Student Name: ..... **Date:** .....

Activity 1.1: Repeat Loop Shape Prediction

Look at the Scratch script below. The sprite draws lines and turns. What shape does it draw?



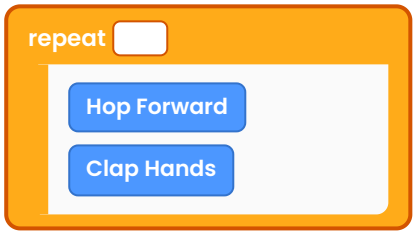
Which geometric shape is formed?

- ☐ [ ] Triangle (3 sides)
- ☐ [ ] Square (4 equal sides)
- ☐ [ ] Circle (curved)

Activity 1.2: Loop Block Compactor

Compress this long repeated sequence into a clean Scratch repeat loop block.

- Hop Forward 🐾
- Clap Hands 👏
- Hop Forward 🐾
- Clap Hands 👏
- Hop Forward 🐾
- Clap Hands 👏



How many times does the pair repeat?
Answer: [ ] times

Activity 1.3: Forever vs. Repeat Match-up

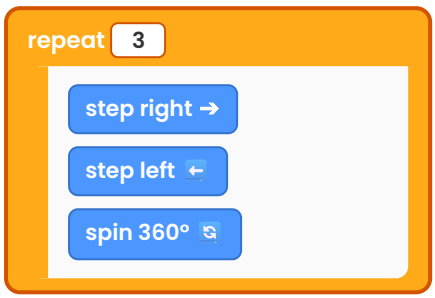
Match each Scratch control loop block with how many times it executes code.

1. repeat [10] loop ●	● A. Runs without stopping
2. forever loop ●	● B. Runs 10 times then stops

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Activity 2.1: Robot Dance Routine

Follow the robot dance algorithm below. Write down how many total dance spins the robot performs.



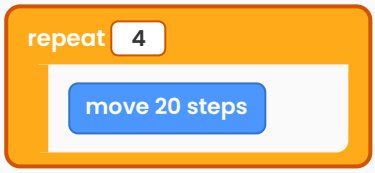
- How many total times does the robot step right?
  Answer: [ ]
- How many total spins are performed?
  Answer: [ ]

Activity 2.2: Loop Step Math Challenge

Calculate the total distance the Scratch Cat moves for each loop block script.



Total Steps = 5 × 10 = [ ]



Total Steps = 4 × 20 = [ ]

Activity 2.3: Debug the Endless Spinner Bug

*Ben wanted his ballerina sprite to spin **3 times and stop**, but she keeps spinning forever! Find and circle the bug.*



What is the bug?

- ☐ Used **forever** instead of **repeat 3**
- ☐ The turn angle is too big