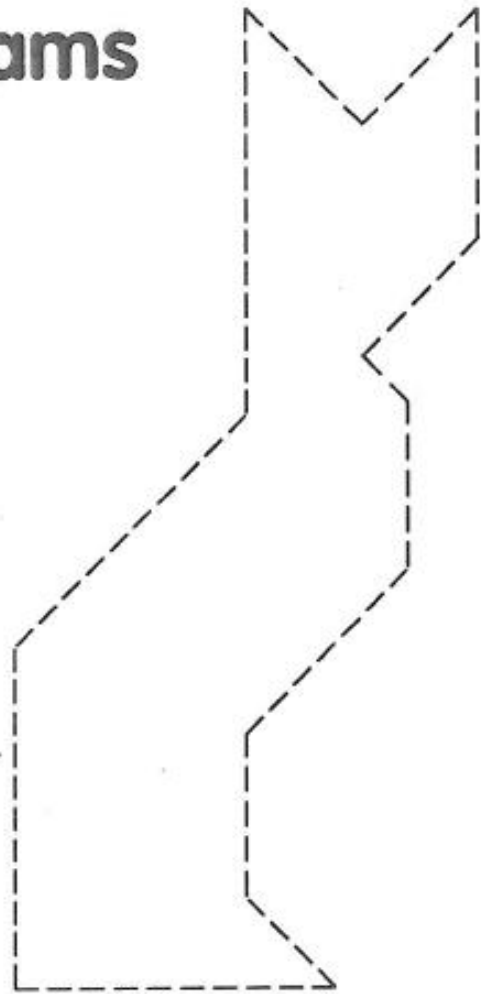
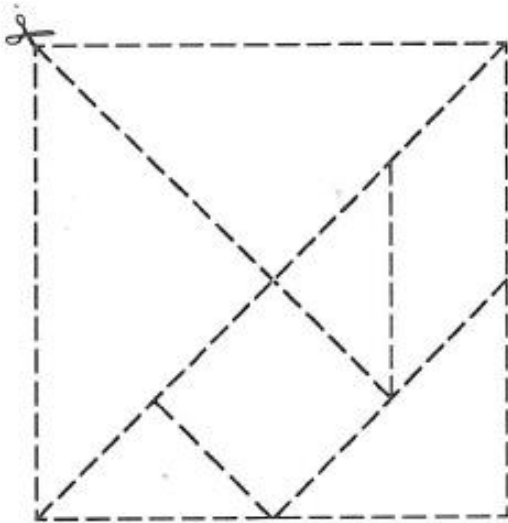


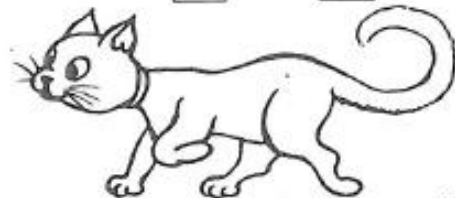
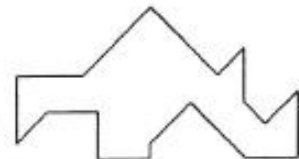
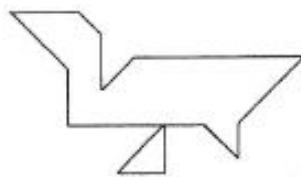
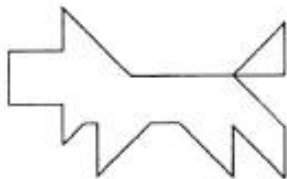
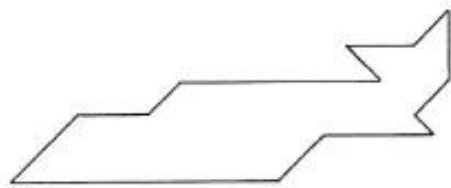
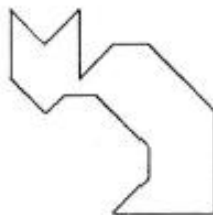
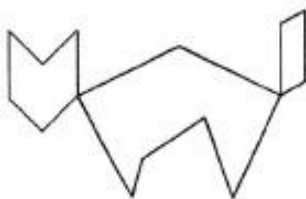


Cat Tangrams

- Cut out this square, then cut along the lines to make seven pieces.
- Fit the pieces inside the cat.



- Create the six shapes below.
- Draw the outline for each shape, then draw lines to show the position of the pieces.



- Create your own shapes.

Cat Tangrams - Ideas Page

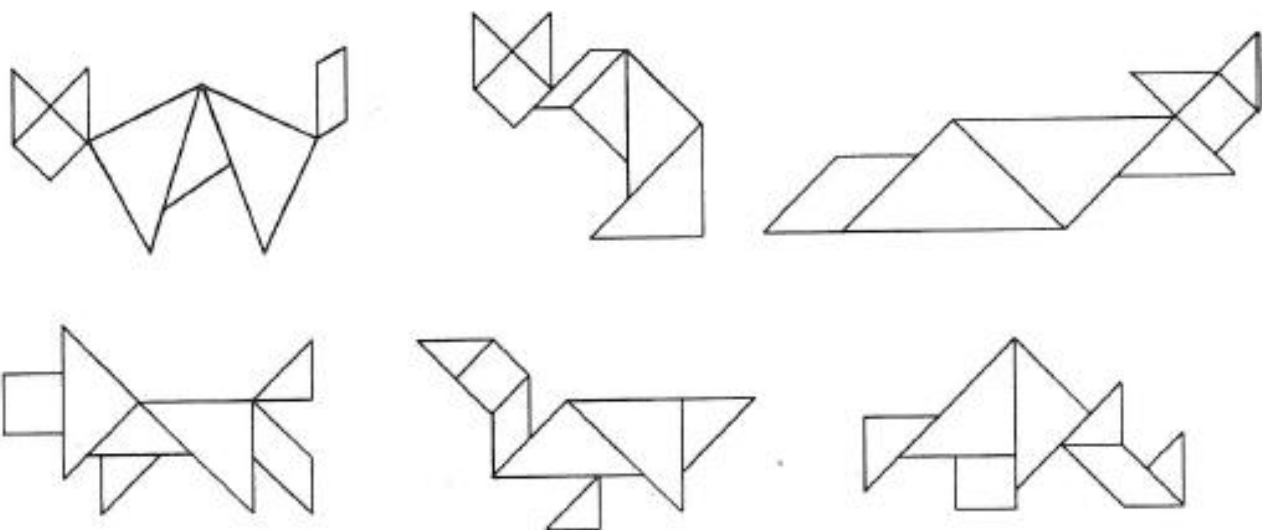


Aims

- To construct shapes using the seven-piece dissection of a square.
- To fit shapes into a given outline.

Activities

- The activity page could be photocopied on to card. Alternatively, the children could draw the square and then cut it out.
- The dissection of a square is known as a Chinese Tangram. The six shapes can be arranged in various ways:



- The children could create their own shapes by working in groups on particular themes, such as animals, ships, trees, people, houses.
- The children could design 'fitting' puzzles for one another by creating shapes, drawing an outline, and asking a partner to try to find the solution.



Extension

- Ask the children to study the seven pieces, and discuss and research the names of the shapes.
- The children could make shapes with different numbers of pieces, for example two-piece shapes, three-piece shapes and so on.
- Ask the children to make the following, using all seven pieces:



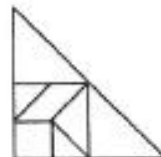
a rectangle



a trapezium



a parallelogram



a triangle

- Ask the children to discuss the relationships between the areas of each piece.
 - Label the pieces A, B, C, D, E, F, G.
 - Ask questions such as: how many Cs make an A, how many Cs make a D, how many Es make a B, and so on.
- If the area of the whole square is 64 square units, what are the areas of each of the pieces?

