

Divisibility rules and tests

WHAT THIS LESSON TEACHES

A quick check that tells you whether one number divides evenly into another, with nothing left over, without actually doing the division.

→ 3540 ends in 0 so divides by 2, by 5 and by 10 at a glance.

→ 162 has digit sum 9 so divides by 3 and by 9.

MODEL THIS ON THE BOARD

TEST 3540 FOR 2, 5 AND 10

- ① Look at the last digit of **3540** which is 0.
- ② A last digit of 0 means it divides evenly by 2, by 5 and by 10.
- ③ No division needed to know the answer.

ANSWER KEY

Scaffold: visual check on the page

Q1: Yes

Q2: Yes

Q3: Yes

Q4: Yes

Q5: Yes

a) **Always** — Any number ending in 0 is a multiple of 10.

b) **Always** — This is the exact rule for divisibility by 4.

c) **Never** — Digit sum 9 means divisible by 3 or 9, not by 2.

d) **Sometimes** — Even means divisible by 2 but needs end in 0 or 5 for 5.

EXTENSION SHEET · STRETCH ANSWERS

S1: 1, 2, 3, 6, 9, 18