Cambridge Primary Mathematics 0096 · Stage 3

CM3-B1

Sir Cumference and All the King's Tens

Np Place value, ordering and rounding · A 30-minute lesson with a 15-minute short version.

Learning intention

For learners

We are learning to make, break apart and regroup 3-digit numbers into hundreds, tens and ones.

Success criteria

- I can show hundreds, tens and ones with objects.
- I can draw or diagram the same maths.
- I can record my answer and explain how the story supports it.
- I can use TWM.04 while I work.

Learning objectives

3Np.03	Make, break apart and regroup 3-digit numbers into hundreds, tens and ones.
TWM.04	Convincing: give evidence to back up or challenge an idea or answer.

30-minute lesson

Governed source lesson: Ten Ones Make a Ten: Building the King's Lunch Count · Concept · Regrouping ten ones into a ten and ten tens into a hundred

1 Find the maths in the story

4 min

3Np.03

Read-along: Listen with highlighting and pause at the passage used by “Ten Ones Make a Ten: Building the King's Lunch Count”.

Teacher: Each group takes 987 beans and no trays, and tries to count them into one pile the way the crowd first stood in the meadow. Stop the count at two minutes wherever it has reached and say the number you got to. Compare your stopping number with the group beside you and say aloud whether the two of you agree.

Learners: Notice the story evidence and say the maths question in their own words.

2 Model it with objects

5 min

3Np.03

Read-along: Replay the source passage while building the quantities, shapes or measures it supplies.

Teacher: Load ten beans into each ten-frame strip until no strip is short. Say ten ones make one ten each time a strip fills, and set the full strips in their own pile. Count the leftover loose beans and say how many ones are still not in a strip.

Learners: Build a concrete model and check that each part matches the read-along.

3 Try the concrete task

6 min

3Np.03

Read-along: Keep the relevant story page visible as the class tests the model.

Teacher: Band ten filled strips together and say ten tens make one hundred as the band goes on. Keep banding until fewer than ten loose strips remain. Say the count now as hundreds, then strips, then loose beans, in that order.

Learners: Change or compare the objects, then explain what stayed the same and what changed.

4 Draw the maths

5 min

3Np.03

Read-along: Return to the same story evidence before learners make a pictorial record.

Teacher: Model a clear drawing, diagram or mark for the concrete work without adding a quantity the story does not supply.

Learners: Draw the model and label the important parts with maths language.

5 Record and solve

6 min

3Np.03

Read-along: Use the read-along once more as the evidence check for the abstract record.

Teacher: Point at the hundreds pile, the strips and the loose beans in turn and say nine hundreds, eight tens, seven ones. Then say the one number those three piles are together. Say which pile you would go to first if someone asked you to hand over one hundred beans.

Learners: Record the result with suitable numbers, words or symbols and link it back to the picture.

6 Reflect and convince

4 min

TWM.04

Read-along: Show the source passage and invite a final evidence-based check.

Teacher: Name the Thinking and Working Mathematically focus: Convincing: give evidence to back up or challenge an idea or answer.

Learners: Use the concrete model, drawing and record together to justify the answer.

Read-along routes

Shared maths question

How does Sir Cumference and All the King's Tens help us explore hundreds, tens and ones?

Evidence required

Show the story evidence, a concrete model, a pictorial record and a matching abstract record.

Solo	Supported	Listening
Read independently, pause at the named source passage and complete the shared maths model.	Read with the audio and use the teacher's pause points, objects and response frame.	Listen with the text highlighted, build the same model and give the explanation orally.

Assessment check

The learner meets 3Np.03 by showing and explaining the objective through the story model. Evidence for TWM.04 is visible when the learner demonstrates this Thinking and Working Mathematically focus: Convincing: give evidence to back up or challenge an idea or answer.

15-minute short version

1 Story question

4 min

3Np.03

Read-along: Listen to the passage used by “Ten Ones Make a Ten: Building the King's Lunch Count”.

Teacher: Each group takes 987 beans and no trays, and tries to count them into one pile the way the crowd first stood in the meadow. Stop the count at two minutes wherever it has reached and say the number you got to. Compare your stopping number with the group beside you and say aloud whether the two of you agree.

Learners: Name the maths question and the story evidence.

2 Build, draw and record

7 min

3Np.03

Read-along: Replay the evidence while learners move from objects to a drawing and a record.

Teacher: Load ten beans into each ten-frame strip until no strip is short. Say ten ones make one ten each time a strip fills, and set the full strips in their own pile. Count the leftover loose beans and say how many ones are still not in a strip.

Learners: Make one concrete model, draw it and add numbers, words or symbols.

3 Check and explain

4 min

TWM.04

Read-along: Return to the source page for the final check.

Teacher: Ask learners to demonstrate: Convincing: give evidence to back up or challenge an idea or answer.

Learners: Explain why the model answers the story question.

Learner activity

Concrete, pictorial, abstract: Hundreds, tens and ones

Use the read-along evidence for every part. Do not add a number or measure that the story does not give.

1. Build the story maths with objects.

2. Draw the same model and label its important parts.

3. Record the result with suitable numbers, words or symbols.

4. Explain how your evidence uses TWM.04.