<u>Unit 5A</u> <u>Graphical Modelling</u>

Unit 5A

This unit explores the differences between an object based graphics program and a paint program. It also helps the children understand that visual models can be used to identify patterns and relationships.

Vocabulary

Object Layer

Resources

Paint Program Colour Magic Program

Assessment

All the children will be able to create and manipulate basic objects. Most of the children will be able to create, combine and manipulate objects, and explain possibilities.

Some of the children will be able to create and explore an accurate graphical model, checking their predictions and making decisions based on this.

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Lesson 1

Teacher Task

Open Paint. Demonstrate how objects in the drawing cannot be moved individually, but large areas can be cut and copied.

Discuss how it might be better if we could say 'pick up the bird shape and put it on a different part of the screen' without moving whole chunks of background. Close paint.

Open Colour magic.

Draw a series of objects (The Snail by Matisse). Show how you can pick up one object whilst not disturbing the others.

Show move, rotate and re-size.

Pupil Task

Create a picture of a man using circles only. Partner (2) has to move man's legs/ arms then print. Next partner (1) moves again. Print out.

Learning Outcome

Children will understand the limitations of paint packages for modelling. Children can use the object based graphics package to manipulate shapes.

Lesson 2

Pupil Task in Class

Draw a bird's eye plan of the classroom (include furniture but not objects).

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Lesson 3

Teacher Task

Still 2

Demonstrate features of package:-

Straight Lines Curved Lines Geometric Shapes Curved Shapes

Pupil Task

On screen create a floor plan of the classroom (using plan in workbook) using elements demonstrated.

More able encouraged to work to scale.

Save to disc.

Learning Outcome

Children can create objects using an objects based graphics package.

Lesson 4

Before going to computer suite measure 1 class table and class dimensions.

I.C.T. Suite

Teacher Task

Tell the children that they must try finding out how many tables can fit into their room comfortably. Then the best layout for best working and safety.

Pupil Task

As above.

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Learning Outcome

Children can use a graphical model to identify patterns and relationships.

Lesson 5, 6+7

Teacher Task

Discuss the school field (rectangle) and how it could be made into a rec. Ask them to produce maps showing their proposals. Thinking of safety etc.

Pupil Task

- 1. Preliminary sketches in sketch book.
- 2. Computer graphics image.
- 3. Print and Discuss in class.

Learning Outcome

Children can use a graphical model to form decisions about improving the School Site.