

Sliding shapes (translation) on squared paper

CURRICULUM ALIGNMENT

SHA.TRN.3

model and explain the effects of transformations on shapes and line segments.

SHA.SAL.3a

describe, interpret and record directional instructions and location.

INTERACTIVES Transformation Playground · challenge, display, explore

WHAT THIS LESSON TEACHES

When a shape slides on squared paper, it moves to a new place but keeps facing exactly the same way. It does not turn and it does not flip, and every corner moves the same number of squares in the same direction.

- A chess piece pushed three squares across the board without being spun around.
- If one corner moves 4 squares right, all the corners move 4 squares right.

MODEL THIS ON THE BOARD

SLIDE A GAME TOKEN 2 SQUARES RIGHT

- 1 Draw a small L-shaped token on the squared paper for a board game.
- 2 Mark every corner of the token carefully.
- 3 Move each corner exactly 2 squares to the right, keeping the same up-down position.
- 4 Redraw the token in the new spot. Check it still faces the same way with no turn or flip.

DISCUSSION STARTER

REFLECT How can you tell a slide from a flip or a turn just by looking?

ANSWER KEY

Scaffold: visual check on the page

Q1: Yes

Q2: Yes

Q3: No

Q4: Yes

Spot: A slide (translation) moves a shape without turning or flipping it. The triangle must still point the same way after moving 3 squares right.