

Lesson 23 **NUMBER****Multiplying a 2-digit number by 1 digit – partition first**

WHAT THIS LESSON TEACHES

To multiply a two-digit number by one digit, partition the two-digit number into tens and units first. Multiply each part by the one-digit number, then add the two part-products.

→ 24 splits into 20 and 4. For 24×3 the tens part-product is $20 \times 3 = 60$.

→ $60 + 12 = 72$, so $24 \times 3 = 72$.

MODEL THIS ON THE BOARD

PARTITION 24×3

- ① Split 24 into tens and units: **20** and **4**.
- ② Tens part-product: **$20 \times 3 = 60$** .
- ③ Units part-product: **$4 \times 3 = 12$** .
- ④ Add the parts: **$60 + 12 = 72$** .

DISCUSSION STARTER

REFLECT Did splitting into tens and units make the multiply step feel easier? Why?

ANSWER KEY

a) 45

b) 72

c) 84

Q1: 26 grapes

Q2: 48 buns

Q3: 51 carrots

a) **Always** — Partitioning into tens and units is the method taught in this lesson.

b) **Always** — Tens are at least 10 while units are at most 9, so the tens product is always bigger.

c) **Always** — Adding the tens product and units product gives the whole product.

d) **Never** — The same split-and-multiply steps work for any one-digit multiplier.