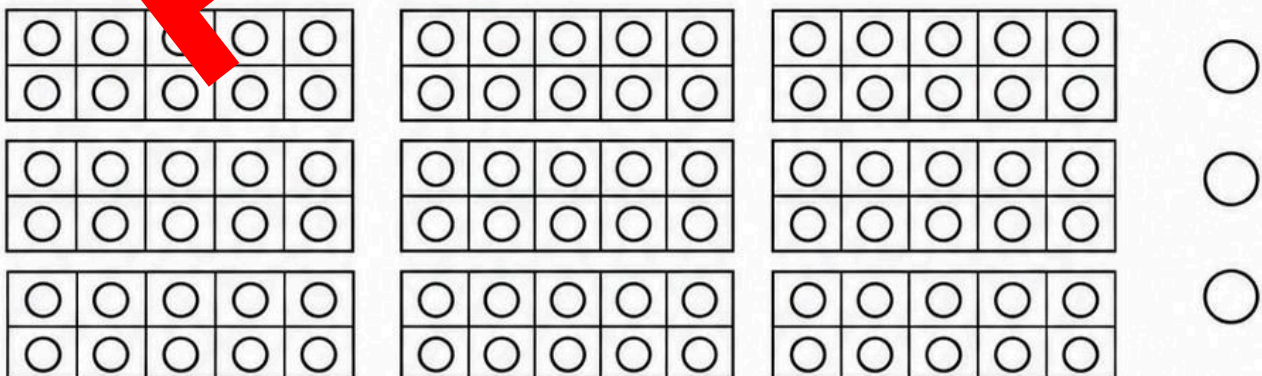


My count: _____

Correct total: _____

What went wrong? _____

3. Sam says: 90 counters.



My count: _____

Correct total: _____

What went wrong? _____

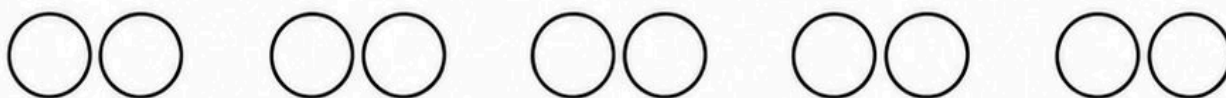
An adult can read. You can show the objects that were missed.

Name: ANSWERS

Check and recount

Check these counts. Show the correct total.

1. Sam says: 5 counters.

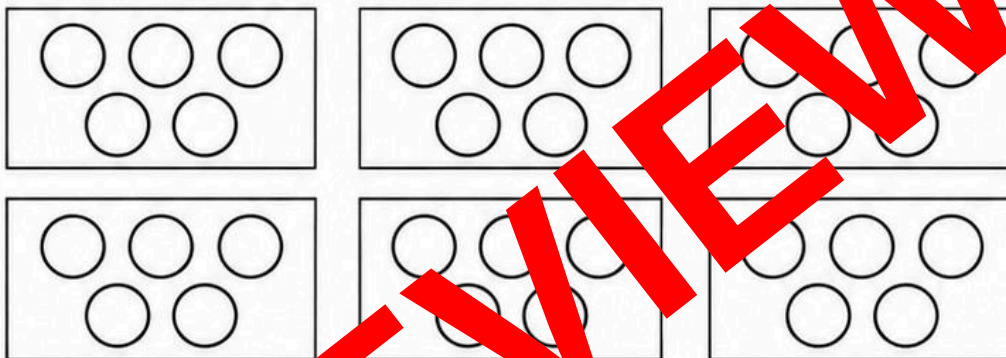


My count: 2, 4, 6, 8, 10

Correct total: 10

What went wrong? Sam counted 5 groups, not all 10 counters.

2. Sam says: 25 counters.

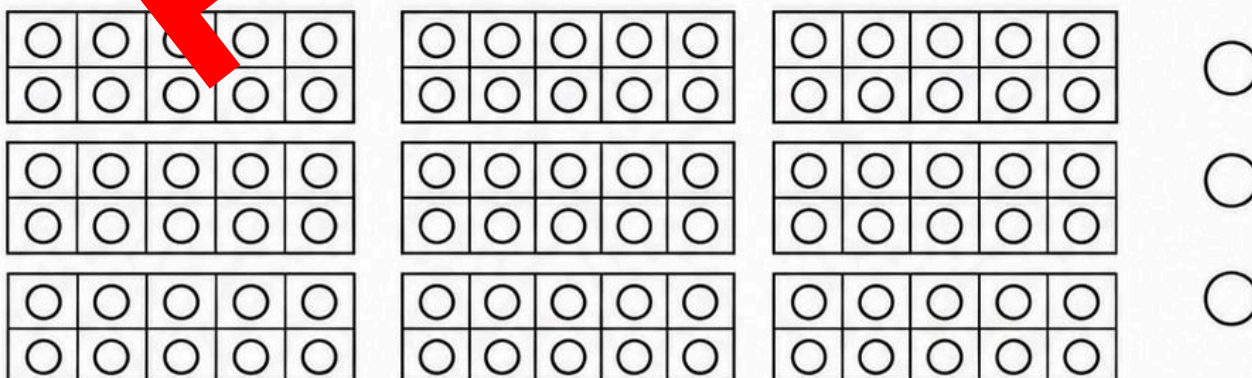


My count: 5, 10, 15, 20, 25, 30

Correct total: 30

What went wrong? One group of 5 was missed.

3. Sam says: 90 counters.



My count: Tens to 90, then 91, 92, 93

Correct total: 93

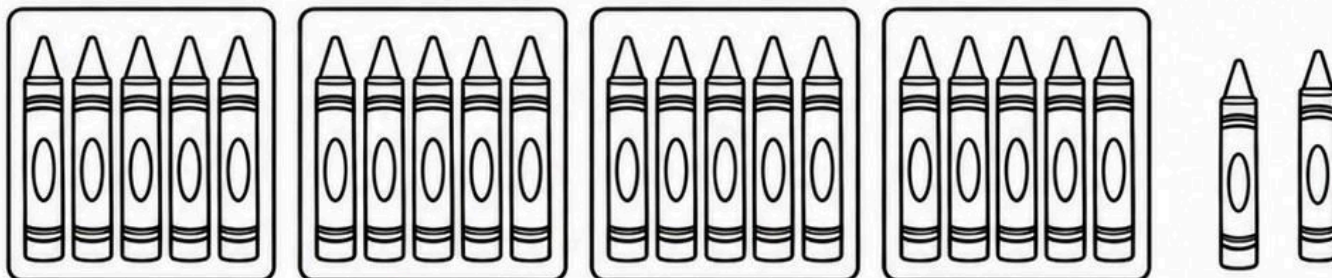
What went wrong? The 3 singles were missed.

An adult can read. You can show the objects that were missed.

Name: _____

Our classroom collection report: A

Count each collection. Show how you checked.

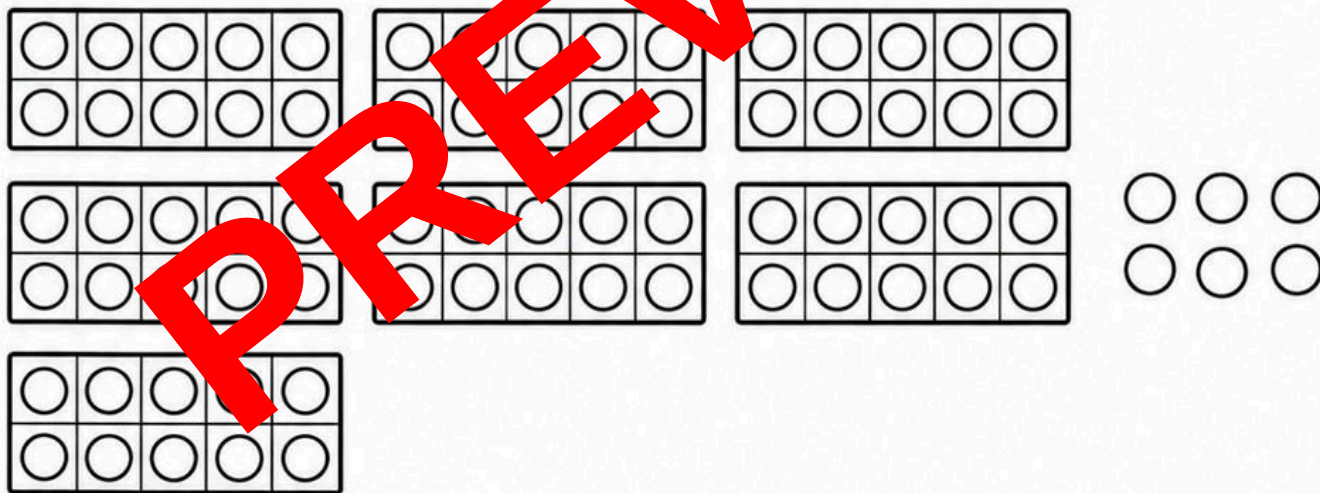


Group size: _____ Full groups: _____ Singles: _____

My count: _____

Total objects: _____

My check: _____



Group size: _____ Full groups: _____ Singles: _____

My count: _____

Total objects: _____

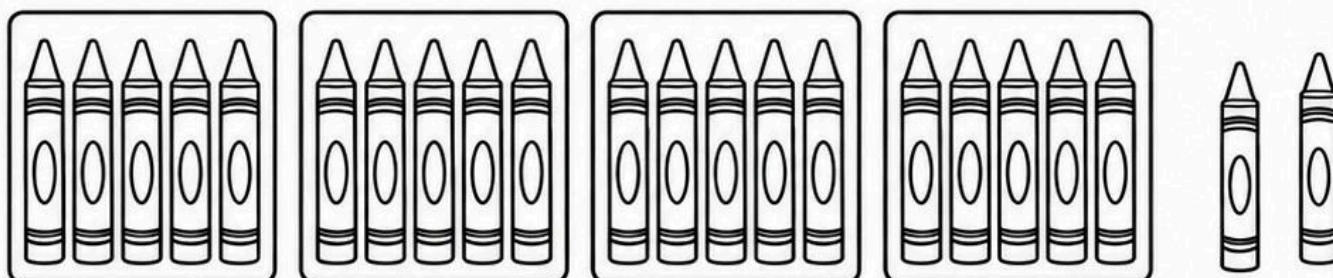
My check: _____

An adult can read and record your explanation.

Name: _____ **ANSWERS**

Our classroom collection report: A

Count each collection. Show how you checked.

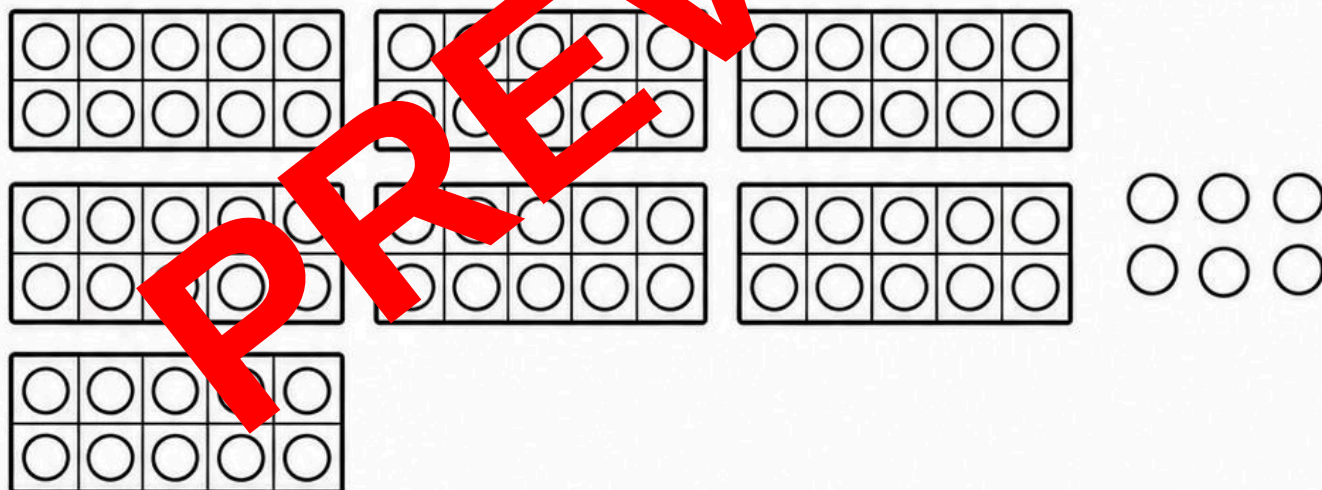


Group size: 5 Full groups: 4 Singles: 2

My count: 5, 10, 15, 20, then 21, 22

Total objects: 22

My check: I checked 5 in every pack and counted the 2 singles.



Group size: 10 Full groups: 7 Singles: 6

My count: Tens to 70, then 71, 72, 73, 74, 75, 76

Total objects: 76

My check: I checked each full frame and counted each single once.

An adult can read and record your explanation.

Name: _____

Our classroom collection report: B

Count all these full ten-frame packs. Show your check.

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

○	○	○	○	○
○	○	○	○	○

Group size: _____

Full groups: _____

Singles: _____

My count: _____

Total objects: _____

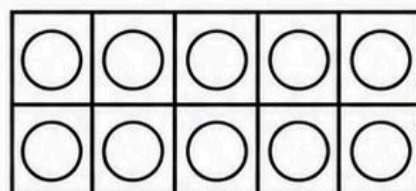
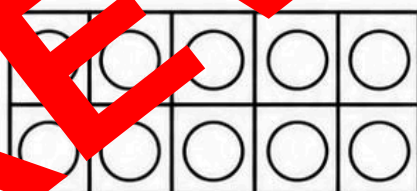
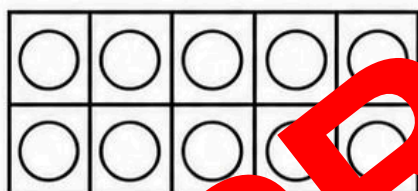
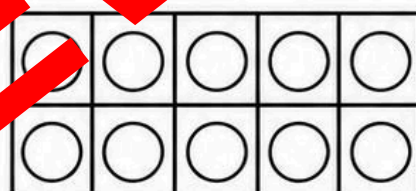
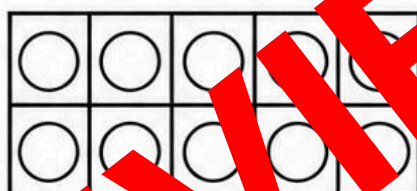
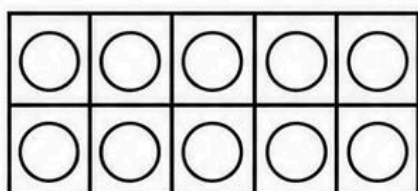
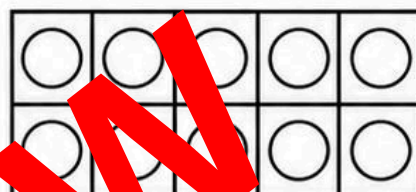
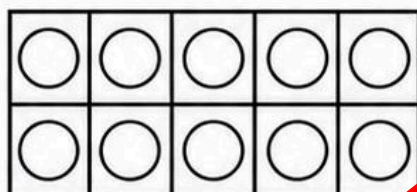
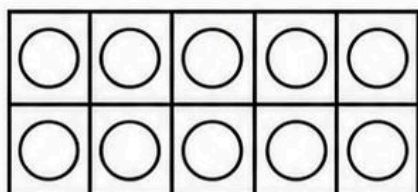
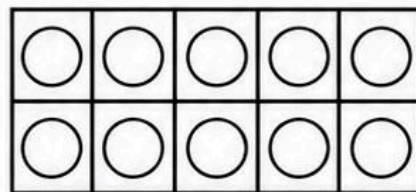
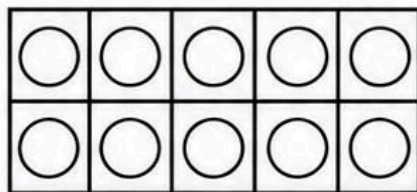
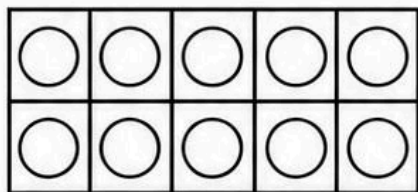
My check: _____

An adult can read and record. You can point or move counters.

Name: _____ **ANSWERS**

Our classroom collection report: B

Count all these full ten-frame packs. Show your check.



Group size: 10 Full groups: 12 Singles: 0

My count: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120

Total objects: 120

My check: I checked 10 counters in each full frame.

I counted every frame once. No counters were left over.

An adult can read and record. You can point or move counters.

Collection Builders

Build, count and check together

Prepare one shared set

- 4 empty grouping sheets
- 5 counter-bank pages: 24 pieces on each, 120 pieces altogether
- 2 task-card pages: cards C1 to C12
- 2 separate checking guides
- 1 student record and its matching sample answers
- Keep the counting reference nearby. Ordinary classroom counters may replace the paper pieces.

Play

- 1 Builder takes a task card. An adult may read it.
- 2 Check how many counters belong in one full group.
- 3 Build the collection on the empty grouping sheets. Keep singles separate.
- 4 Point to or move one full group at a time. Count each group once. Then count each single once.
- 5 Tell or record the total. Checker uses the separate guide to check the groups, count and singles.
- 6 Return all pieces, switch roles and choose a fresh card.

Use the whole set

All 120 pieces form one reusable collection. A pair shares this set and resets between tasks. Use all four grouping sheets for large collections. Keep counted groups separate from groups still to count.

Access and checking

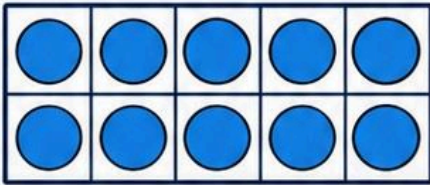
An adult can cut, read and record. Students may point, place or speak. Cutting, handwriting and speed are not the maths goal. Check equal groups and every object.

Keep guides and model answers separate from blank student mats.

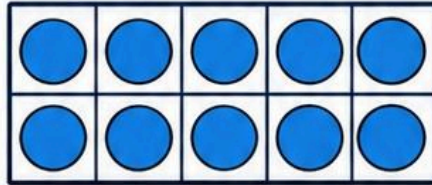
MODEL

Same counters, new groups

Count in tens



10



20



21

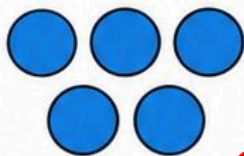
22

23

2 full tens and 3 singles

Total: 23

Regroup in fives



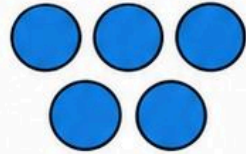
5



10



15



20



21

22

23

4 full fives and 3 singles.

Total: 23

We kept the same 23 counters. We did not add or remove any.

Check each group. Count each object once.

Return the pieces and reset before the next task.

Grouping sheet 1

Keep each counter in one cell.

Keep singles separate. A partly filled frame is not a full ten.

Grouping sheet 2

Keep each counter in one cell.

Keep singles separate. A partly filled frame is not a full ten.

Grouping sheet 3

Keep each counter in one cell.

Keep singles separate. A partly filled frame is not a full ten.

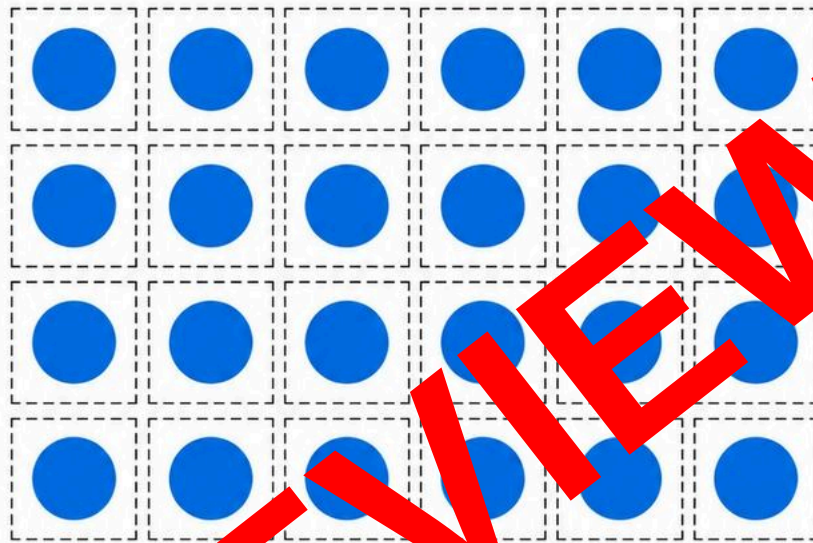
Grouping sheet 4

Keep each counter in one cell.

Keep singles separate. A partly filled frame is not a full ten.

Counter bank 1

An adult can cut the pieces on the dashed lines.



Keep bank labels off the cut pieces.

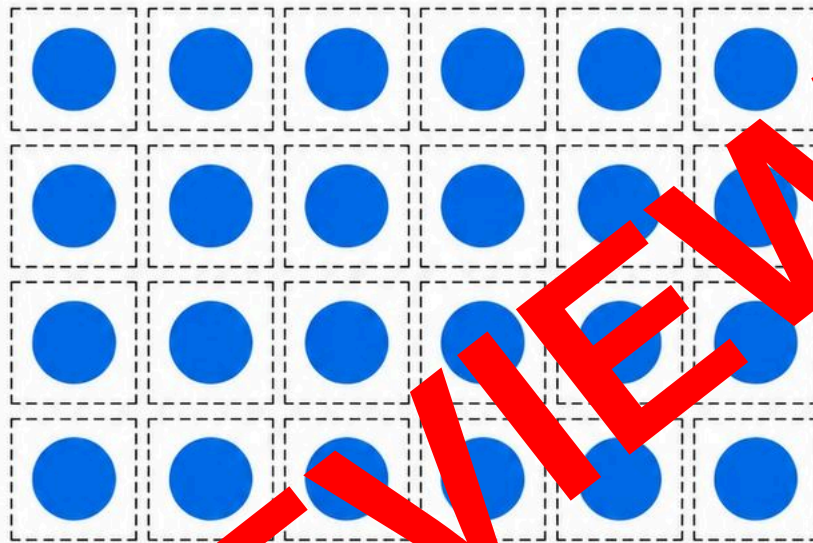
Five banks share one shared set of 120 pieces.

Prep unknown collections away from students.

PREVIEW

Counter bank 2

An adult can cut the pieces on the dashed lines.



Keep bank labels off the cut pieces.

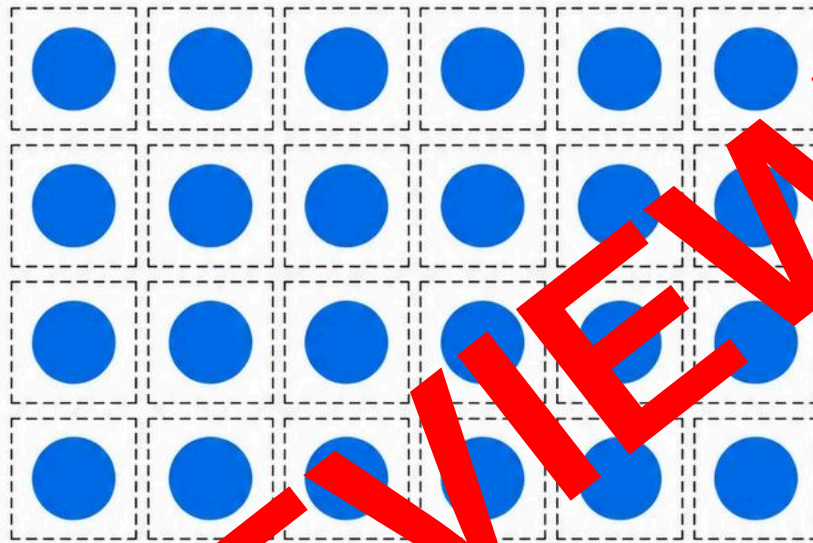
Five banks share one shared set of 120 pieces.

Prep unknown collections away from students.

PREVIEW

Counter bank 3

An adult can cut the pieces on the dashed lines.



Keep bank labels off the cut pieces.

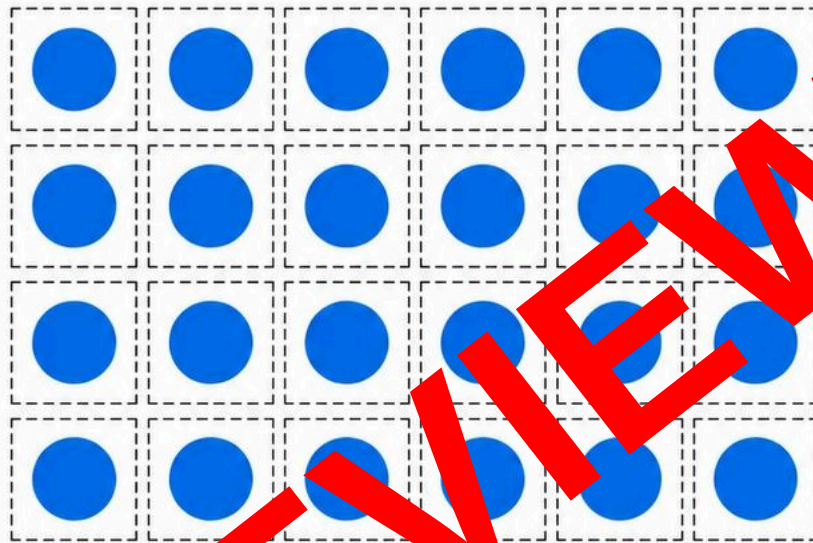
Five banks share one shared set of 120 pieces.

Prep unknown collections away from students.

PREVIEW

Counter bank 4

An adult can cut the pieces on the dashed lines.



Keep bank labels off the cut pieces.

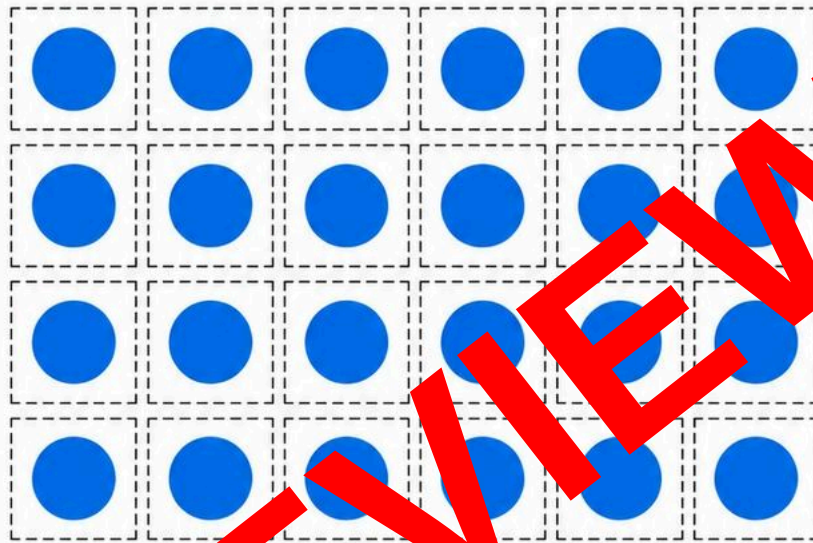
Five banks share one shared set of 120 pieces.

Prep unknown collections away from students.

PREVIEW

Counter bank 5

An adult can cut the pieces on the dashed lines.



Keep bank labels off the cut pieces.

Five banks share one shared set of 120 pieces.

Prep unknown collections away from students.

PREVIEW

Builder uses the supplied counter pieces and empty grouping sheets. An adult may read.

Collection Builders: cards 1 to 6

C1

Build 4 groups of 2.
Count all the counters.
Tell your Checker.

C2

Build 9 groups of 2.
Count all the counters.
Tell your Checker.

C3

Build 12 groups of 2.
Count all the counters.
Tell your Checker.

C4

Build 6 groups of 5.
Count all the counters.
Tell your Checker.

C5

Build 9 groups of 5.
Count all the counters.
Tell your Checker.

C6

Build 8 groups of 5
and 3 singles.
Count all the counters.
Tell your Checker.

Checker uses the separate guide. Reset and switch roles.

Collection Builders: cards 7 to 12

Use the supplied counters, all four grouping sheets and the counting reference.

C7

Build 6 groups of 10.
Count all the counters.
Tell your Checker.

C8

Build 9 groups of 10.
Count all the counters.
Tell your Checker.

C9

Build 11 groups of 10
and 7 singles.
Count all the counters.
Tell your Checker.

C10

Fill an 12 ten-frames.
Count all the counters.
Tell your Checker.

C11

Keep the full collection
from C10.
Regroup it in fives.
Count again. Did the total
stay the same?

C12

Keep the same full
collection.
Regroup it in twos.
Count one pair at a time
with an adult.
Did the total stay the same?

Checker uses the separate guide. Return the pieces and switch roles.

Collection Builders: checking guide 1

Keep this guide separate from student cards and empty mats.

C1

4 groups of 2. Singles: 0.

Count: 2, 4, 6, 8. Total: 8.

Check: 8 objects, not 4 groups.

C2

9 groups of 2. Singles: 0.

Count: 2, 4, 6, 8, 10, 12, 14, 16, 18. Total: 18.

Check: count every pair once; a missed pair changes the total.

C3

12 groups of 2. Singles: 0.

Count: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24.

Total: 24. Check: 12 is the group count, not the object total.

C4

6 groups of 5. Singles: 0.

Count: 5, 10, 15, 20, 25, 30. Total: 30.

Check: 25 miss one full group of 5.

C5

9 groups of 5. Singles: 0.

Count: 5, 10, 15, 20, 25, 30, 35, 40, 45. Total: 45.

Check: point to each group once to avoid a double count.

C6

8 groups of 5 and 3 singles.

Count: 5, 10, 15, 20, 25, 30, 35, 40, then 41, 42, 43.

Total: 43. Check: count all 3 singles after 40.

Check the actual objects and equal group size. Accept other correct strategies.

Collection Builders: checking guide 2

Keep this guide separate from student cards and empty mats.

C7	6 groups of 10. Singles: 0. Count: 10, 20, 30, 40, 50, 60. Total: 60. Check all 6 full frames once.
C8	9 groups of 10. Singles: 0. Count: 10, 20, 30, 40, 50, 60, 70, 80, 90. Total: 90. Check: 9 is the group count, not the counter total.
C9	11 groups of 10 and 7 singles. Last full-group count: 110. Then 111, 112, 113, 114, 115, 116, 117. Total: 117. Check all 7 singles after 110.
C10	12 full groups of 10. Singles: 0. Count: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120. Total: 120 (actual counter). Check every frame for 10.
C11	24 groups of 5. Singles: 0. Use the complete count-by-5 reference. Last count: 120. Total: 120. Same 120 counters; none added or removed. Count each group once.
C12	60 pairs. Singles: 0. Use the complete count-by-2 reference with adult guidance. Last count: 120. Total: 120. Same objects; count each pair once, not 60 single objects.

All counters must be present. Accept other mathematically correct strategies.

Collection Builders record

Name: _____

Choose four task cards. Show or tell your count.

Task: _____ Group size: _____

Full groups: _____ Singles: _____

My count or picture: _____

Total: _____

My check: _____

Task: _____ Group size: _____

Full groups: _____ Singles: _____

My count or picture: _____

Total: _____

My check: _____

Task: _____ Group size: _____

Full groups: _____ Singles: _____

My count or picture: _____

Total: _____

My check: _____

Task: _____ Group size: _____

Full groups: _____ Singles: _____

My count or picture: _____

Total: _____

My check: _____

You can use counters, point or speak. An adult can record.

Collection Builders record

Name: **ANSWERS** Valid samples only

Choose four task cards. Show or tell your count.

Task: **C1** Group size: **2**

Full groups: **4** Singles: **0**

My count or picture: **2, 4, 6, 8**

Total: **8**

My check: **Each pair has 2. I counted each pair once.**

Task: **C6** Group size: **3**

Full groups: **8** Singles: **3**

My count or picture: **Fives to 40, then 41, 42, 43**

Total: **43**

My check: **All 3 singles were counted after 40.**

Task: **C9** Group size: **10**

Full groups: **11** Singles: **7**

My count or picture: **Tens to 110, then 111, 112, 113, 114, 115, 116, 117**

Total: **117**

My check: **I checked all 11 full frames and 7 singles.**

Task: **C10** Group size: **10**

Full groups: **12** Singles: **0**

My count or picture: **10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120**

Total: **120**

My check: **Each full frame has 10. Every frame was counted once.**

You can use counters, point or speak. An adult can record.

Classroom supply counts

Prepare one shared set

- 2 story-card pages: S1 to S12
- Choose my grouping mat
- Count once workflow mat
- Student record and matching sample answers
- Supply checking guide
- From Collection Builders in this unit: all 5 counter banks (120 pieces), all 4 empty grouping sheets and the counting reference.

No other resource is needed. A pair shares this set.
Ordinary counters may replace the paper pieces.

Play

- 1 An adult reads a story card. Builder finds the number of packs and objects in each pack.
- 2 Use counters to stand for the classroom objects. Check the full-group size and build the collection on the grouping sheets.
- 3 Use the choice mat to decide or check a group size. Keep leftover singles separate.
- 4 Move or point to one group at a time. Use the workflow mat to track counted and uncounted groups. Count each full group once, then every single.
- 5 Teacher record the total number of objects. Checker uses the separate guide to reset, return the pieces and switch roles.

Use the mats correctly

The two story mats manage choices and counting. They do not hold the full large collection. Use all four grouping sheets to keep the whole collection visible.

Access

An adult can cut, read and record. Students may point, place or speak. Judge the mathematical count, not speed or handwriting.

Keep checking guides separate from student cards and empty mats.

Use counters to stand for the objects. An adult may read.

S1

There are 4 pencil pots.
Each pot has 2 pencils.
How many pencils
altogether?

S2

There are 7 pairs of socks.
Each pair has 2 socks.
How many socks
altogether?

S3

There are 5 craft trays.
Each tray has 5 buttons.
How many buttons
altogether?

S4

There are 6 crayon packs.
Each pack has 5 crayons.
There are 2 loose crayons too.
How many crayons
altogether?

S5

There are 4 counter packs.
Each pack has 10 counters.
How many counters
altogether?

S6

There are 8 counter packs.
Each pack has 10 counters.
There are 4 loose counters too.
How many counters
altogether?

Build, count, tell your total, then check and reset.

Supply stories: cards 7 to 12

Use counters to stand for the objects. An adult may read.

S7

There are 9 craft trays.
Each tray has 5 items.
How many items altogether?

S8

There are 11 counter packs.
Each pack has 10 counters.
There are 7 singles too.
How many counters altogether?

S9

There are 12 full ten-frame
packs.
Each pack has 10 counters.
How many counters altogether?

S10

There are 10 full ten-frame
packs.
Each pack has 10 counters.
There are 6 singles too.
How many counters altogether?

S11

There are 8 pairs of counters.
Each pair has 2 counters.
There is 1 single too.
How many counters altogether?

S12

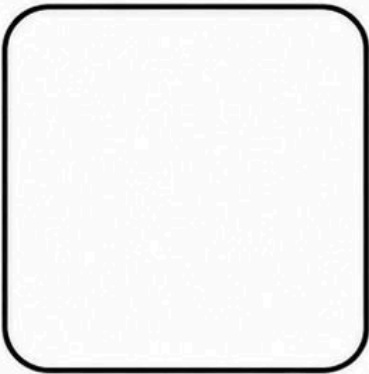
There are 19 craft trays.
Each tray has 5 items.
How many items altogether?

Build the collection on the four grouping sheets. Check and reset.

Choose my grouping

Try a few counters. Which group size will you use?

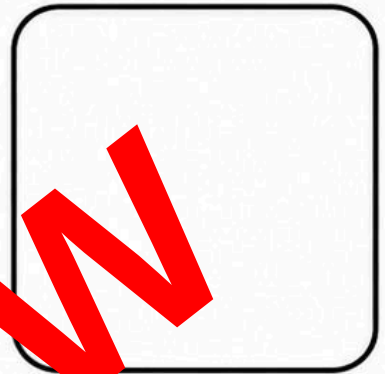
Groups of 2



Groups of 5



Groups of 10



Leftover singles

PREVIEW

Build the full collection on the four grouping sheets. This mat is for choosing and checking.

Share the counter set. An adult may read.

Count each group **once**

Move or point to one group. Count it once.

Not yet counted

Checking one group

Counted

Keep the full collection on the four grouping sheets.
Mark each group as counted. Check that none were missed or counted twice.

Name: _____

Supply count record

Story card: _____

Group size: _____

Full groups: _____

Singles: _____

My count or picture:

Total: _____

My check:

Story card: _____

Group size: _____

Full groups: _____

Singles: _____

My count or picture:

Total: _____

My check:

Story card: _____

Group size: _____

Full groups: _____

Singles: _____

My count or picture:

Total: _____

My check:

Story card: _____

Group size: _____

Full groups: _____

Singles: _____

My count or picture:

Total: _____

My check:

Tell, point, show or record your count. An adult may write.

Name: ANSWERS — valid samples

Supply count record

Story card: S1

Group size: 2

Full groups: 4

Singles: 0

My count or picture:

2, 4, 6, 8

Total: 8

My check:

I counted each pair once.

Story card: S4

Group size: 5

Full groups: 6

Singles: 2

My count or picture:

5, 10, 15, 20, 25, 30;
then 31, 32

Total: 32

My check:

I included both singles.

Story card: S8

Group size: 10

Full groups: 11

Singles: 7

My count or picture:

10, 20, 30, 40, 50, 60, 70, 80,
90, 100, 110; then 111, 112,
113, 114, 115, 116, 117

Total: 117

My check:

I counted all 11 tens and 7 singles.

Story card: S9

Group size: 10

Full groups: 12

Singles: 0

My count or picture:

10, 20, 30, 40, 50, 60, 70, 80,
90, 100, 110, 120

Total: 120

My check:

I counted every full ten-frame once.

Tell, point, show or record your count. An adult may write.

Supply stories: checking guide

Card	Full groups	Count and singles	Total
S1	4 groups of 2	2, 4, 6, 8; no singles	8
S2	7 groups of 2	End at 14; no singles	14
S3	5 groups of 5	End at 25; no singles	25
S4	6 groups of 5	End at 30; then 31, 32	32
S5	4 groups of 10	10, 20, 30, 40; no singles	40
S6	8 groups of 10	End at 80; then 81, 82, 83, 84	84
S7	9 groups of 5	End at 45; no singles	45
S8	11 groups of 10	End at 110; then 111, 112, 113, 114, 115, 116, 117	117
S9	12 groups of 10	End at 120; no singles	120
S10	10 groups of 10	End at 100; then 101, 102, 103, 104, 105, 106	106
S11	8 groups of 2	End at 16; then 17	17
S12	19 groups of 5	End at 95; no singles	95

Use the full count-by-2, 5 and 10 reference for the regular sequence.
Count every group once, then every single once.

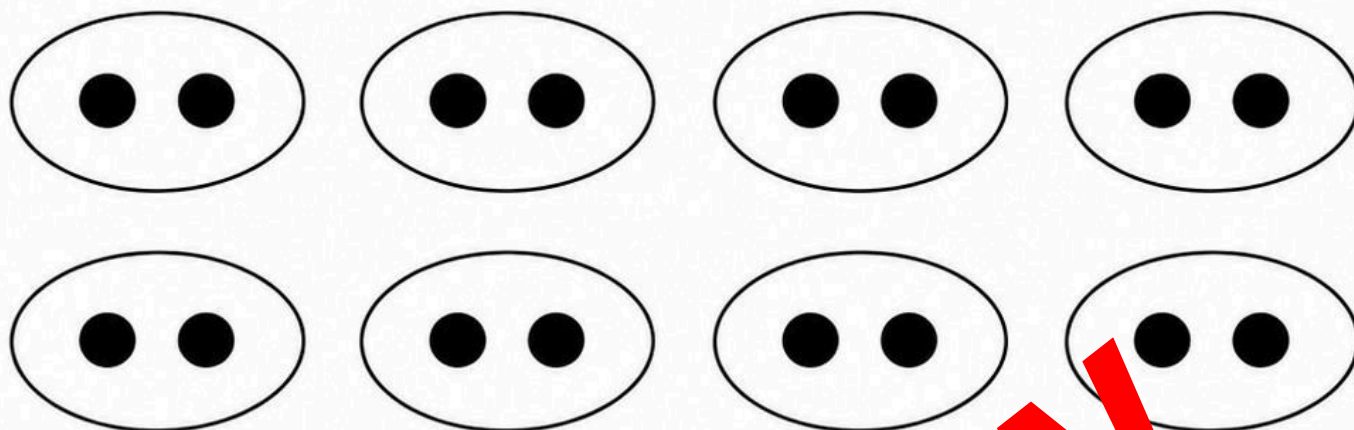
Check common errors

- Count objects, not just packs or groups.
- Include singles.
- Recount if a group was skipped or counted twice.
- Keep this guide separate from unsolved cards and mats.

Independent group count 1

Name: _____

Count each collection. Tell, point, show or record.

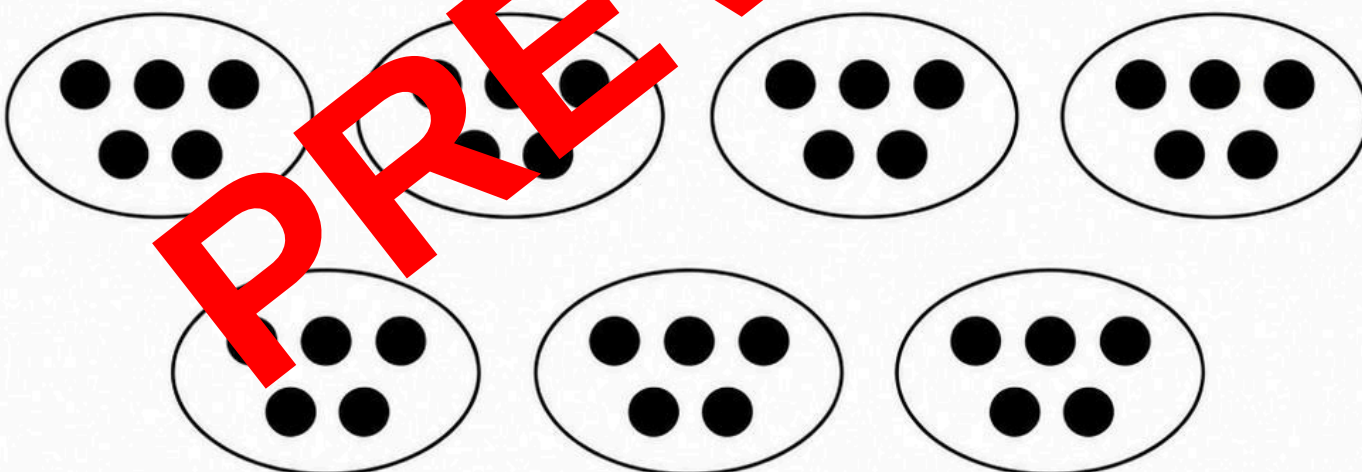


Group size: ____

Full groups: ____

My count: ____

Total: ____



Group size: ____

Full groups: ____

My count: ____

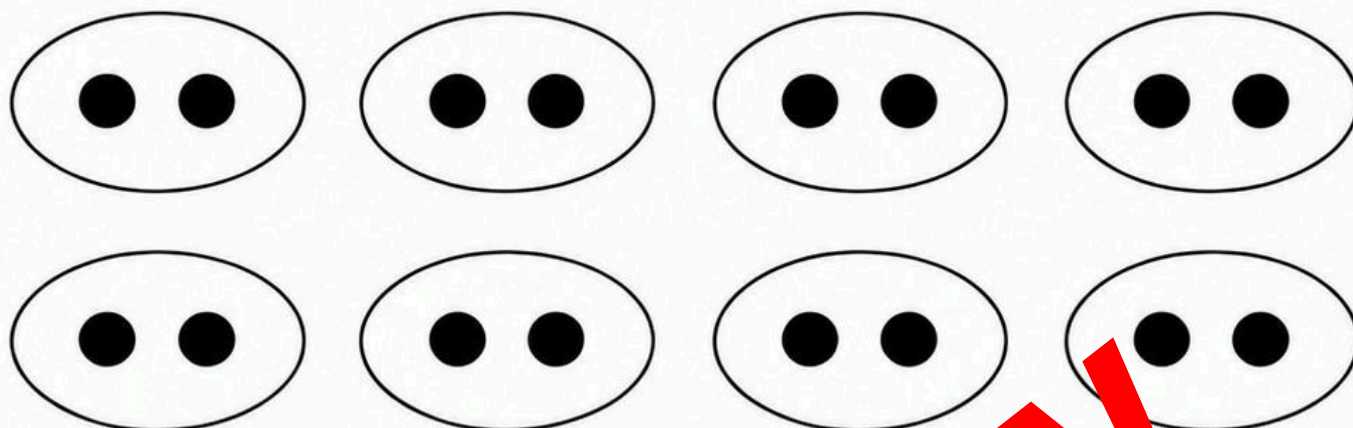
Total: ____

An adult may read and write your response.

Independent group count 1

Name: ANSWERS

Count each collection. Tell, point, show or record.

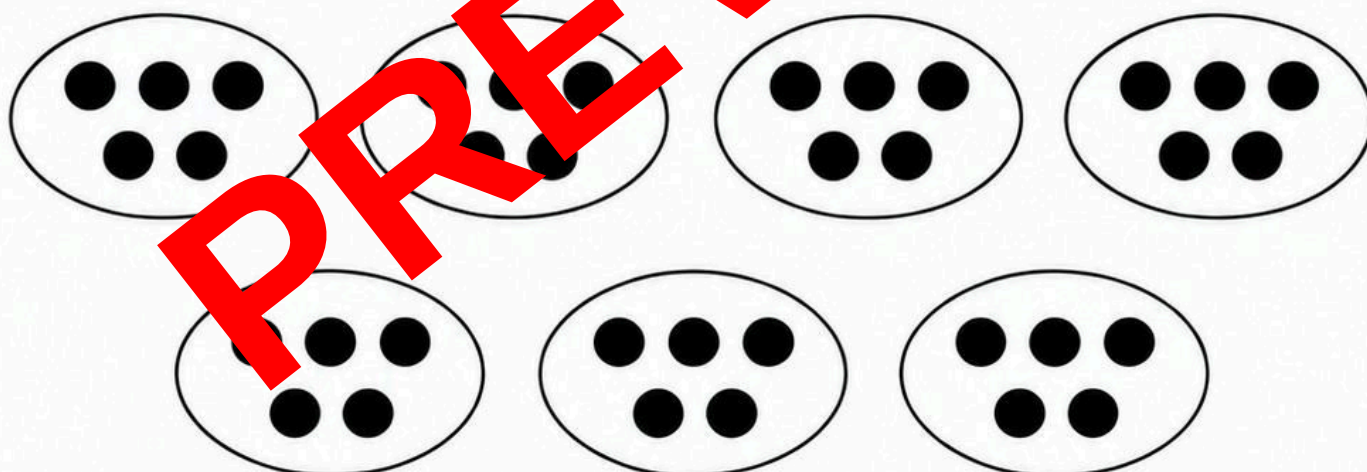


Group size: 2

Full groups: 8

My count:
2, 4, 6, 8, 10, 12,
14, 16

Total: 16



Group size: 5

Full groups: 7

My count:
5, 10, 15, 20, 25,
30, 35

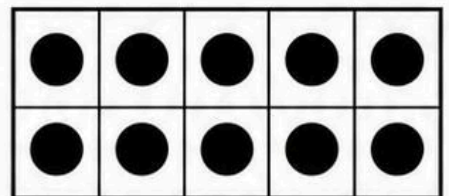
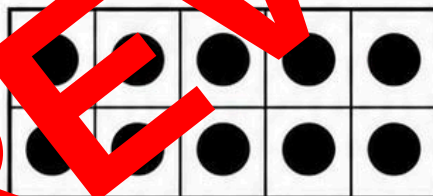
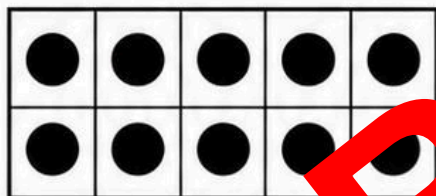
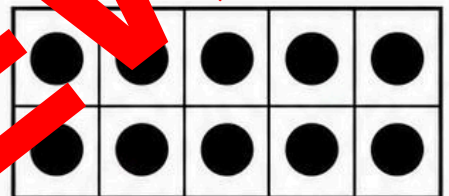
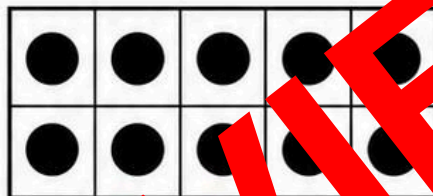
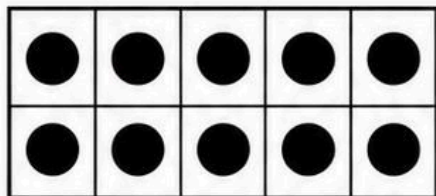
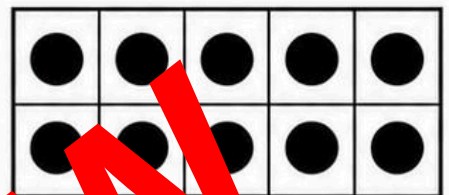
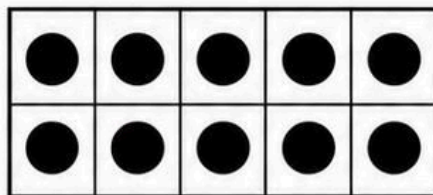
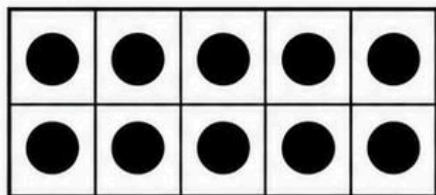
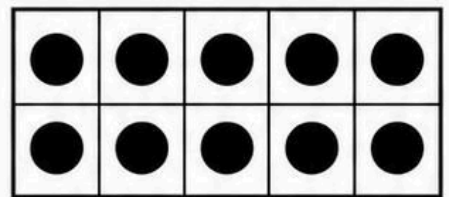
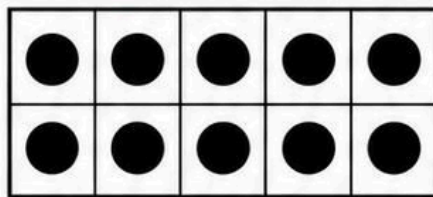
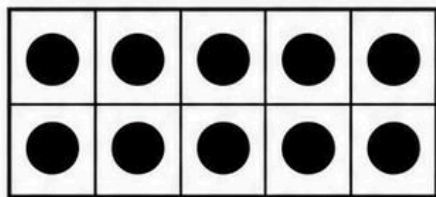
Total: 35

An adult may read and write your response.

Independent group count 2: A

Name: _____

Count each full group once. Find the total.



Group size: _____ Full groups: _____ Singles: _____

My count:

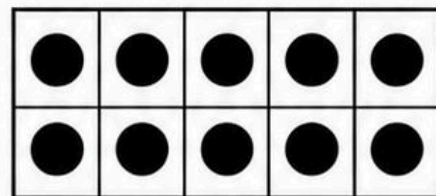
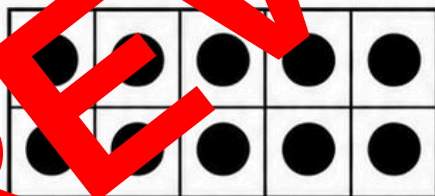
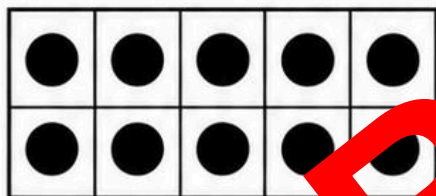
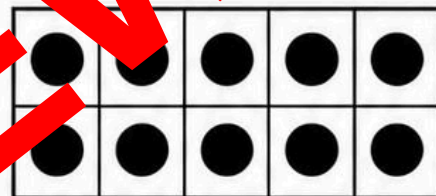
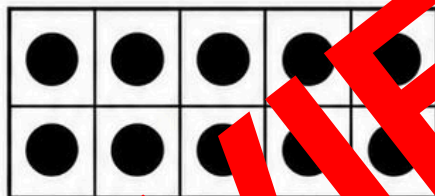
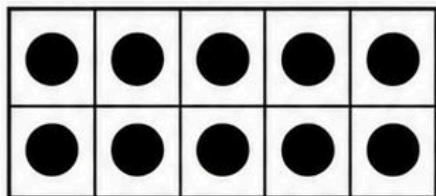
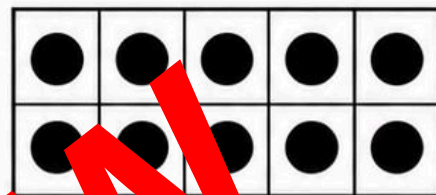
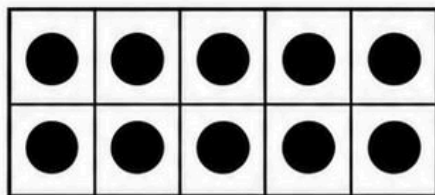
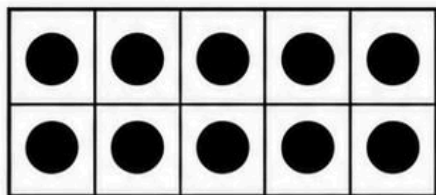
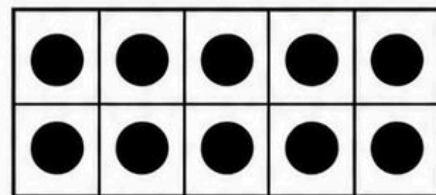
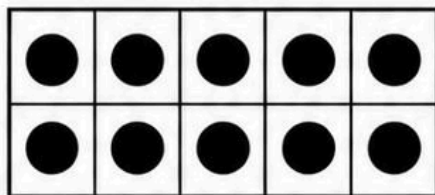
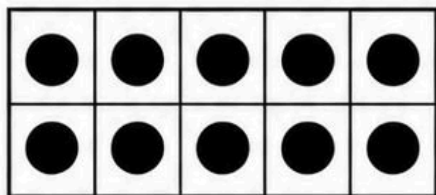
Total: _____

Tell, point, show or record. An adult may read and write.

Independent group count 2: A

Name: **ANSWERS**

Count each full group once. Find the total.



Group size: **10**

Full groups: **12**

Singles: **0**

My count:

10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120

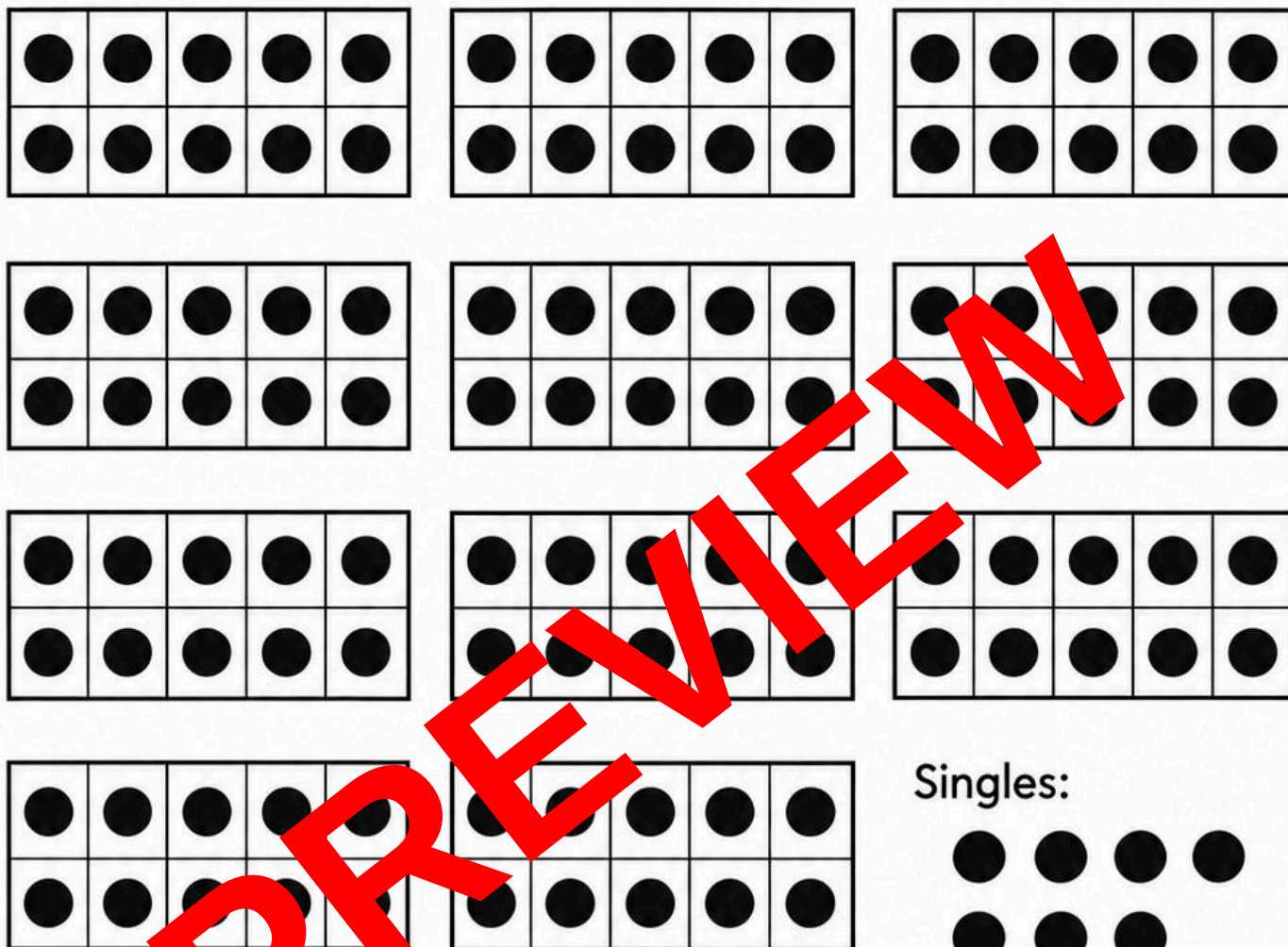
Total: **120**

Tell, point, show or record. An adult may read and write.

Name: _____

Independent group count 2: B

Count the full groups. Then count the singles.



Group size: _____

Full groups: _____

Singles: _____

My count:

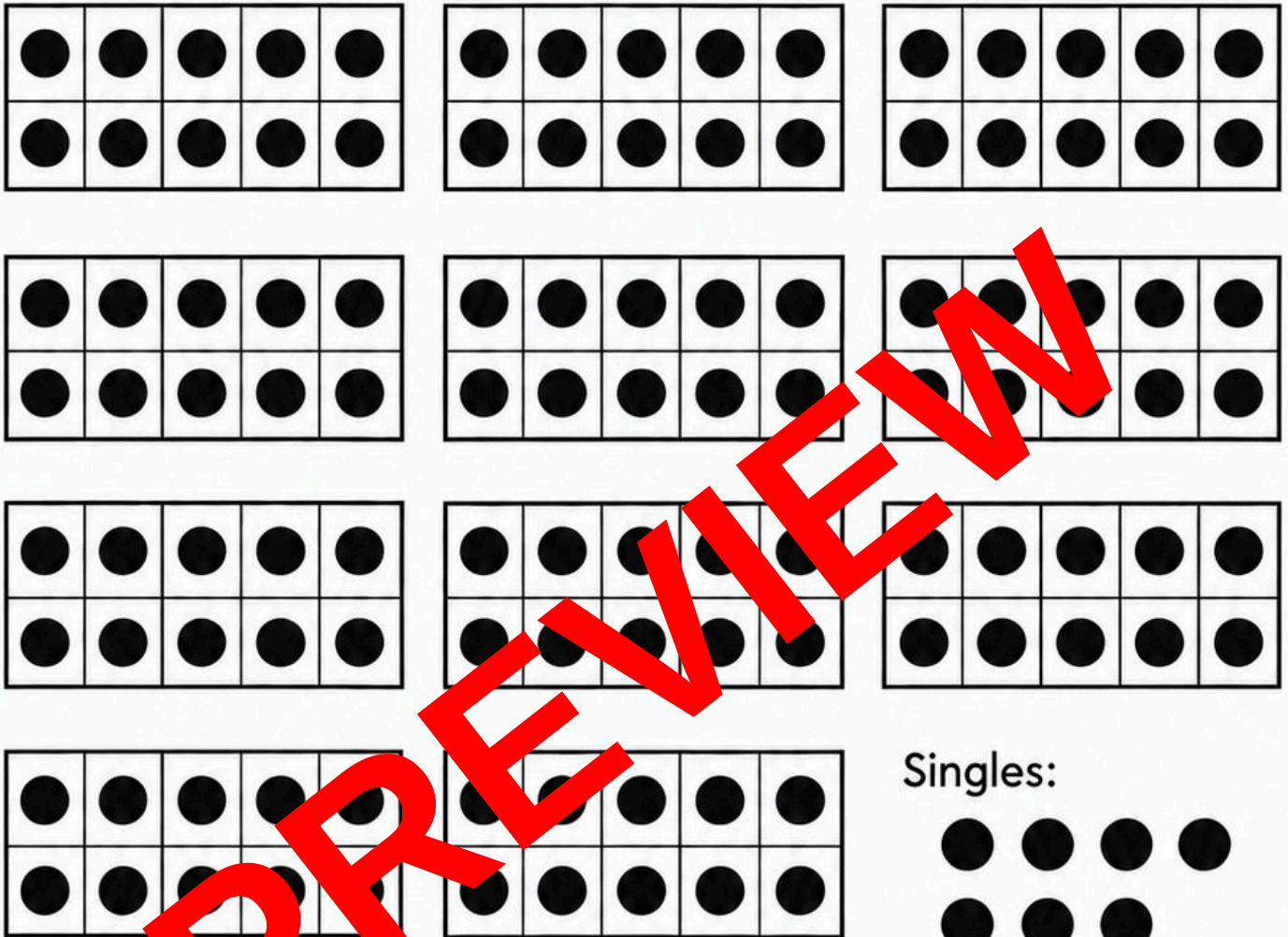
Total: _____

Tell, point, show or record. An adult may read and write.

Name: **ANSWERS**

Independent group count 2: B

Count the full groups. Then count the singles.



Group size: **10**

Full groups: **11**

Singles: **7**

My count:

**10, 20, 30, 40, 50, 60, 70, 80, 90,
100, 110; then 111, 112, 113, 114,
115, 116, 117**

Total: **117**

Tell, point, show or record. An adult may read and write.

Year 1

Assess an actual collection

Teacher assessment guide

TEACHER ONLY — keep totals and preparation out of students' view.

PREPARE

- Use the supplied five counter banks and four grouping sheets.
- Cut the counters.
- Away from students, prepare one full collection of 120 and a fresh collection of 47.
- Hide bank labels, cards, completed models and checking guides.
- Use one shared set and reset between probes.

OBSERVE ACROSS LESSONS 3–5

- Work with a few students at each station.
- Show the unknown collection, not its total.
- Begin with 47 if helpful, then observe the actual 120 collection separately.
- A smaller successful count does not provide evidence for 120.

NEUTRAL PROMPTS

- “How could you organise these?”
- “Show how you know the groups are equal.”
- “Find how many objects there are.”
- “How will you check?”
- “Have you counted every object once?”

EXPECTED EVIDENCE

- The student chooses and checks equal groups of 2, 5 or 10; counts every full group once using the matching sequence; counts leftover singles once; states the total and verifies it.
- For 47: 9 fives reach 45, then 46, 47; or 4 tens reach 40, then 41–47. Other correct groupings are accepted.
- For 120: 12 tens, 24 fives or 60 pairs quantify the same 120 actual objects.

ACCESS AND RECORDING

- Read instructions.
- Accept counter actions, pointing, speech, pictures, a communication device or an adult recording the response.
- These access choices do not change the mathematics.
- Do not give the group size, count or total.
- Record any mathematical cue separately.
- Record range, strategy, leftover handling, total, check and next step on the observation sheet; use the rubric for feedback.

Counting observation record

Class: _____

Dates: _____

Observe actual counting in lessons 3–5 and the fresh practical probe. Record evidence, not guesses.

Student:	
Actual collection / range observed:	Group size / equality:
Cumulative count:	Leftover singles:
Total / check:	Access support / mathematical cue:
Next step:	

Student:	
Actual collection / range observed:	Group size / equality:
Cumulative count:	Leftover singles:
Total / check:	Access support / mathematical cue:
Next step:	

Student:	
Actual collection / range observed:	Group size / equality:
Cumulative count:	Leftover singles:
Total / check:	Access support / mathematical cue:
Next step:	

Student:	
Actual collection / range observed:	Group size / equality:
Cumulative count:	Leftover singles:
Total / check:	Access support / mathematical cue:
Next step:	

Student:	
Actual collection / range observed:	Group size / equality:
Cumulative count:	Leftover singles:
Total / check:	Access support / mathematical cue:
Next step:	

Student:	
Actual collection / range observed:	Group size / equality:
Cumulative count:	Leftover singles:
Total / check:	Access support / mathematical cue:
Next step:	

Reading, pointing, speech, counter actions, a communication device or adult recording are access choices.
Record any hint about group size, count or total separately. Record evidence for 120 separately from smaller counts.

Collection counting rubric

Student: _____

Date: _____

Criterion	Starting	Developing	Secure	Independent
Equal groups	Needs direct modelling to form equal groups.	Forms some equal groups; checks with reminders.	Forms and checks groups of 2, 5 or 10.	Chooses a useful group size and explains why groups are equal.
Count full groups once	Needs an adult to model the counting sequence.	Uses a sequence with cues; may skip or recount a group.	Uses the matching sequence and counts each full group once.	Organises the count and detects skipped or repeated group.
Include singles once	Needs modelling to notice and count leftover singles.	Includes singles after a reminder; may restart the total.	Counts each single once after the last full group value.	Explains why singles are not a full group and checks their count.
Total, range and check	Needs direct modelling to find and check a smaller total.	Finds some totals; evidence for the actual 120 collection is incomplete.	Quantifies the actual 120 collection and checks after a neutral prompt.	Quantifies and rechecks the actual 120 collection; explains the evidence.

Observed collection / evidence: _____

Next teaching step: _____

Judge the mathematics shown. Reading, pointing, speech, counter actions, a communication device and adult recording are access choices; these alone do not lower achievement. Record mathematical hints separately. Record the range actually observed. No universal quiz, handwriting, speech or speed pass mark.

Collection Builders Year 1



How many counters?

Touch or move each counter once.

Say how many there are altogether.

Try a small loose collection on your table.



Make a pair



A pair has 2 objects.

Point to both counters
in one pair.

Make another pair.

Check that it also has 2.



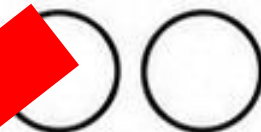
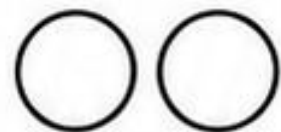
Are these groups equal?

A



Equal groups have the same number.

B



Check each group in picture A.

Which group is different in picture B?



Groups and objects

There are 4 groups.

Each group has 2
counters.

2, 4, 6, 8. There are 8
counters.



Build, count, tell

Builder: make 9 pairs.

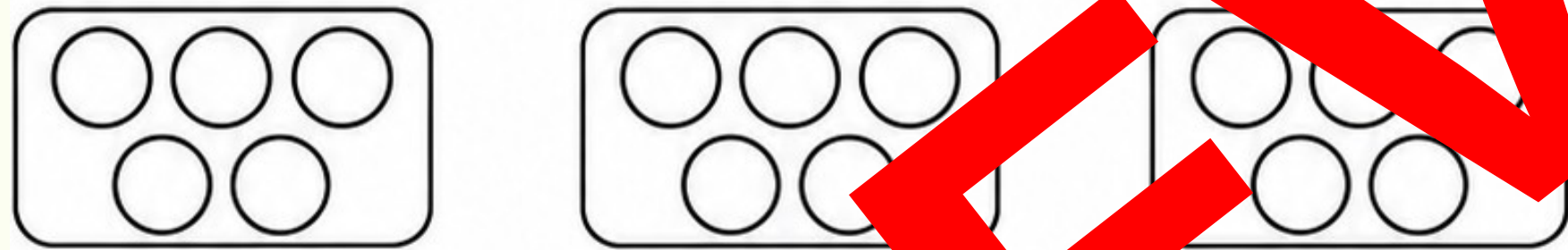
Checker: check 2 in every pair.

Count each pair once. Tell the total.

Reset the counters and swap jobs.



Five in a group



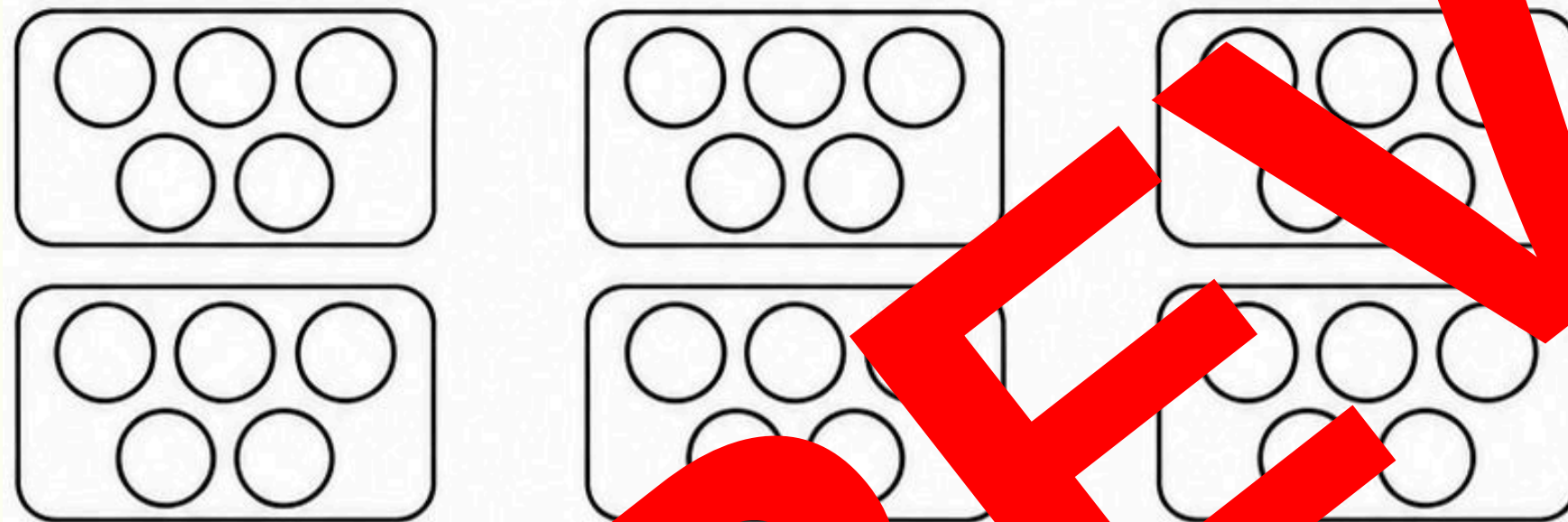
Check that each full group has 5.

Count one group at a time: 5, 10, 15.

There are 15 counters altogether.



From groups to a total



There are 6 full groups

of 5.

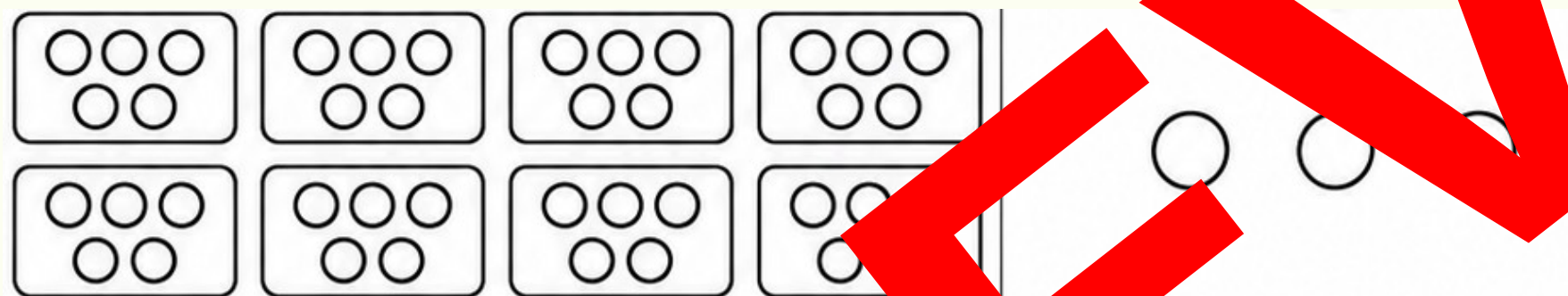
5, 10, 15, 20, 25, 30.

The last count tells the
total: 30.



Do not forget singles

3 fives each 40.



Count the 3 singles: 41,
42, 43.

There are 43 counters
altogether.



Build and check fives

Choose a fives task card: C4, C5 or C6.

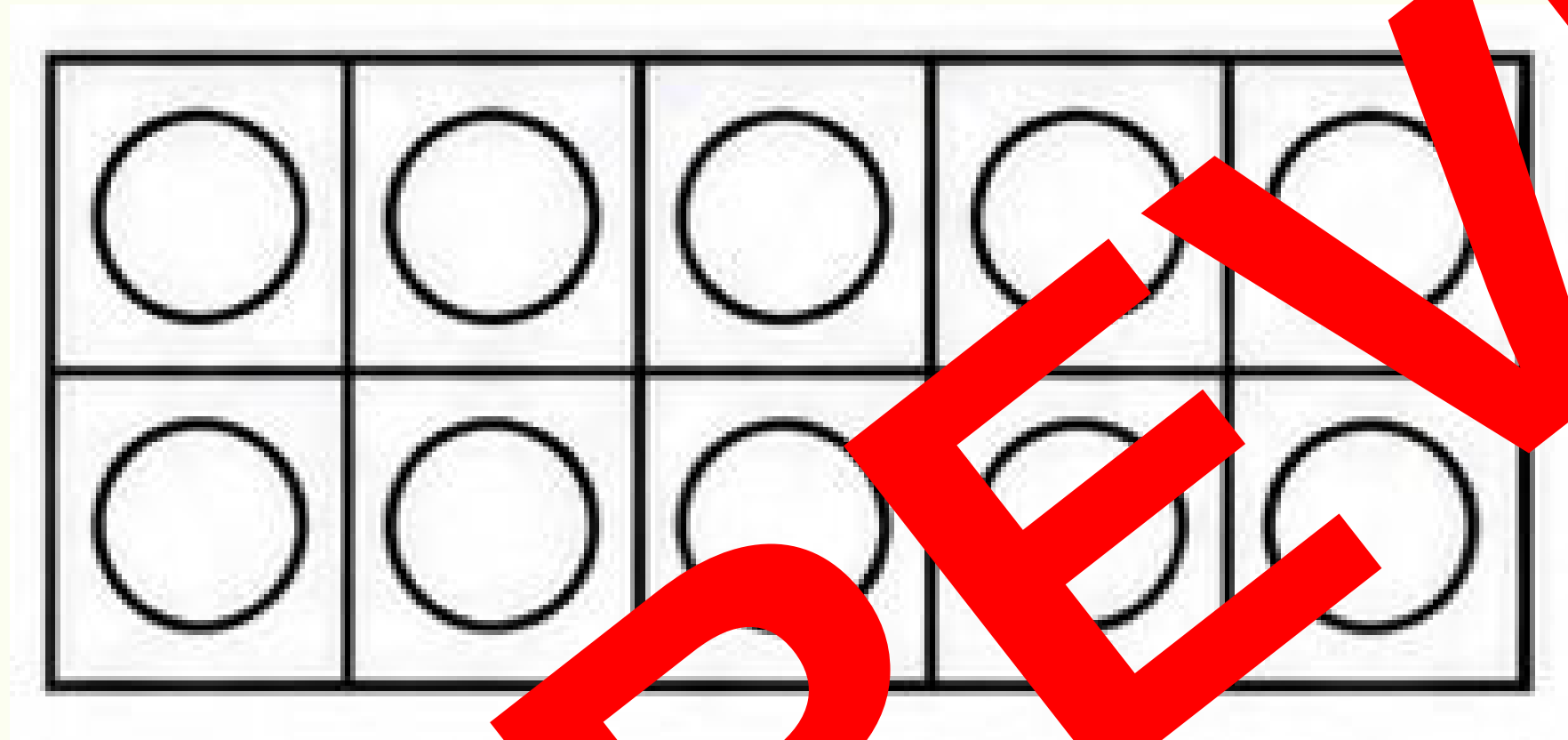
Check that every full group has 5.

Count each full group, then each single.

Tell the total, check, reset and swap.



A full ten-frame



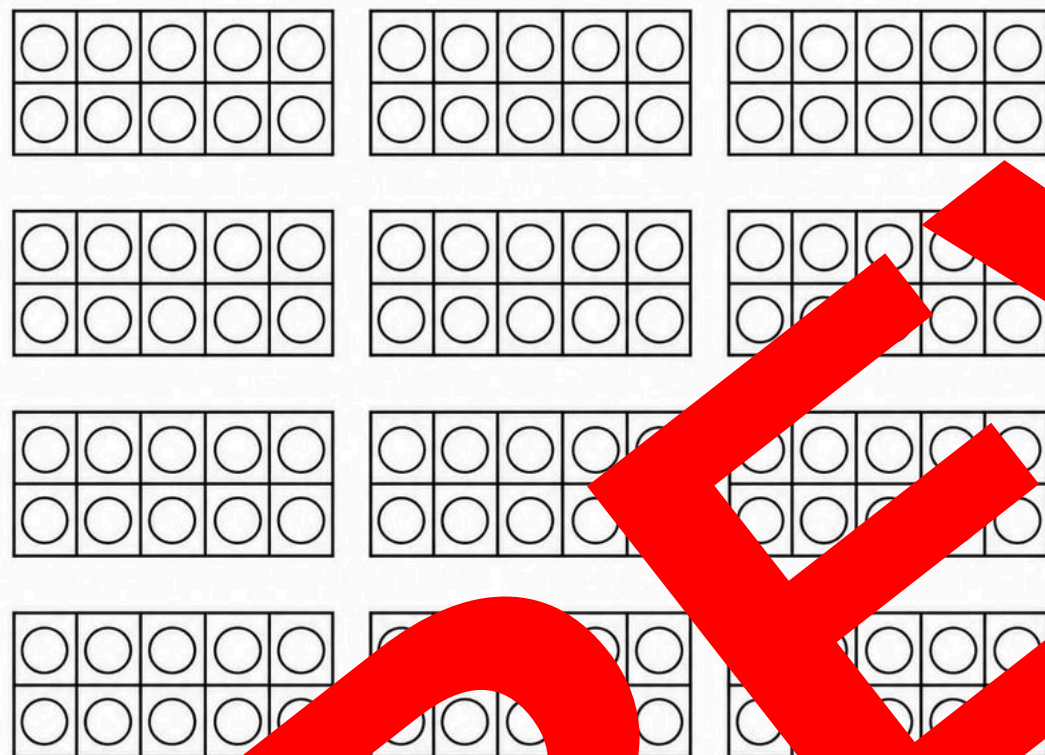
Count the objects in this frame.

There are 5 on top and 5 below.

A full ten-frame holds 10.



Tens to 120



Each frame has 10.

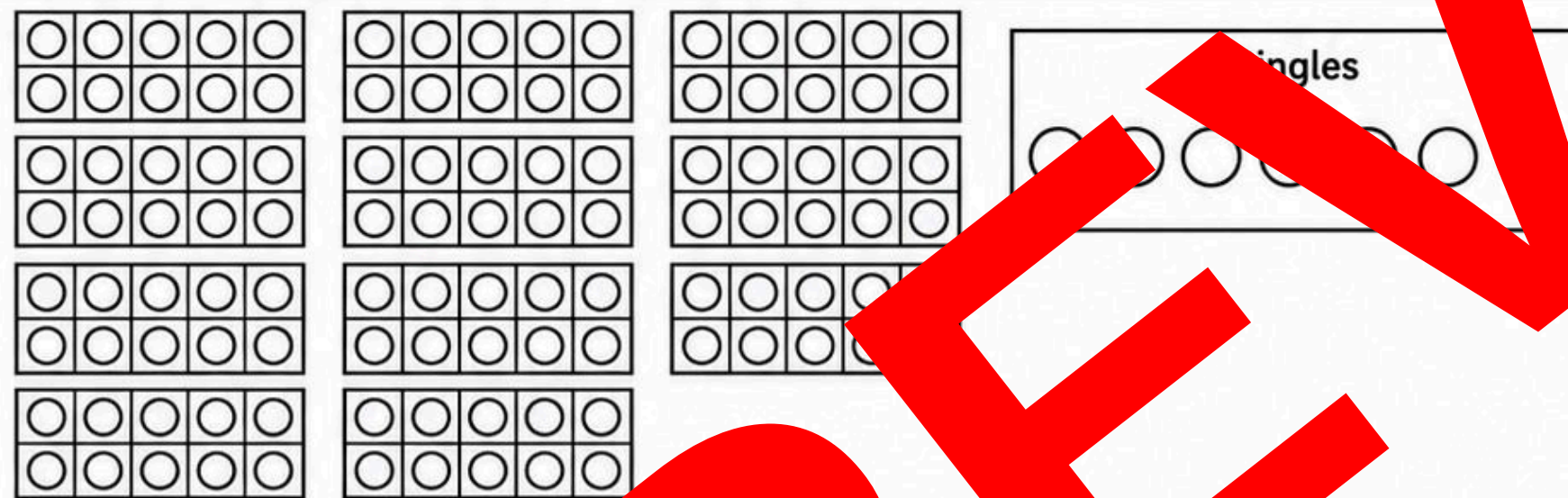
10, 20, 30, 40, 50, 60,

70, 80, 90, 100, 110, 120.

12 full tens hold 120.



Tens and singles



11 tens reach 110.

Then 111, 112, 113, 114,
115, 116, 117.

The 7 singles make the
total 117.



Same objects, new groups

Keep all 120 counters. Do not add or remove any.

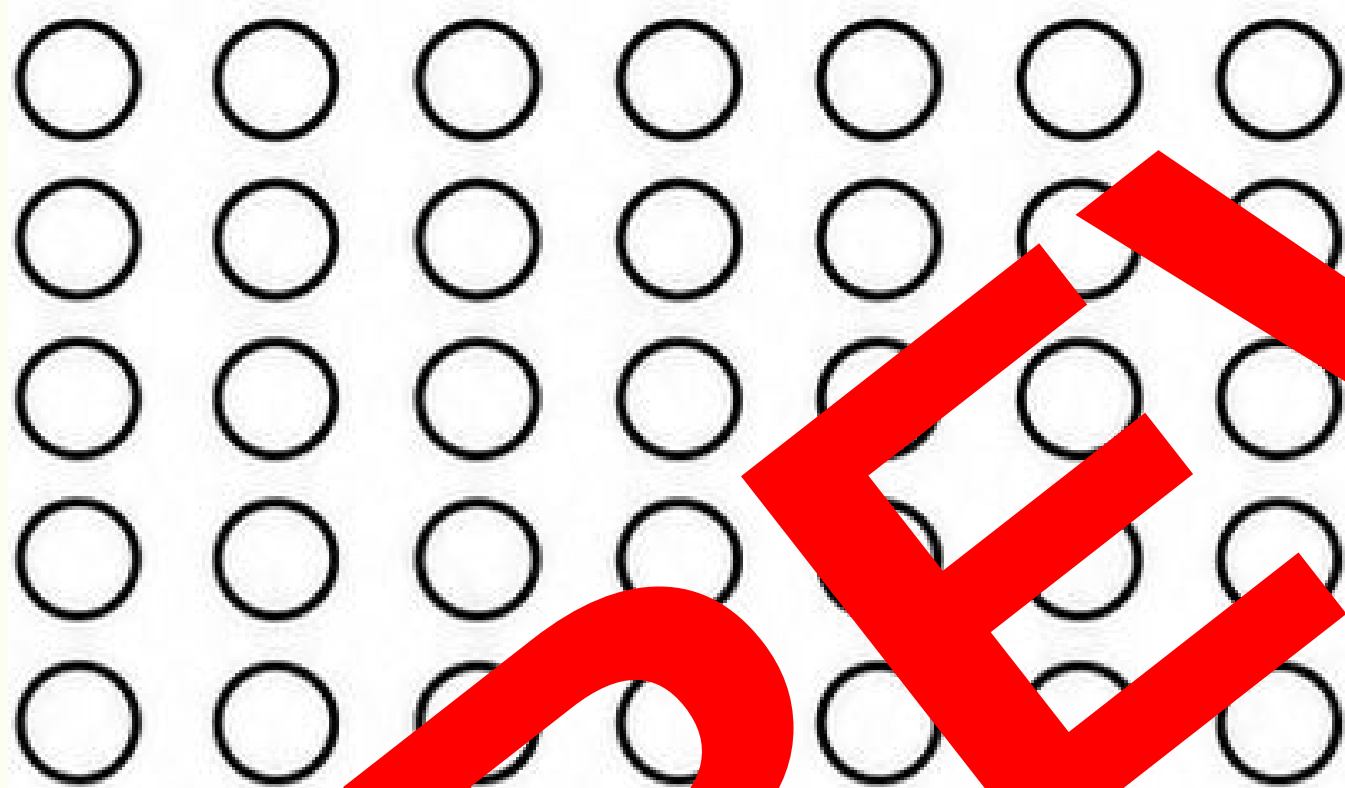
Regroup them: 24 fives or 60 pairs.

Use the counting reference. Count every group once.

Check that the total is still 120.



Choose a useful grouping



Try groups of 2, 5 or 10.

Keep singles separate.

Count. Check another way.

Which method helps you?



Count one group once

Point to or move the group you are counting.

Mark that group as counted.

Have you missed a group? Counted one twice?

Keep the full collection on only four grouping sheets.



Check a classroom story

There are 6 crayon packs with 5 each.

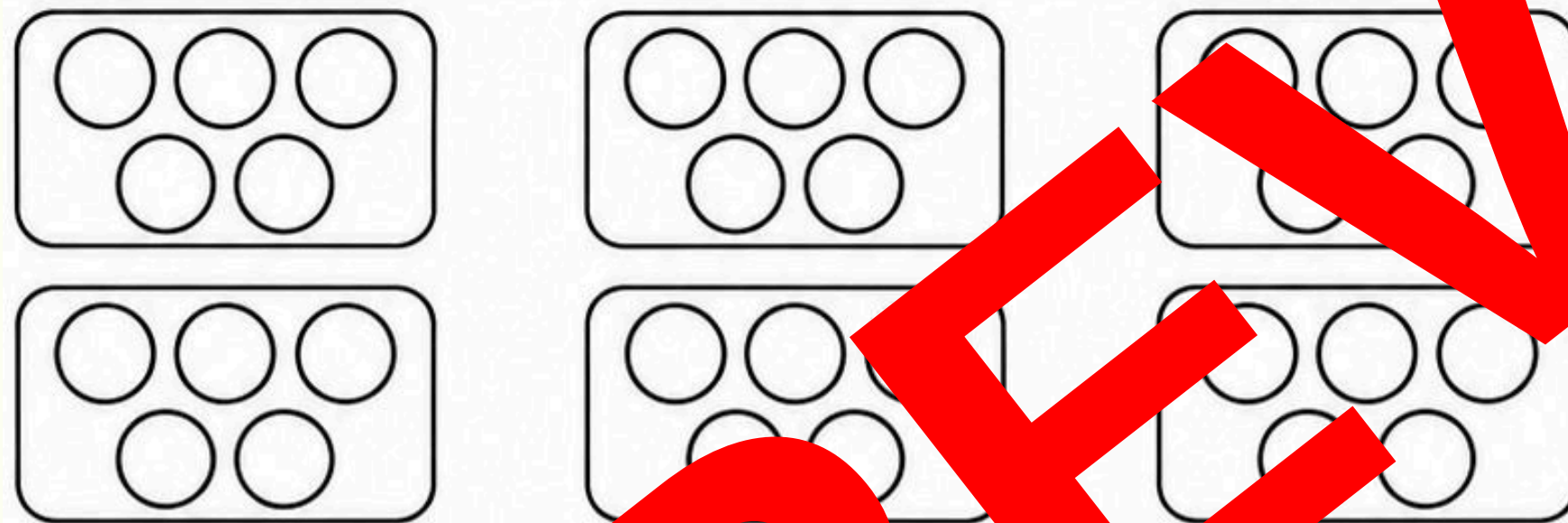
There are 2 loose crayons too.

Build it. Count the groups then the singles.

Check: 30, then 31, 32. The total is 32.



Find and fix a counting error



Sami said there are 25
circles.

Point to each group as
you count.

What was missed? What
is the correct total?



Our fresh collection

Build 7 full ten-frame packs and 6 singles.

Count every full ten once then the singles.

Show your count and check it.

Check: 70, then 71, 72, 73, 74, 75, 76.



Show how you counted!

You can speak, point, move counters or draw.

An adult can record what you have done.

Tell the group size, your count and the total.

Show how you checked every object once.



Independent counting check

Choose and check equal groups.

Count each full group, then each single.

Find the total. Check another way.

Show your own mathematical decisions.



What did the check show?

4 pairs make 8 counters.

Check: 2, 4, 6, 8 again.

Show a check for your
count.



My next counting step

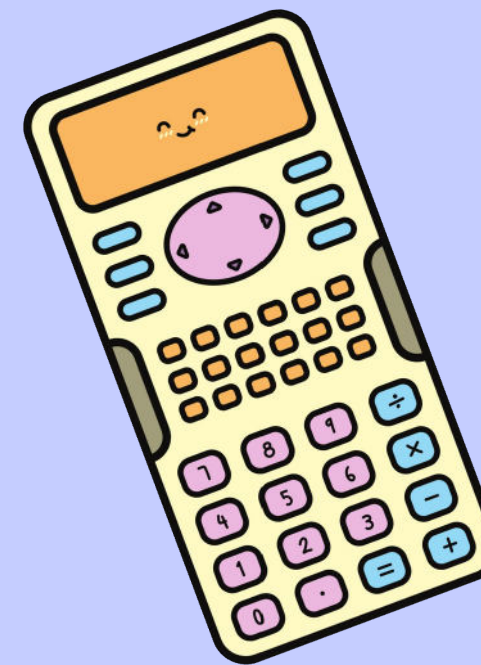
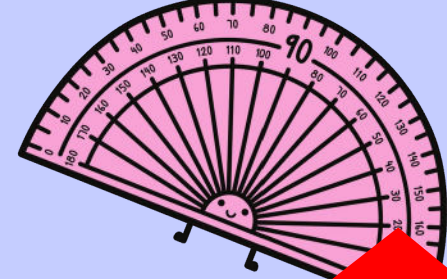
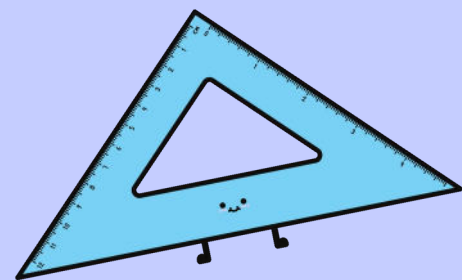
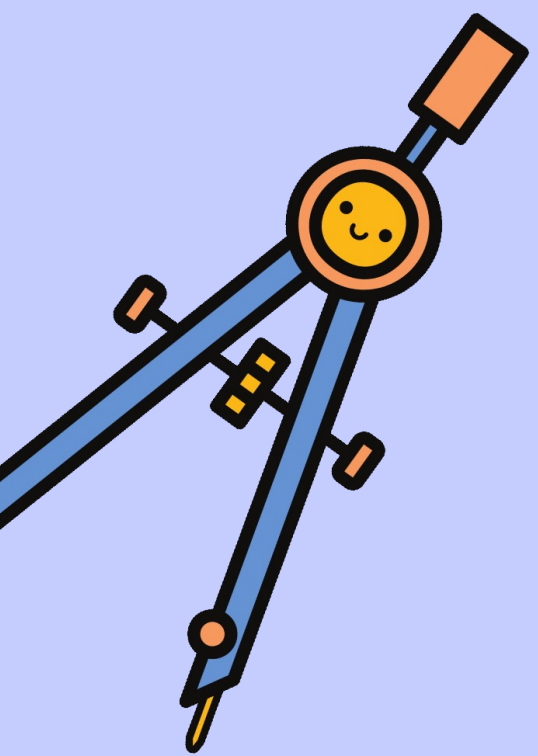
Check every group has the same number.

Mark each group as counted.

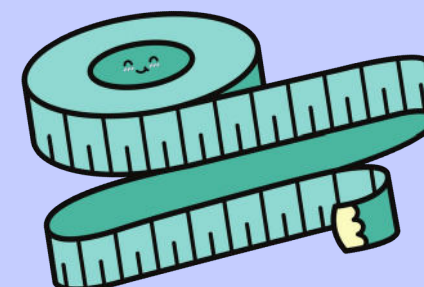
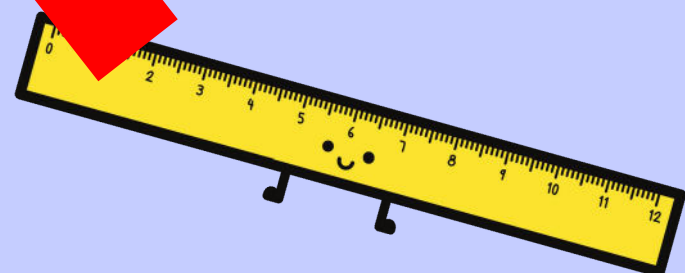
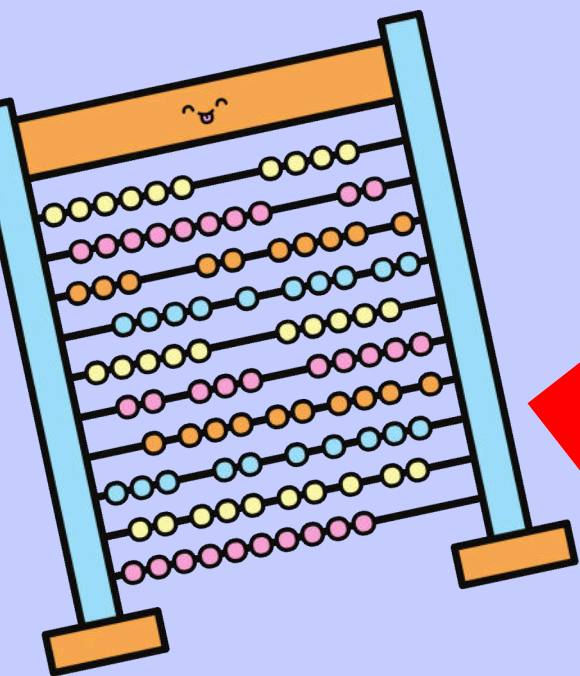
Start the singles after the last full-group count.

Choose the step that will help your next count.





Well done,
collection builders!



Collection Builders Quiz Year 1



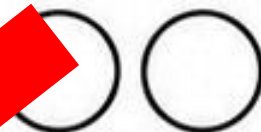
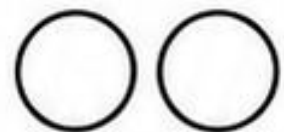
Which picture shows equal groups?

A



Check the number in
each group.

B



A or B



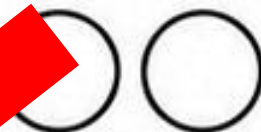
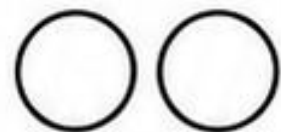
Answer 1

A



Picture A. Each group
has 2 counters.

B

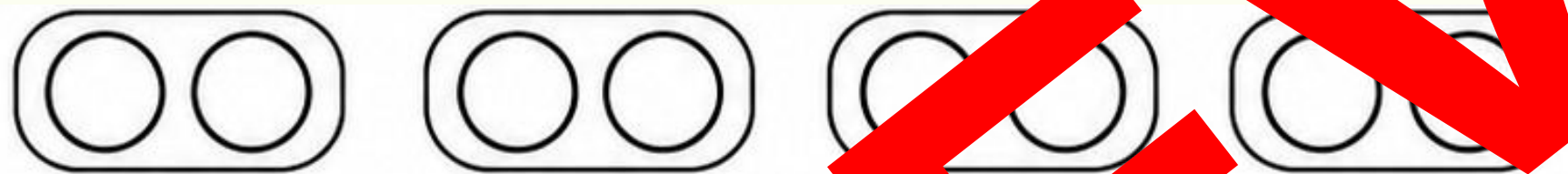


Picture B has groups of
2, 3 and 2.



How many counters in 4 groups?

Count the counters.



8

4

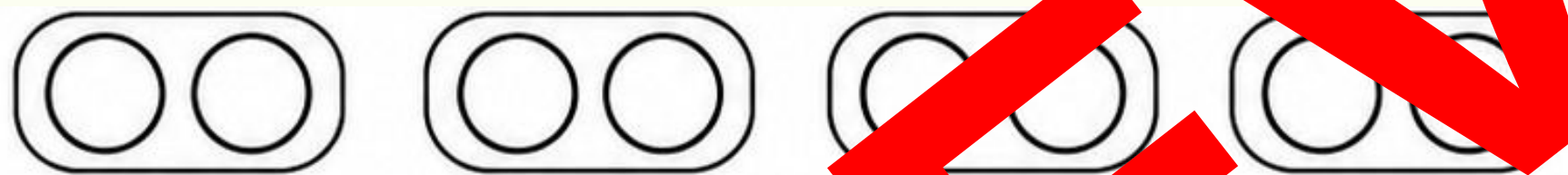
6



Answer 2

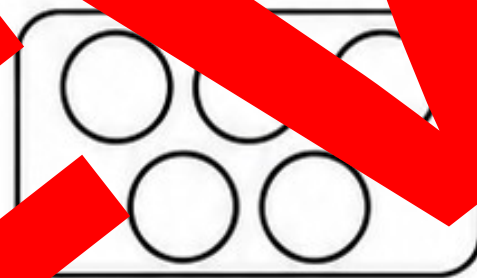
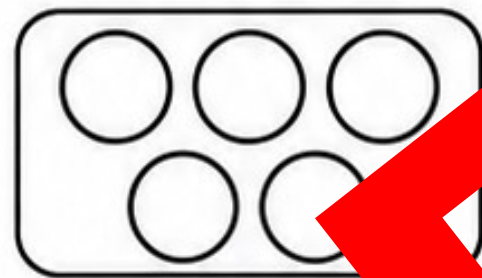
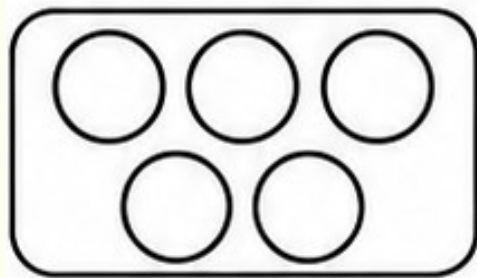
3 counters: 2, 4, 6, 8.

4 is the number of
groups.



How many in 3 groups of 5?

Count the full group at
a time.



10

15

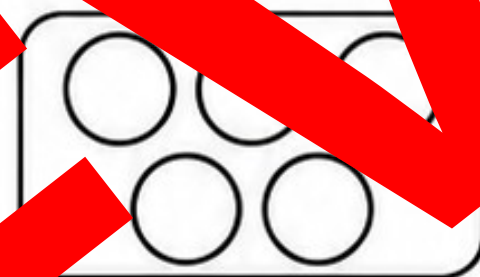
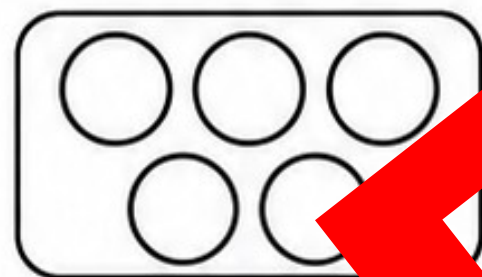
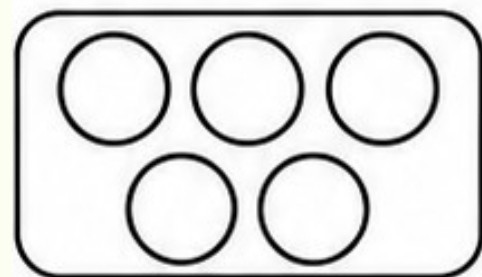
3



Answer 3

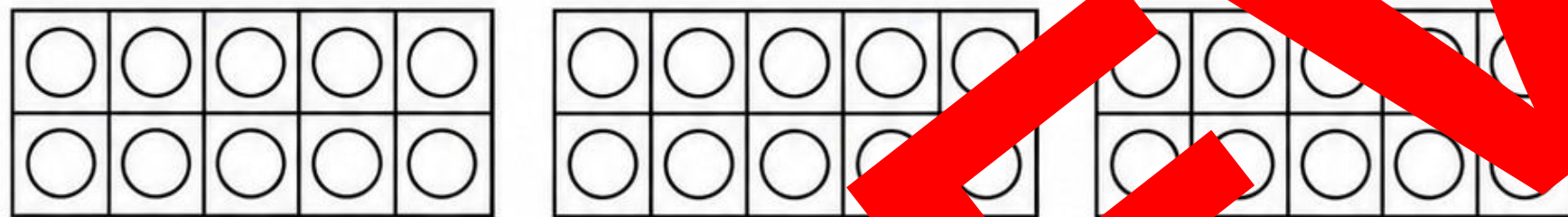
15 counters: 5, 10, 15.

Each group adds 5 to
the count.



How many in 3 full ten-frames?

Check that each frame is
full.



3

13

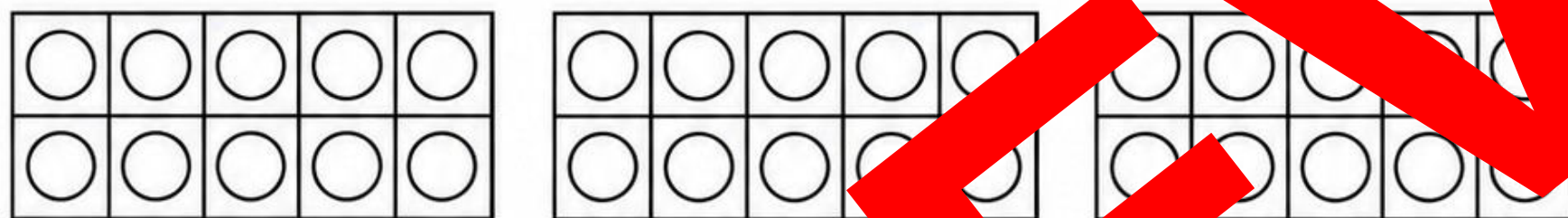
30



Answer 4

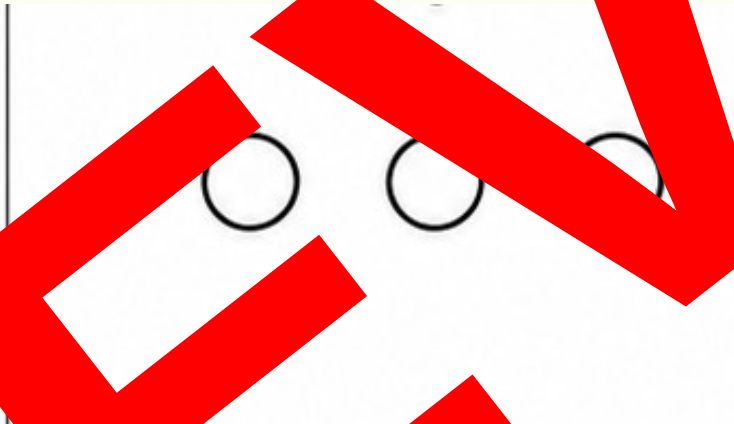
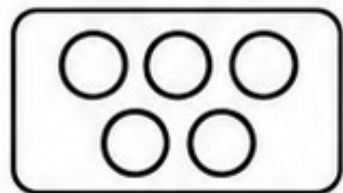
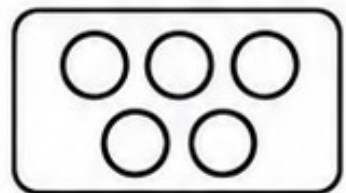
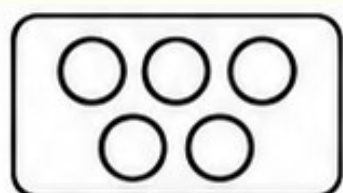
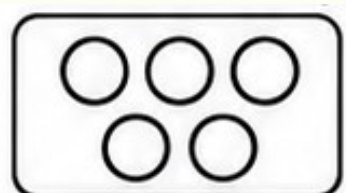
30 counters: 10, 20, 30.

3 is the number of
frames.



Count groups and singles

Find how many
counters altogether.



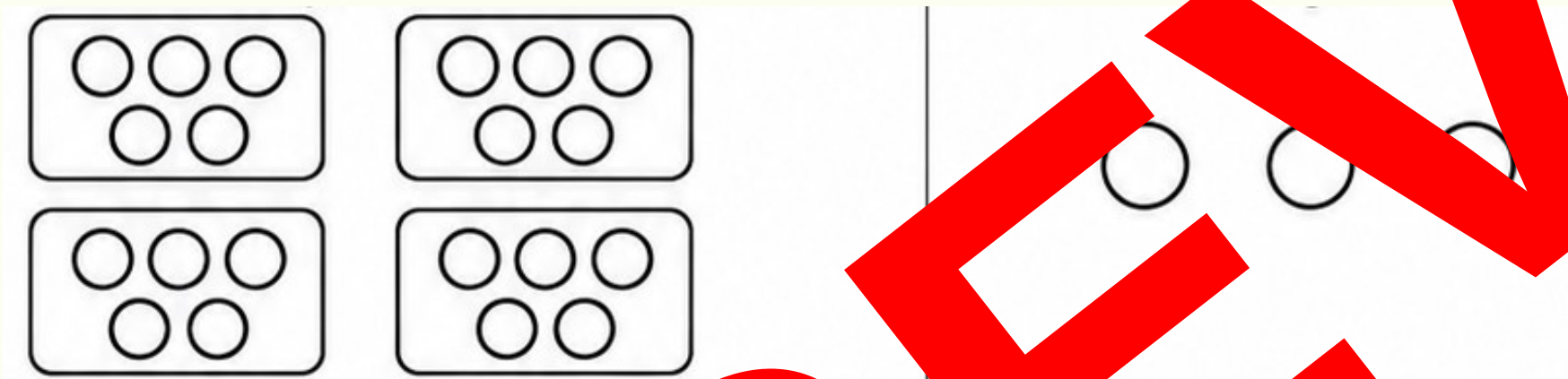
23

20

7



Answer 5



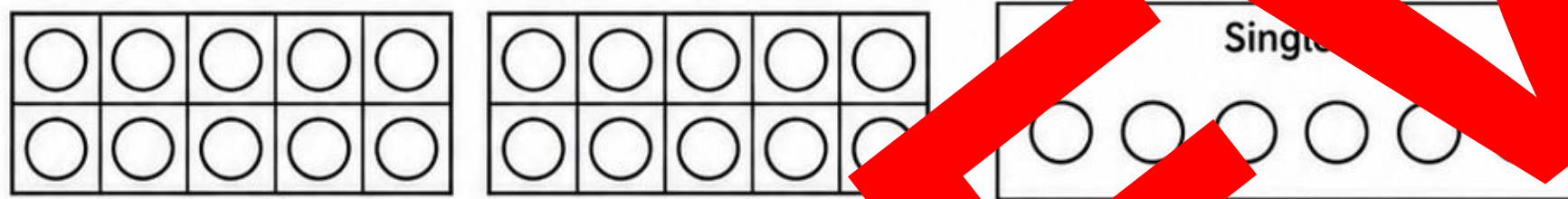
23 counters. Four fives
reach 20.

Then count the singles:
21, 22, 23.



Count tens and singles

Find the total number of
counters.



26

62

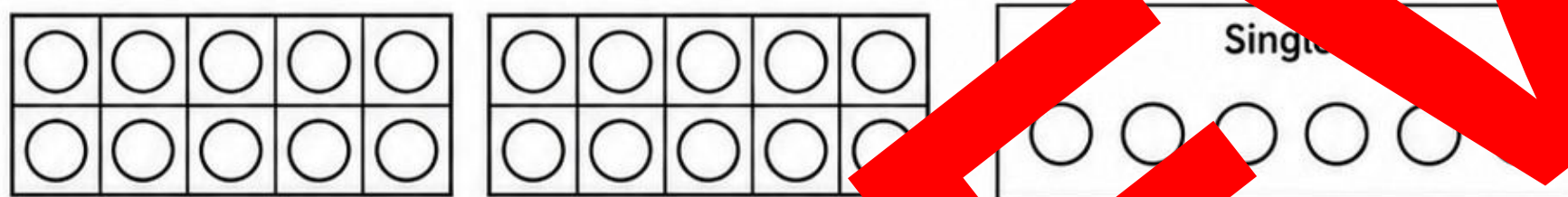
20



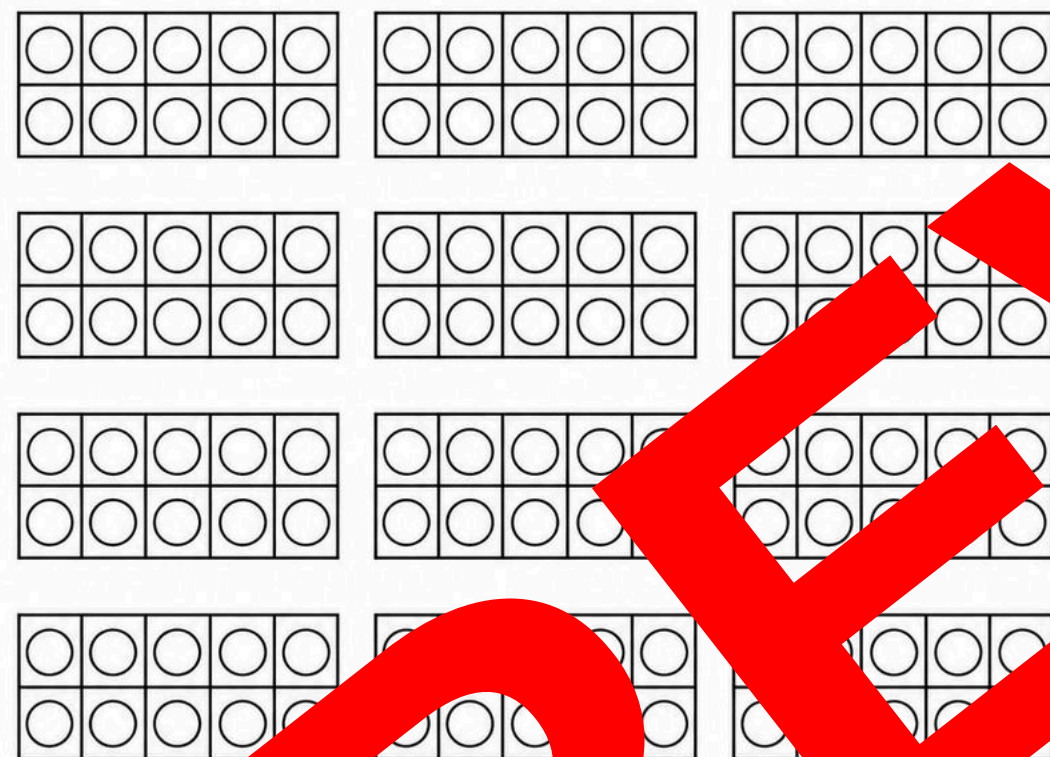
Answer 6

26 counters: 10, 20.

Then 21, 22, 23, 24, 25, 26.



Our full ten-frame collection



How many counters
altogether?

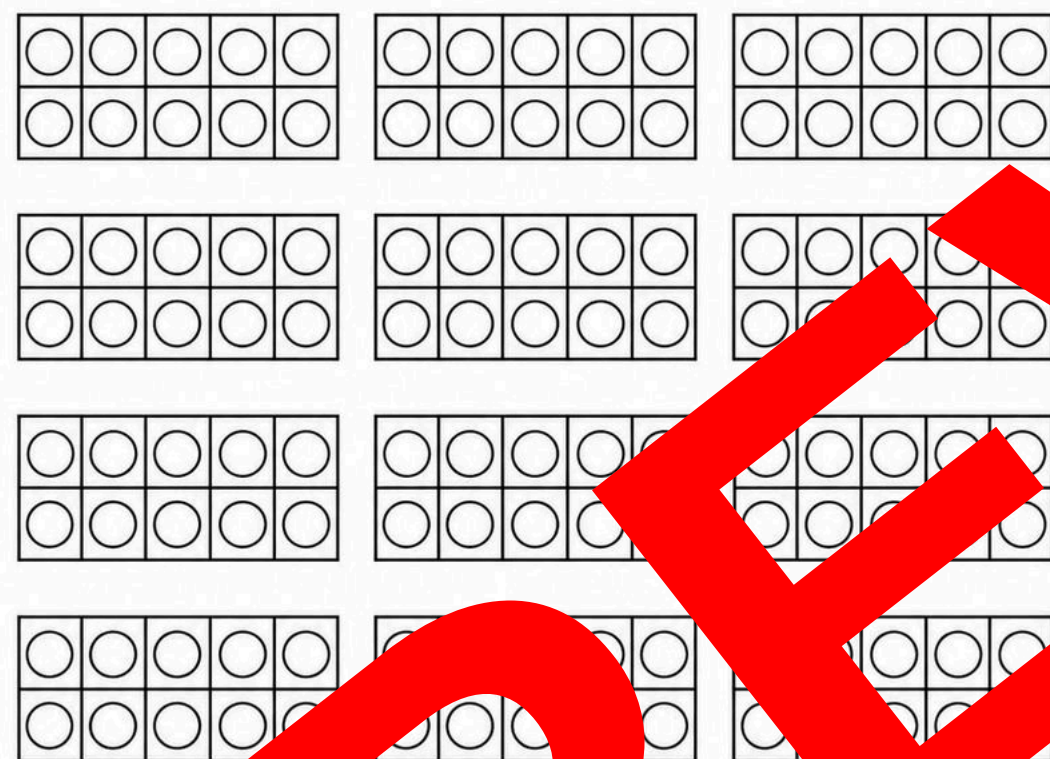
12

120

102



Answer 7



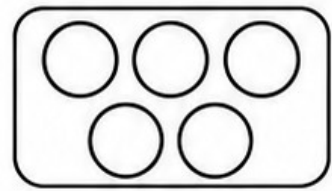
120 tens. Count all

tens once.

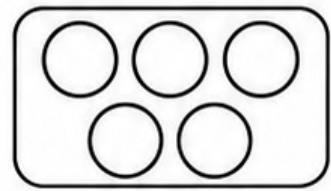
10, 20, 30, 40, 50, 60, 70,
80, 90, 100, 110, 120.



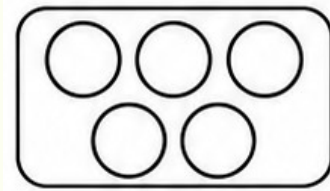
What count comes next?



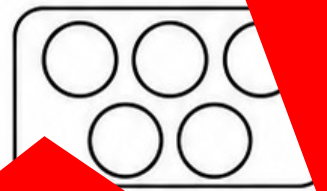
5



10



15



?

Count for each full
group.

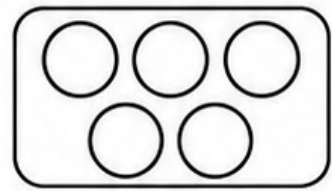
15

20

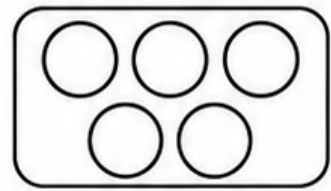
25



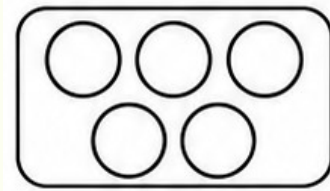
Answer 8



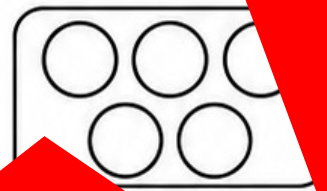
5



10



15



20

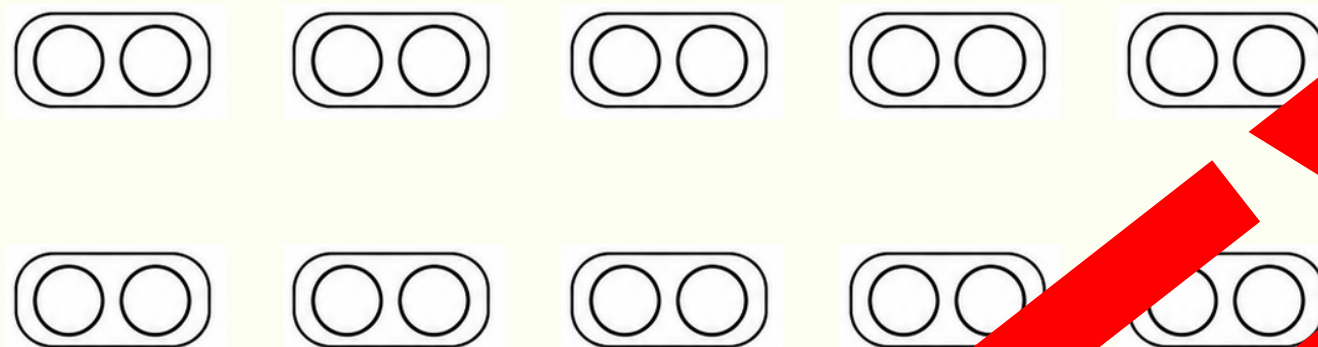
20 belongs to the fourth group.

5, 10, 15, 20. Each group adds 5.

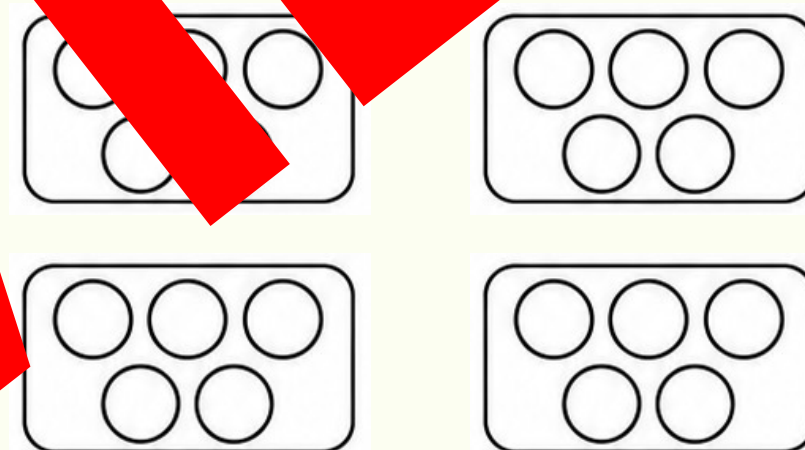


Same counters, new groups

Before: pairs



After: fives



No counters were added or removed. Did the total change?

Changed

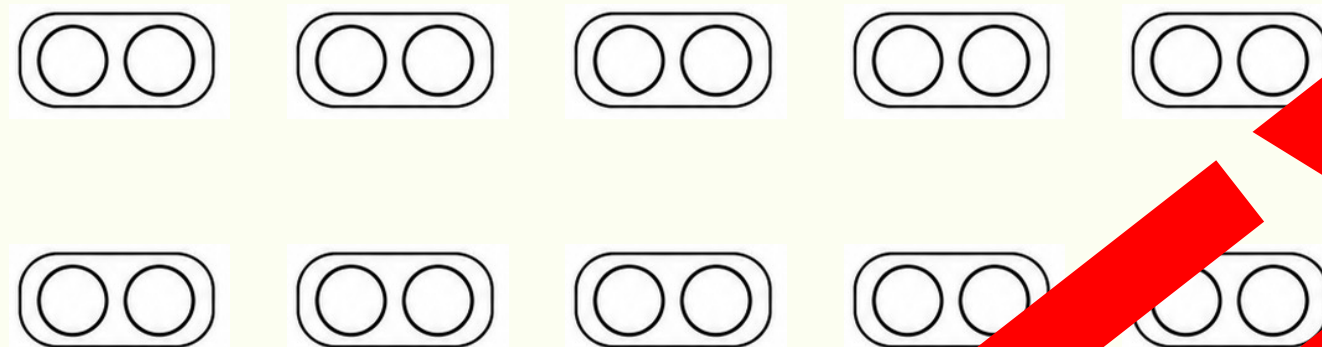
Stayed 20

Cannot count

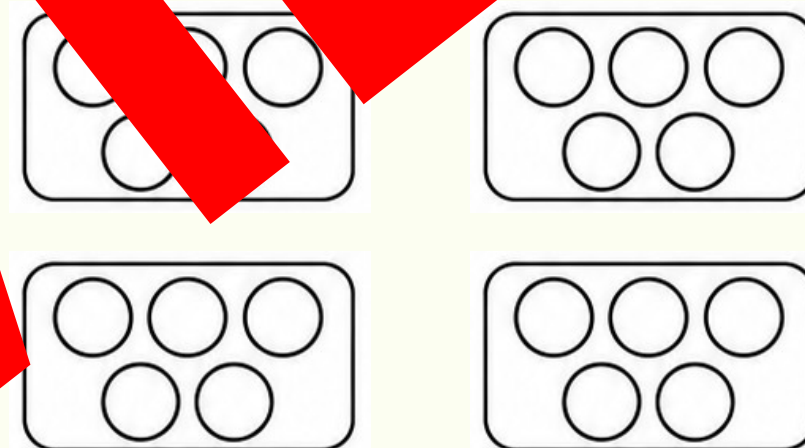


Answer 9

Before: pairs



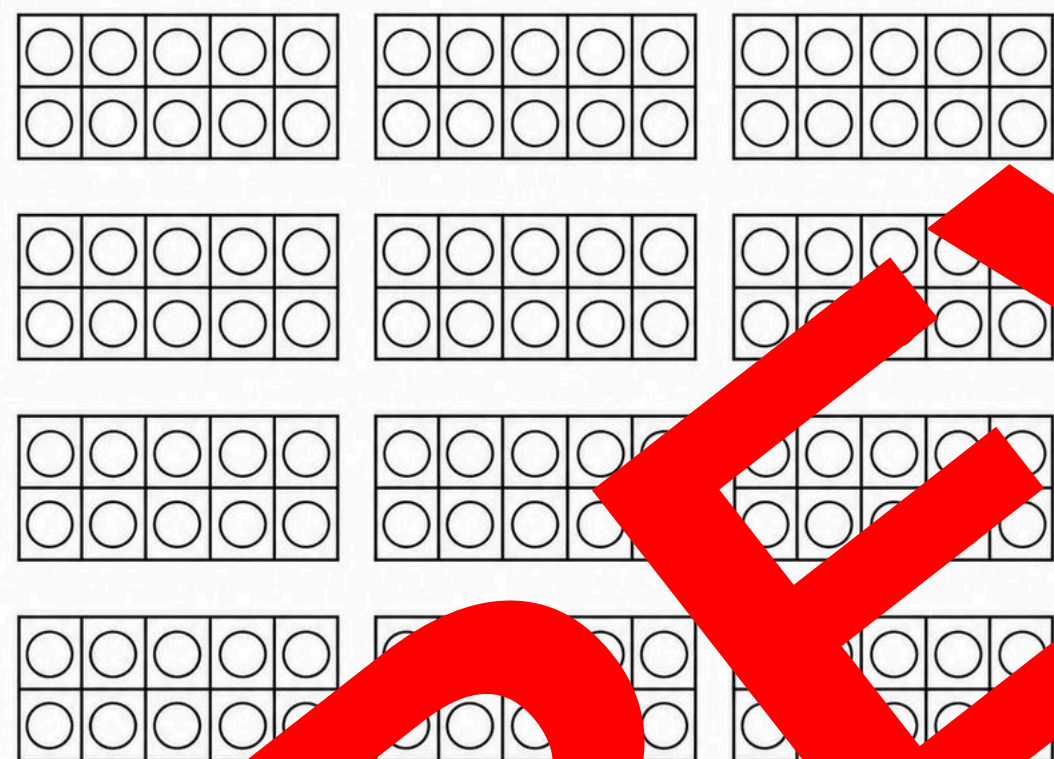
After: fives



The total stayed 20.
Ten pairs and four fives both hold 20 counters.



One full ten-frame remains



11 full frames have been
counted to 110. Count
the last full frame.

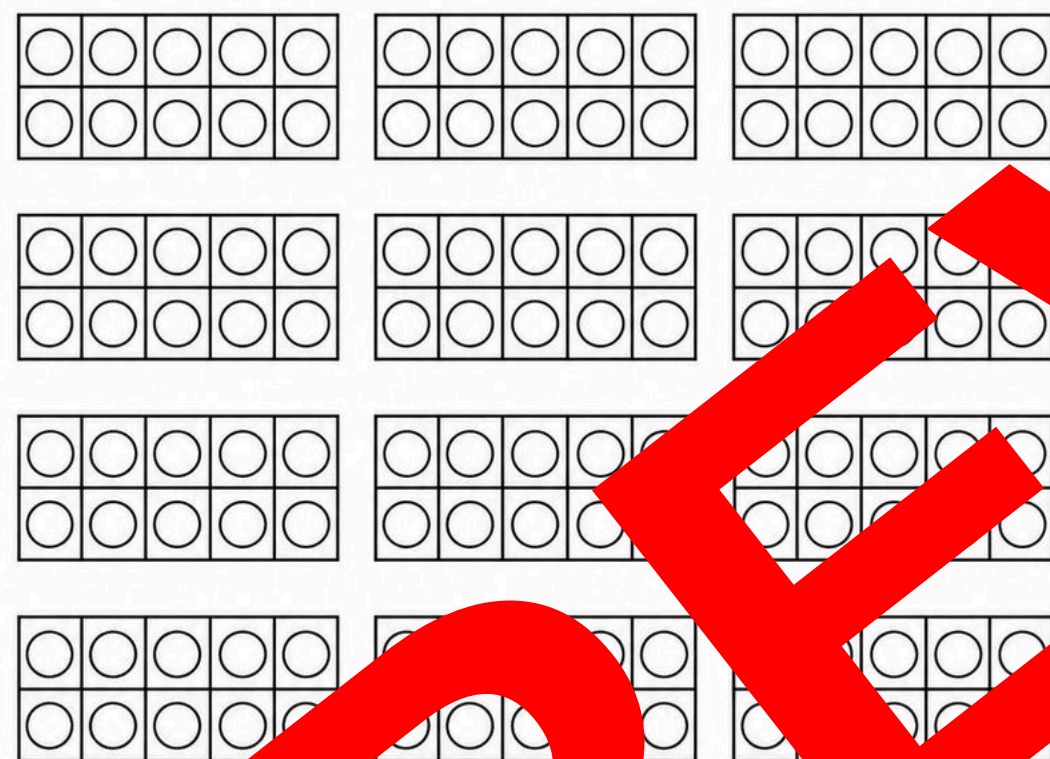
110

120

100



Answer 10

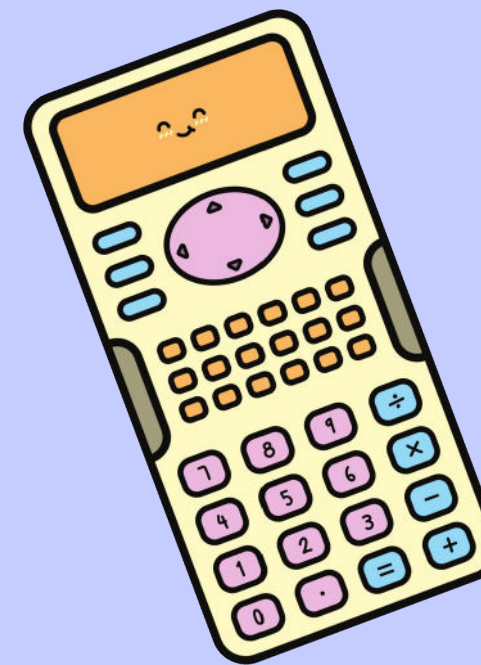
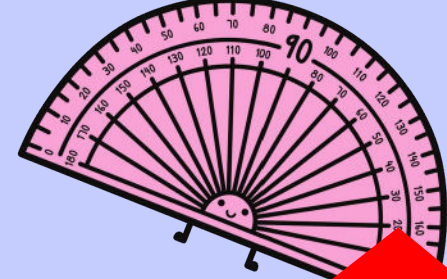
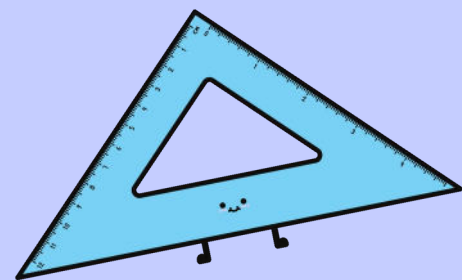
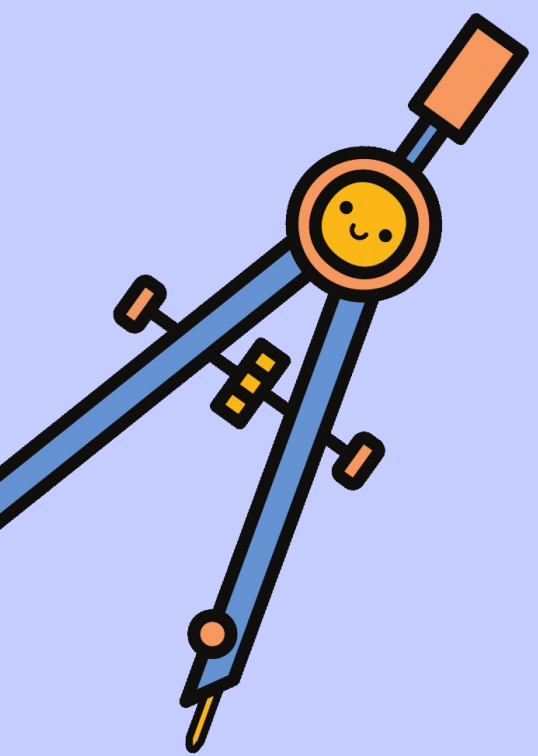


120. Last full frame

adds 10.

110, then 120. Count
each frame once.





Well done,
collection builders!

