Chapter 3: Double Century

CONTENTS 12 exercises · 27 questions

3.1	Let us Do — Estimate Objects	1 Q
3.2	Let us Play — Snakes and Ladders Board	4 Q
3.3	Let us Think — Talking Pot (numbers up to 100)	1 Q
3.4	Let us Do — Making 100	3 Q
3.5	Let us Explore — How many are 100?	2 Q
3.6	Let us Do — Numbers beyond 100 (matchstick bundles)	2 Q
3.7	Let us Think — Talking Pot (numbers beyond 100)	1 Q
3.8	Let us Do — Number line 100 to 150	2 Q
3.9	Let us Do — Numbers from 150 to 200	3 Q
3.10	Let us Do — Jumping Game	6 Q
3.11	Let us Do at Home — Seeds Estimation to 200	1 Q
3.12	Let us Play — Clap, Snap and Pat	1 Q

Exercise 3.1 — Let us Do — Estimate Objects

Q1 Look at the picture. Estimate and write the number of each of the following objects: (a) Oranges (b) Bangles (c) Laddoos (d) Barfi (e) Bindis (f) Bananas

SOLUTION

This is an estimation activity — look at the picture and make a reasonable guess for each item. Estimations will vary by child. There is no single correct answer.

Typical sample estimates: Oranges ≈ 20, Bangles ≈ 30, Laddoos ≈ 15, Barfi ≈ 12, Bindis ≈ 50, Bananas ≈ 10.

Estimation activity — answers vary by child. Looking at the market-scene picture: Oranges ≈ 20–25, Bangles ≈ 30–40, Laddoos ≈ 15–20, Barfi ≈ 10–15, Bindis ≈ 50–60, Bananas ≈ 8–12. No single correct answer; encourage close observation and counting.

Exercise 3.2 — Let us Play — Snakes and Ladders Board

Q1 Which number will you reach if you take the ladder from 13?

SOLUTION

Find the ladder on the snakes and ladders board that starts at 13.
Follow the ladder from its foot at 13 to its top.
The ladder from 13 takes you up to 48.
48 — The ladder's foot is at 13 (row 2 of the board). Follow the ladder upward: it reaches square 48 (row 5).

Q2 If you are on the snake at number 25, which number will you reach?

SOLUTION

Find the snake on the board whose head is at 25.
Follow the snake down from 25 to its tail.
The snake at 25 takes you down to 22.
22 — The snake's head is at 25 (row 3). The snake's tail lands on 22 (also row 3, two squares to the left).

Q3 You are standing on 96. Which number on the die will take you to the snake's mouth?

SOLUTION

Look at the snakes and ladders board to find which number between 97 and 102 has a snake's mouth.
The snake's mouth is at 99.
From 96, rolling a 3 on the die gives 96 + 3 = 99.
So the die must show 3.
2 — The snake's mouth (head) nearest to 96 is at square 98 (top row). From 96, rolling 2 on the die gives 96 + 2 = 98, which is the snake's mouth.

Q4 Show the number written on the tail of the longest snake using bundles and loose sticks.

SOLUTION

Find the longest snake on the board. Its tail is at 17.
17 = 1 bundle of ten + 7 loose sticks.
Draw 1 bundle (tied group of 10 sticks) and 7 individual sticks.
The longest snake on the board has its head near 84 and its tail at 17. Show 17 as: 1 ten-bundle and 7 loose sticks (1 ten + 7 ones = 17).

Exercise 3.3 — Let us Think — Talking Pot (numbers up to 100)

Q1 The talking Pot says one more than the number you say. Fill in the blanks: (a) I said 39, Pot said _____ (b) I said 42, Pot said 43 (c) I said 63, Pot said _____ (d) I said _____, Pot said 90 (e) I said _____, Pot said _____

SOLUTION

The Pot always says one MORE than what you say.

(a) 39 + 1 = 40. Pot said 40.

(b) 42 + 1 = 43. Already given. ✓

(c) 63 + 1 = 64. Pot said 64.

(d) Pot said 90, so you said 90 − 1 = 89.

(e) Any number and its successor work here; for example, I said 74, Pot said 75.

(a) 40 (b) 43 (c) 64 (d) 89 (e) any number and one more than it (e.g., 74 and 75)

Exercise 3.4 — Let us Do — Making 100

Q1 Fill in the blanks to make 100 using the number line: (a) 70 and 30 makes 100 (b) __ and __ makes 100 (c) __ and __ makes 100

SOLUTION

Use the number line: jump from 0 to a number, then jump again to reach 100.
(a) 70 + 30 = 100 (already given).
(b) Sample: 60 + 40 = 100. Jump to 60, then 40 more lands on 100.
(c) Sample: 45 + 55 = 100. Jump to 45, then 55 more lands on 100.
Many other pairs are valid: 30+70, 20+80, 50+50, etc.
(a) 70 and 30 (b) any pair summing to 100, e.g. 60 and 40 (c) any pair summing to 100, e.g. 45 and 55

Q2 Use matchstick bundles and a ginladi to make 100 in different ways. Fill the table: (a) 60 and 40 makes ___ (b) 45 and ___ makes 100 (c) ___ and 25 makes 100 (d) ___ and 85 makes 100 (e) ___ and ___ makes 100 (f) ___ and ___ makes 100

SOLUTION

(a) 60 + 40 = 100.
(b) 45 + ? = 100 → ? = 100 − 45 = 55.
(c) ? + 25 = 100 → ? = 100 − 25 = 75.
(d) ? + 85 = 100 → ? = 100 − 85 = 15.
(e) Any pair: e.g. 30 + 70 = 100.
(f) Any pair: e.g. 50 + 50 = 100.
(a) 100 (b) 55 (c) 75 (d) 15 (e) any pair summing to 100 (f) any pair summing to 100

Q3 Write numbers in the flower petals so that the numbers in each petal add up to 100. (Pairs shown include: 9 + ___, 91 + ___, 55 + 5___, 60 + ___, 37 + ___, 25 + __)

SOLUTION

Each pair of petals must add to 100.
9 + 91 = 100. Missing partner: 91.
91 + 9 = 100. Missing partner: 9.
55 + 45 = 100. Missing partner: 45.
60 + 40 = 100. Missing partner: 40.
37 + 63 = 100. Missing partner: 63.
25 + 75 = 100. Missing partner: 75.
Left flower (centre = 100): petals are 45+55, 30+70, 60+40, 37+63, 25+75, 81+19 — each pair sums to 100. Right flower (centre = 100): petals are 9+91, 0+100, and two blank pairs to be filled so each sums to 100.

Exercise 3.5 — Let us Explore — How many are 100?

Q1 Open a full box of matchsticks. Estimate the number. Count the matchsticks. How close was your estimate? How many boxes of matchsticks will get the total close to 100 matchsticks?

SOLUTION

This is a hands-on activity with a real matchbox.
A standard matchbox contains about 40–50 matchsticks.
Estimate before counting, then count and compare.
If a box has about 50 sticks, you need about 2 boxes for 100 sticks.
If a box has about 40 sticks, you need about 3 boxes for 100 sticks.
Your answer will depend on the actual matchbox you use.
Answers depend on the actual matchbox used. Typically 2–3 boxes give close to 100 matchsticks.

Q2 Take a handful of seeds (kidney beans, chickpeas, etc.). Estimate the number. Count the seeds. How many handfuls will get the total close to 100?

SOLUTION

This is a hands-on estimation activity.
Estimate first, then count your seeds.
If one handful has about 20 seeds, you need about 5 handfuls for 100.
If one handful has about 25 seeds, you need about 4 handfuls for 100.
Your answer depends on how many seeds fit in your hand.
Answers vary. If one handful ≈ 25 seeds, then 4 handfuls ≈ 100 seeds.

Exercise 3.6 — Let us Do — Numbers beyond 100 (matchstick bundles)

Q1 Identify the matchstick bundles (100s, 10s, 1s) and write the corresponding numbers. The table starts at 123 and includes 104 and 120. Fill all blank rows.

SOLUTION

Each number is made of: 1 hundred-bundle + ten-bundles + loose sticks.
123 = 1 hundred + 2 tens + 3 ones → 1×100 + 2×10 + 3 = 123.
104 = 1 hundred + 0 tens + 4 ones → 1×100 + 0×10 + 4 = 104.
120 = 1 hundred + 2 tens + 0 ones → 1×100 + 2×10 + 0 = 120.
Continuing the table from 120 upward: 121 = 1,2,1 | 122 = 1,2,2 | 123 = 1,2,3 ... up to 150.
All numbers between 100 and 150 start with 1 hundred-bundle; the tens and ones digits change.
Sample rows: 123 → 1 hundred, 2 tens, 3 ones | 104 → 1 hundred, 0 tens, 4 ones | 120 → 1 hundred, 2 tens, 0 ones. All numbers in 100–150 have exactly 1 hundred-bundle.

Q2 Match the numbers with the correct bundles and loose sticks: 101, 116, 110, 100, 140.

SOLUTION

100 = 1 hundred-bundle, 0 ten-bundles, 0 loose sticks.
101 = 1 hundred-bundle, 0 ten-bundles, 1 loose stick.
110 = 1 hundred-bundle, 1 ten-bundle, 0 loose sticks.
116 = 1 hundred-bundle, 1 ten-bundle, 6 loose sticks.
140 = 1 hundred-bundle, 4 ten-bundles, 0 loose sticks.
Match (reading the bundle pictures top to bottom on the page): 101 → 1 hundred-bundle, 0 ten-bundles, 1 loose stick | 116 → 1 hundred-bundle, 1 ten-bundle, 6 loose sticks | 110 → 1 hundred-bundle, 1 ten-bundle, 0 loose sticks | 100 → 1 hundred-bundle, 0 ten-bundles, 0 loose sticks | 140 → 1 hundred-bundle, 4 ten-bundles, 0 loose sticks.

Exercise 3.7 — Let us Think — Talking Pot (numbers beyond 100)

Q1 The Talking Pot says one more. Fill in the blanks: (a) Bholu said 127, Pot said ___ (b) Bholu said 105, Pot said ___ (c) Bholu said 109, Pot said ___ (d) Bholu said 150, Pot said ___ (e) Bholu said 134, Pot said ___ (f) Bholu said 100, Pot said ___

SOLUTION

The Pot always says one MORE than the number said.

(a) 127 + 1 = 128.

(b) 105 + 1 = 106.

(c) 109 + 1 = 110.

(d) 150 + 1 = 151.

(e) 134 + 1 = 135.

(f) 100 + 1 = 101.

(a) 128 (b) 106 (c) 110 (d) 151 (e) 135 (f) 101

Exercise 3.8 — Let us Do — Number line 100 to 150

Q1 Fill the blank spaces on the number line from 100 to 150 (marked at every 10).

SOLUTION

The number line goes from 100 to 150 in steps of 10.
100, 110, 120, 130, 140, 150.
100, 110, 120, 130, 140, 150

Q2 Show the following numbers on the number line (100 to 150): (a) Place an arrow on 125 (b) Make a tree on 112 (c) Make a smiley on 149 (d) Put a cross on 137.

SOLUTION

On the number line from 100 to 150, locate each number between the nearest tens.
(a) 125 is halfway between 120 and 130. Place an arrow at 125.
(b) 112 is 2 steps after 110. Draw a tree at 112.
(c) 149 is 1 step before 150. Draw a smiley at 149.
(d) 137 is 7 steps after 130. Put a cross at 137.
Mark 125 (arrow), 112 (tree), 149 (smiley), 137 (cross) at their correct positions on the 100–150 number line.

Exercise 3.9 — Let us Do — Numbers from 150 to 200

Q1 Observe the table and fill in the blanks. 100 and 1 makes One Hundred One (101); 100 and 2 makes One Hundred Two (102); fill up to 100 and 9 makes One Hundred Nine (109); and 100 and 10 makes One Hundred Ten (110). Also fill: 100 and 6 makes ___, 100 and 7 makes ___, 100 and 8 makes ___, 100 and 9 makes ___.

SOLUTION

100 and 6 makes 106 (One Hundred Six).
100 and 7 makes 107 (One Hundred Seven). Already given.
100 and 8 makes 108 (One Hundred Eight).
100 and 9 makes 109 (One Hundred Nine).
100 and 10 makes 110 (One Hundred Ten). Already given.
106, 107 (given), 108, 109, 110 (given)

Q2 Fill the blank spaces in the table for numbers 150 to 159: 100 and 53 makes ___, 100 and 54 makes ___, 100 and 55 makes ___ (One Hundred and Fifty Five), 100 and 56 makes ___, 100 and 57 makes ___, 100 and 58 makes ___, 100 and 59 makes ___.

SOLUTION

100 + 53 = 153 (One Hundred and Fifty Three).
100 + 54 = 154 (One Hundred and Fifty Four).
100 + 55 = 155 (One Hundred and Fifty Five). Given.
100 + 56 = 156 (One Hundred and Fifty Six).
100 + 57 = 157 (One Hundred and Fifty Seven).
100 + 58 = 158 (One Hundred and Fifty Eight).
100 + 59 = 159 (One Hundred and Fifty Nine).
153, 154, 155 (given), 156, 157, 158, 159

Q3 Write the numbers in order on the stones: 150, 158, 163, ___.

SOLUTION

The stones show numbers in increasing order.
The sequence visible is: 150, 158, 163.
The next stone continues the pattern (numbers on the page: 167, 177, 182, 189, 199).
Fill the stones in ascending order: 150, 158, 163, 167, 177, 182, 189, 199.
150, 158, 163, 167, 177, 182, 189, 199 — the stones shown on the page border in ascending order are: 150, 158, 163 (bottom row), then 167, 177, 182, 189, 199 continuing up and across.

Exercise 3.10 — Let us Do — Jumping Game

Q1 Draw jumps of 5 on the number line and write the numbers in the given spaces. Starting from 100, fill in: 100, ___, ___, ___, 120, ___, ___, ___, ___, ___, 150.

SOLUTION

Each jump is +5.
100, 105, 110, 115, 120, 125, 130, 135, 140, 145, 150.
Check: 100 + 5×10 = 150. ✓
100, 105, 110, 115, 120, 125, 130, 135, 140, 145, 150

Q2 Continue the jumps of 20 and write the missing numbers on the number line: 100, 120, ___, ___, ___, 200.

SOLUTION

Each jump is +20.
100, 120, 140, 160, 180, 200.
Check: 100 + 20×5 = 200. ✓
100, 120, 140, 160, 180, 200

Q3 Fill in the table of 1 less, Number, 1 more: (a) ___, 160, ___ (b) ___, 129, ___ (c) ___, 187, ___ (d) ___, 134, ___ (e) ___, 158, ___

SOLUTION

(a) 160: 1 less = 159, 1 more = 161.
(b) 129: 1 less = 128, 1 more = 130.
(c) 187: 1 less = 186, 1 more = 188.
(d) 134: 1 less = 133, 1 more = 135.
(e) 158: 1 less = 157, 1 more = 159.
(a) 159, 160, 161 (b) 128, 129, 130 (c) 186, 187, 188 (d) 133, 134, 135 (e) 157, 158, 159

Q4 Show at least two different ways of making the following numbers: (a) Use matchstick bundles to make 125 (b) Make 145 using a ginladi (c) Make 170 on a number line.

SOLUTION

(a) 125 using matchstick bundles:
Way 1: 1 hundred-bundle + 2 ten-bundles + 5 loose sticks = 100 + 20 + 5 = 125.
Way 2: 1 hundred-bundle + 1 ten-bundle + 15 loose sticks = 100 + 10 + 15 = 125.
(b) 145 using a ginladi (number line strip):
Way 1: Jump to 100, then 40, then 5 more → 145.
Way 2: Jump to 140, then 5 more → 145.
(c) 170 on a number line: Starting at 100, jump +70, or in two jumps of 35 each, landing on 170.

(a) 1 hundred + 2 tens + 5 ones = 125 (b) 140 + 5 = 145 (c) mark 170 as 100 + 70 on the number line

Q5 Fill in the empty boxes: Number | Matchstick Bundles (100s, 10s, 1s) | Pictorial Form | Number Sentence. Given anchor: 172.

SOLUTION

172 = 1 hundred-bundle + 7 ten-bundles + 2 loose sticks.
Number sentence: 100 + 70 + 2 = 172.

Other rows shown: 114 = 100 + 10 + 4	100 and 14 more.
132 = 100 + 30 + 2	100 and 32 more.
108 = 100 + 0 + 8	100 and 8 more.
180 = 100 + 80 + 0	30 more than 150 → 150 + 30 = 180.

160 = 100 + 60 + 0.
172 → 1 hundred, 7 tens, 2 ones → 100 + 70 + 2 = 172

Q6 Mark the following numbers on the number line: (a) 109, 112, 124, 134, 146 on the line 100–150 (b) 155, 163, 178, 189, 198 on the line 150–200 (c) 125, 142, 153, 174, 199 on the line 100–200.

SOLUTION

(a) On the 100–150 number line:
109 is just after 100 (9 steps). 112 is 2 after 110. 124 is 4 after 120. 134 is 4 after 130. 146 is 6 after 140.
(b) On the 150–200 number line:
155 is 5 after 150. 163 is 3 after 160. 178 is 8 after 170. 189 is 9 after 180. 198 is 8 after 190.
(c) On the 100–200 number line:
125 is between 120–130. 142 is between 140–150. 153 is between 150–160. 174 is between 170–180. 199 is between 190–200.
(a) Mark 109, 112, 124, 134, 146 at their correct positions between 100 and 150. (b) Mark 155, 163, 178, 189, 198 between 150 and 200. (c) Mark 125, 142, 153, 174, 199 on the 100–200 number line.

Exercise 3.11 — Let us Do at Home — Seeds Estimation to 200

Q1 Fill a small container with seeds. Estimate how many seeds are in it. Count and see how close your estimate is. Guess how many times you need to fill the container to get close to 200 seeds.

SOLUTION

This is a hands-on home activity.
Estimate before counting — write your estimate.
Count the seeds carefully. Compare the count with your estimate.
If the container holds about 40 seeds, then 200 ÷ 40 = 5 times.
If the container holds about 50 seeds, then 200 ÷ 50 = 4 times.
Your answer depends on the size of your container and the type of seed.
Answers vary by container size. If one container ≈ 50 seeds, then 4 containers ≈ 200 seeds.

Exercise 3.12 — Let us Play — Clap, Snap and Pat

Q1 One clap = 100, one snap = 10, one pat = 1. Two claps = 200, two snaps = 20, two pats = 2. Guess the numbers shown: Clap–Snap Snap–Pat Pat Pat = ?

SOLUTION

Clap (1 clap = 100) + Snap Snap (2 snaps = 20) + Pat Pat Pat (3 pats = 3).
= 100 + 20 + 3 = 123.
123 (One Hundred and Twenty Three)