Explore

You will need Pattern Blocks and a Mira.

Choose 3 Pattern Blocks, 2 the same and 1 different.
Arrange the 3 blocks to make a figure with exactly 1 line of symmetry.
Each block must touch at least one other block.
Trace the figure.
Draw a dotted line to show the line of symmetry.

Show *and* Share

Describe the strategy you used to solve the problem.
Could you make more than one figure? Explain.

Connect

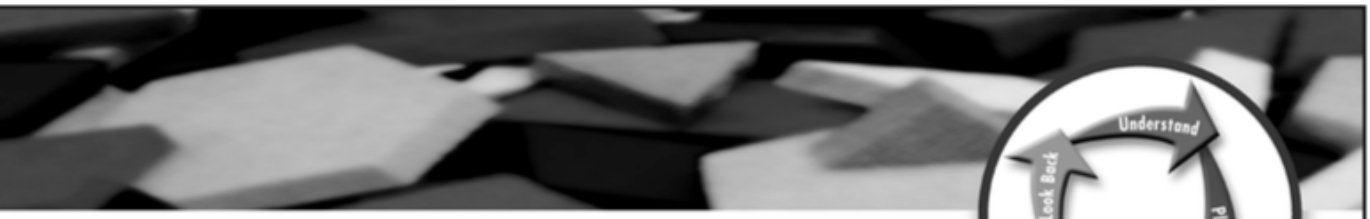
You will need pentominoes, 2-cm grid paper, and a Mira.
Choose 2 different pentominoes.
Arrange the pentominoes to create a figure with exactly 1 line of symmetry.
Trace the figure and show the line of symmetry.

What do you know?
- Use 2 different pentominoes.
- Arrange the pentominoes to make a figure.
- The figure must have exactly 1 line of symmetry.

Think of a strategy to help you solve this problem.
- You can use **guess and check** to find a figure with exactly 1 line of symmetry.

Strategies

- Make a table.
- Use a model.
- Draw a diagram.
- Solve a simpler problem.
- Work backward.
- **Guess and check.**
- Make an organized list.
- Use a pattern.
- Draw a graph.



Solve

Arrange the pentominoes to make a figure.
Use a Mira to check for lines of symmetry.
If the figure has no lines of symmetry
or more than one line of symmetry,
try a different arrangement to make a new figure.

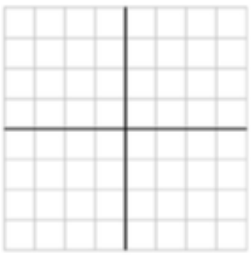
Look Back

Check your work.
Does your figure have exactly 1 line of symmetry?
How do you know?

Practice

Choose one of the **Strategies**

1. Draw mirror lines to divide a piece of grid paper in 4 congruent sections.
   Draw Figure A in one section.
   Reflect Figure A in one of the mirror lines.
   Label the image B.
   Reflect Image B in the other mirror line.
   Label the image C.
   Describe a transformation that would move Figure A directly onto Image C.
   How many different transformations can you find?



2. Repeat question 1.
   This time divide the paper in 3 sections.