

The teens are one ten and units

CURRICULUM ALIGNMENT

NUM.PVT.2a

understand that digits have different values depending on their place or position in a number.

INTERACTIVES Place Value Blocks (Dienes) · challenge, display, explore

WHAT THIS LESSON TEACHES

Teen numbers from 11 to 19 are each made of one ten and some loose units. The digit 1 in the tens place stands for one ten-rod.

→ 14 is one ten-rod and 4 unit cubes.

→ 11 is one ten-rod and just 1 unit cube.

MODEL THIS ON THE BOARD

BUILDING THE NUMBER 13

- ① Place **1** ten-rod on the mat.
- ② Add **3** loose unit cubes beside it.
- ③ The total is **13**.
- ④ Say together: one ten and three units.

LESSON ARC

Open with one tied bundle of ten sticks and four loose sticks held up for the class — take three hands-up answers and listen for ten-and-four or fourteen before any mat appears. Walk four teen snapshots on the place-value-blocks interactive (14, 17, 11, 19), having the class say one ten and ___ before each numeral is named. Pupils build 13, 16 and 12 at the board together, then draw 14 as one rod and four units in their copybook. Class Challenge turns practise 12, 15 and 11, each Check ending with what the front 1 stands for.

TEACHING MOVES

1. **Getting Started.** Hold one tied bundle of ten and four loose sticks so every pupil can see. Take three hands-up answers — ten and four or fourteen are both gold. Do not open the place-value mat yet; let the sticks carry the idea alone.
2. **Watch and Notice.** Walk the four snapshots one at a time on the place-value-blocks interactive. For each, make the class say one ten and ___ before you name the numeral. Linger on 11 — only one unit cube — and tap the 1 as the bundle, not a loose one. Keep the beat moving.
3. **Try It Together.** One pupil builds at the board; the class agrees or corrects out loud. Call 13, then 16, then 12. After each build, the whole class says one ten and ___ before the next pupil comes up. Watch for ten loose cubes in the units column and prompt a trade for one rod.
4. **Draw 14 in your copy.** Give the full four minutes. Walk the room glancing for a single rod, four small cubes and the numeral 14 beneath — this is whole-class copybook practice, not marking. A clear rod-and-units sketch is enough.
5. **Class Challenge.** Board order: 12, then 15, then 11. Keep each turn brisk — build, Check, then ask what the 1 at the front stands for. Aim for a quick the ten-rod or one bundle of ten. If a build stalls, prompt the trade rather than re-teaching the whole idea.

6. **What Did We Notice?** Ask: in 14, does the 1 stand for the ten-rod or one loose cube? Revoice strong answers as so the 1 at the front is the bundle, and the 4 is the loose ones. Head off because fourteen has a 1 in it with no place-value meaning — push back to the rod.

COMMON MISCONCEPTIONS

⚠ Pupils put ten loose unit cubes in the units column instead of one ten-rod, then add more cubes on top.

Stop the build. Point at the ten loose cubes and ask for a trade: swap them for one rod in the tens place. Rebuild the same teen and have the class say one ten and ____ before moving on.

⚠ Pupils say the 1 at the front is just one — they treat it as a single loose cube, not a bundle of ten.

Put one unit cube beside one ten-rod on the interactive. Same digit shape on the numeral, very different value. Tap the rod and revoice: the 1 is this whole bundle.

⚠ On 11, pupils freeze or build two loose cubes, because one ten and one feels like double-counting the same one.

Hold 11 on the mat longer than the others. Cover the rod, reveal the single unit, then uncover both: one ten and one. Have the class chorus one ten and one before the numeral is named.

DIFFERENTIATION

EMERGING

- Pre-place the ten-rod on the interactive so the pupil at the board only counts and adds the unit cubes.
- Stay on clearer teens such as 14 and 15 for copybook drawing; leave 11 as a teacher-supported look-and-say.

DEVELOPING

- After the copybook 14, ask them to sketch 16 beside it and say what changed — only the units, not the rod.
- During Class Challenge waits, have them mouth one ten and ____ for the next number before it is called.

PROFICIENT

- After 11 is checked, narrate 18 from the front and ask what the build becomes if one more unit is added — push for one ten and nine, then name 19.
- Ask: why is the 1 in 17 worth more than the 7, even though 7 looks bigger? Copybook sentence, not a new build.

✂ **Cross-curricular:** Link to Gaeilge — chorus a haon déag, a dó dhéag while pointing at the ten-rod, then the units.

ANSWER KEY

Scaffold: visual check on the page

Q1: 2

Q2: 14

Q3: 1

Q4: 16

Q5: 9

a) Always : Every teen is exactly one ten plus loose units.

b) Never : The 1 always stands for the ten-rod, never a single unit.

c) Always : That is the place-value make-up of 17.

d) Never : 18 needs one ten-rod and eight units, not two tens.

EXTENSION SHEET · STRETCH ANSWERS

S1: 4

S2: 4

S3: 8

S4: 5