

Tiling and Patterns

Chapter 2: Hide and Seek · Topic 2

Key Concept

Shapes that tile well include squares, rectangles, and triangles, since their sides fit together perfectly without leaving gaps.

Some shapes, like regular circles, cannot tile a surface alone because they leave gaps between them when placed together.

Tiling patterns are seen in floor tiles, honeycomb structures (using hexagons), and many decorative designs.

Creating tiling patterns helps us understand geometry, spatial reasoning, and how shapes fit together, which is also useful in art and design.

Quick Revision Notes

- Tiling means covering a surface without gaps or overlaps.
- Squares, rectangles and triangles tile well.
- Circles alone cannot tile a surface without gaps.
- Floor tiles show tiling patterns.
- Honeycombs use hexagon tiling.
- Tiling helps understand geometry and spatial reasoning.
- Tiling patterns are used in art and design.
- Shapes that fit together perfectly create good tiling.

Practice Questions

- 1 Create a tiling pattern using squares on paper.
- 2 Try tiling with triangles and check for gaps.
- 3 Find a tiling pattern in your home, like floor tiles.
- 4 Research honeycomb tiling and hexagons.
- 5 Design your own tiling pattern using two shapes.
- 6 Explain why circles don't tile well alone.