Factors and Multiples

Can you build it? Can you grow it?



Created with LessonDino.com · AI lesson planner with checkable sources

Today we will...



WE ARE LEARNING TO

Find all factor pairs for numbers to 100

Connect factors, multiples, and prime numbers

SUCCESS LOOKS LIKE

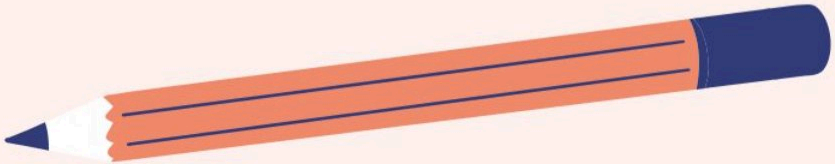
- ✓ I can list factor pairs in order
- ✓ I can spot multiples of one-digit numbers
- ✓ I can tell prime or composite

Created with LessonDino.com · AI lesson planner with checkable sources

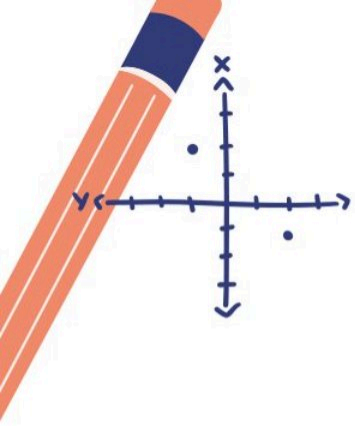


BIG IDEA

Factors build a number, multiples grow from it.



Created with LessonDino.com · AI lesson planner with checkable sources



Find all factor pairs

1. Start with 1 times the number
2. Try 2, 3, 4 in order
3. Keep it if it divides with no leftover
4. Stop when pairs meet or cross

Created with LessonDino.com · AI lesson planner with checkable sources

Which would you explore?

Which number looks most fun to find factors for?

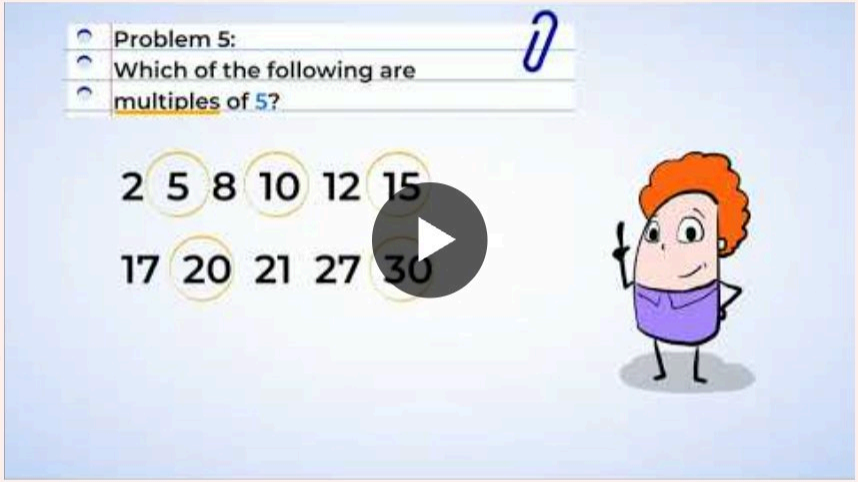
- **A** 24 - lots of pairs
- **B** 49 - a square surprise
- **C** 29 - maybe prime?
- **D** 36 - many rectangles



Vote with your hands, then explain why.

Created with LessonDino.com · AI lesson planner with checkable sources

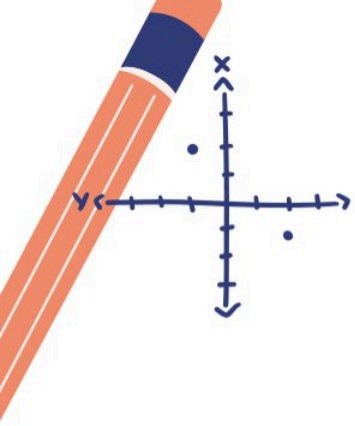
Watch: factors in action



▶ 0:00 – 5:00

- Listen for factor pairs building numbers
- Watch how multiples count up bigger

Created with LessonDino.com · AI lesson planner with checkable sources



Key words

factor

a number that divides into another number with no leftover

multiple

what you get when you multiply

prime

has only two factors: 1 and itself

composite

has more than two factors

Created with LessonDino.com · AI lesson planner with checkable sources

Watch: prime or composite?



▶ 0:00 – 5:00

- Clap when you hear prime
- Call out composite numbers you spot

Created with LessonDino.com · AI lesson planner with checkable sources

Your task

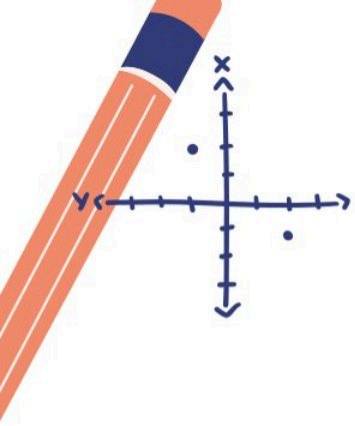
Build rectangles for 24 with counters and list every factor pair.

1. Build every rectangle you can with 24 counters
2. Write each one as a pair, like 3 x 8
3. Decide prime or composite and explain why

10 min

In pairs

Created with LessonDino.com · AI lesson planner with checkable sources



Factor or multiple?

🔍

Factors fit in

2 and 6 are factors of 12.

🌱

Multiples grow out

12, 24, 36 are multiples of 12.

⭐

Prime

7 has only 1 and 7.

Composite

12 has many more factors.

Created with LessonDino.com · AI lesson planner with checkable sources

Quick quiz

1. List all factor pairs for 18.
2. Is 56 a multiple of 7?
3. Is 17 prime or composite?
4. True or false: 35 is a multiple of 5 and 7.



Created with LessonDino.com · AI lesson planner with checkable sources