

Repeat It

Use a repeat (loop) to make programs shorter, and continue repeating patterns.

Name _____ Date _____ Class _____

Learning objective: I can use a repeat to make a program shorter.

✓ I can spot a pattern ✓ I can say how many times to repeat ✓ I can write a repeat program

Arrow cards: ↑ = move forward one square ↶ = turn left ↷ = turn right. The robot moves the way its orange nose points.

Repeat: instead of ↑ ↑ ↑ we can write **repeat 3 × ↑**.

1 How many times? Fill in the number so the robot reaches the flag.

Robot 1



repeat ____ × ↑

Robot 2



repeat ____ × ↓

Robot 3



repeat ____ × ↑

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2 Make it shorter Write each program as a repeat.

1 ↑ ↑ ↑ ↑

2 ↺ ↺ ↺ ↺

3 What comes next? Draw or write the next two in each pattern.

1 clap, stamp, clap, stamp, clap, ...

2        ...

3 jump, jump, spin, jump, jump, spin, ...

4 True or false?

	TRUE	FALSE
1 A repeat makes a program shorter.	☐	☐
2 'repeat 2 × ↑' moves the robot 3 squares.	☐	☐
3 'repeat 3 × ↑' is the same as ↑ ↑ ↑.	☐	☐

5 Your own pattern Make a dance pattern and write it as a repeat.

1 My pattern:

Answer Key

Repeat It

Question	Answers
1 How many times?	1. repeat 4 × ↑ 2. repeat 3 × ↑ 3. repeat 5 × ↑
2 Make it shorter	1. repeat 4 × ↑ 2. repeat 4 × ↻ (the robot spins all the way round and faces the same way again)
3 What comes next?	1. stamp, clap 2. ● ● 3. jump, jump
4 True or false?	1 True ; 2 False – it moves the robot 2 squares; 3 True
5 Your own pattern	1. e.g. repeat 3 × [clap, spin]

Teaching note: the loop answers were checked by simulation.