Name
Date $\qquad$

## Master 7.10 Additional Activity 1: Hidden Pictures

Work on your own.
You will need grid paper and a ruler.
Mark a point at each pair of coordinates.
Use a ruler to connect the points in the order you draw them.


What is the hidden picture?

Take It Further:
Create your own hidden picture.
Write instructions for your picture.
Trade instructions with a classmate.
Draw your classmate's picture.
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## Master 7.11 Additional Activity 2:

 Transformation PatternsWork with a partner.
You will need 1-cm grid paper.
Draw the next figure in each pattern.

## Pattern A



## Pattern B



## Pattern C



Describe the transformations used in each pattern.

## Take It Further:

Create your own pattern using transformations.
Describe the transformations you used to create your pattern.
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## Master 7.12 Additional Activity 3:

## Folding Figures

Work on your own.
You will need scissors.
Draw a broken line on each figure to make two congruent figures.
You may be able to draw more than one line on some figures.
You may not be able to draw any lines on other figures.


Cut out each figure.
Fold each figure along the line or lines you drew to check your work.
Take It Further:
Draw a figure for which you can draw each number of broken lines: $0,1,2$
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## Master 7.13 Additional Activity 4: Symmetry Patterns

Work with a partner.
You will need grid paper and coloured pencils.
The broken lines are lines of symmetry.
Draw the figure that is shown in the top left section in the other three sections to make a symmetrical pattern.


Take It Further: On grid paper, draw a horizontal broken line and a vertical broken line. In the top left section, draw a figure. Draw the figure in the other three sections to make a pattern with two lines of symmetry.

