



Making a Picture

Using everyday language to talk about shape and position



Children often enjoy creating pictures from a variety of coloured shapes.

Adults could offer them a picture frame and shapes, and encourage them to build a picture, talking about the shapes and patterns that they make.

The Activity

The adult works with a group of children around him/her. Using a variety of card shapes s/he chats with the children to find out where on the A3 sheet to place the shapes in order to create a picture. Once the pieces have been agreed they can be pasted in position along with the frame.

Encouraging mathematical thinking and reasoning:

Describing

Which shape would you like to use?

What can you see in the picture? How is it similar to/different from ...?

Is the picture finished? Are you ready to put the frame round it?

Tell me about the shape/pattern.

How many triangles/circles/squares/rectangles are there in your picture?

Reasoning

Why do you want it to go here?

Opening Out

What if we made another ... here?

What will happen if you take away that shape? Can you make another one like it here?

What could you add to your picture to make ...?

Recording

Where should we put it? What are you making?

The Mathematical Journey

Relationship between shapes

- making connections between the mathematical shapes they are offered and the world around them as they create the picture
- developing mathematical language to describe the shapes rather than describing them only by colour which is often the most obvious attribute to children

Properties of shapes

- using everyday language such as curved, pointy, straight, wiggly then progressing to using the mathematical names of the shapes such as circle, square rectangle, triangle, oblong

Position and spatial properties

- using positional language such as above, below, beside, on top of, underneath, left, right, in front, behind ...

Development and Variation

Making pictures as an independent activity with A4 sized frames

Creating junk models from packaging to explore 3D shapes and the language associated with them

Painting and drawing shapes

Creating specific images from sets of shapes such as a house, a cat, a dog, a boat ...

Playing with tangram pieces to create pictures Feeling shapes in a bag and trying to identify them



Resources

- Thin card or foam shapes (a selection of triangles, rectangles, semicircles etc.)
- A3 sheet of coloured thin card
- A (narrow) card frame that will go around the A3 sheet to create a 'picture frame'

Optional:

- Printed sheet of shapes and frames in different sizes
- A camera to take photos of children's creations.

Photo acknowledgements

<http://www.theimaginationtree.com>



nrich.maths.org/early-years

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