## Unit 1 Lesson 3: Making the Moves

1 Notice and Wonder: The Isometric Grid (Warm up)

## Student Task Statement

What do you notice? What do you wonder?


## 2 Transformation Information

## Student Task Statement

Your teacher will give you tracing paper to carry out the moves specified. Use $A^{\prime}, B^{\prime}, C^{\prime}$, and $D^{\prime}$ to indicate vertices in the new figure that correspond to the points $A, B, C$, and $D$ in the original figure.


1. In Figure 1, translate triangle $A B C$ so that $A$ goes to $A^{\prime}$.
2. In Figure 2, translate triangle $A B C$ so that $C$ goes to $C^{\prime}$.
3. In Figure 3, rotate triangle $A B C 90^{\circ}$ counterclockwise using center $O$.
4. In Figure 4, reflect triangle $A B C$ using line $\ell$.

5. In Figure 5, rotate quadrilateral $A B C D 60^{\circ}$ counterclockwise using center $B$.
6. In Figure 6, rotate quadrilateral $A B C D 60^{\circ}$ clockwise using center $C$.
7. In Figure 7, reflect quadrilateral $A B C D$ using line $\ell$.
8. In Figure 8, translate quadrilateral $A B C D$ so that $A$ goes to $C$.

## 3 A to B to C

Images for Launch


## Student Task Statement

Here are some figures on an isometric grid.


1. Name a transformation that takes Figure $A$ to Figure $B$. Name a transformation that takes Figure $B$ to Figure $C$.
2. What is one sequence of transformations that takes Figure $A$ to Figure $C$ ? Explain how you know.
