Developing images using repeating patterns in Revelation Natural Art

**IT
Year 4**

ABOUT THE UNIT

In this unit children learn to develop visual ideas and to realise these ideas using ICT. Children will need to use a computer graphics package like Revelation Natural Art to explore and experiment with ideas and will amend and modify their work to meet specific outcomes. They also learn to save their work as they go along.

Children learn to use ICT tools appropriately and will select areas of an image to cut, copy and change. They learn to export their work to other packages and import images from sources such as clip art, scanner or digital camera.

Children will apply what they have learnt in this unit when using ICT to produce pictures, plans and maps in art, design and technology, and geography.

WHERE THE UNIT FITS IN

Builds on the Unit earlier 'Creating pictures' in Revelation Natural Art.

TECHNICAL VOCABULARY

- cut
- copy
- paste
- import
- export
- undo
- save as
- scanner
- clip art
- digital camera

RESOURCES

- like Revelation Natural Art with a range of tools and edit features
- scanner, digital camera or clip art (see also Stamps collection in Revelation Natural Art).

EXPECTATIONS

at the end of this unit

most children will: use a computer graphics package like Revelation Natural Art to develop an image using a variety of tools

some children will not have made so much progress and will: use a computer graphics package like Revelation Natural Art to develop an image

some children will have progressed further and will: use a computer graphics package like Revelation Natural Art to develop and refine an image selecting the most appropriate tools, and saving drafts

LEARNING OBJECTIVES CHILDREN SHOULD LEARN	POSSIBLE TEACHING ACTIVITIES	LEARNING OUTCOMES CHILDREN	POINTS TO NOTE
SETTING THE SCENE			
• **key idea:** that ICT can be used to develop images	♦ Remind the class how ICT features, such as cut and paste, can help them with their writing. Explain that they are going to use ICT to develop pictures, using similar tools and techniques.	• recognise that ICT can be used to develop images	
SHORT FOCUSED TASKS			
• **key idea:** that pictures can be assembled by repeating elements • **technique:** to use stamps and/or the copy tool	♦ Collect wrapping paper that uses repeating patterns. Discuss how the patterns are created and talk about the background colours used. ♦ As well as the ready-made stamps, Revelation Natural Art provides you with tools to create your own stamps. Show the class how to use stamps and ask the children to create wrapping paper based on a theme, *eg plants or animals*. Encourage children to experiment with different flood fill backgrounds.	• create repeating patterns using the stamps. • Use stamps as a background. • Tile • Experiment with different size Stamps and select more than one stamp.	Encourage children to use the 'undo' command to go back to a previous step if a colour or pattern is unsuccessful. See the Revelation Natural Art Activity Guide for further work on patterns and tiling. There is also the step by step 'Wallpaper' activity on the Logotron website: http://www.logo.com/rna/ wrapping.htm
• **technique:** to alter the size of the brush tool	♦ Discuss the work of Georges Seurat and his use of dots. Demonstrate how to alter the size and pattern of the brush tool to produce a 'pointillist' effect. ♦ Ask children to recreate sketches from their sketchbooks on screen using a pointillist technique.	• create pictures using a variety of brush sizes and effects	A good website on the life and work of Georges Suerat: http://www.artchive.com/artchive/S/seurat.html
• **technique:** to select areas, copy and re-size them	♦ Demonstrate how areas of the screen can be selected, copied and re-sized. ♦ Show the class pictures of tropical fish. Ask children to create a fish tank by drawing a single fish then making multiple copies of different sizes.	• select appropriate areas, copy and re-size them	Some children will be able to copy pictures but not re-size them.

LEARNING OBJECTIVES	POSSIBLE TEACHING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE
CHILDREN SHOULD LEARN		CHILDREN	
• **technique:** to use a range of visual effects, such as reflection or symmetry	♦ Discuss designs which use symmetry, *eg Islamic carpets.* Demonstrate how a paint program can create symmetrical patterns automatically. ♦ Ask children to produce their own designs for carpets using the symmetry tool.	• create patterns using the symmetry tool	For website resources on Islamic carpets, see: http://www.weavingartmuseum.org/index2.html http://www.artteaching.co.uk/ offers an extensive section of resources on multicultural art. For a general site on the symmetric patterns at the Alhambra, see: http://weasel.cnrs.humboldt.edu/%7Espain/alh/index.html This useful website: http://www.islamicart.com/ is a general introduction to all types of Islamic design.
• **key idea:** that ICT can be used to recreate images made by hand • **key idea:** that a screen image can be a finished product • **technique:** to use 'save as' to keep drafts	♦ Ask children to create a number of black and white templates for stained-glass windows using felt pens or ink, possibly inspired by the work of Charles Rennie Mackintosh or from sketches of local church windows. Scan a number of sketches into the computer as a starting point for work on light and colour. Show the children how to use 'save as' to save drafts. ♦ For information on Mackintosh, visit: http://www.artmagick.com/artists/mackintosh.aspx ♦ Ask children to experiment with colours by flood filling the templates with various colours and ask them to use 'save as' to keep versions which work well. Discuss the quality of light created.	• recognise that a screen image can be a finished product • save drafts which show the development of their design	Black outlines may need retouching to prevent the flood fill from leaking. Children's work could be incorporated into an electronic 'art gallery' as part of the school's home page on the Internet. This encourages children to see the version on screen as the final one. Also see the Stained Glass selection of Stamps in Revelation Natural Art. For additional resources and ideas, this website has an extensive collection stained glass windows: www.stainedglassphotography.com/#bottom

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INTEGRATED TASK

LEARNING OBJECTIVES	POSSIBLE TEACHING ACTIVITIES	LEARNING OUTCOMES	POINTS TO NOTE
• to use the skills and techniques learnt to organise, reorganise and communicate ideas • to select suitable information and media and prepare it for processing using ICT	♦ Show the class a mixed-media collage, such as 'Guitar' by Pablo Picasso, and discuss some of the techniques used. Encourage children to find material that can be scanned, *eg from newspapers or magazines*. ♦ Ask children to use the various techniques learnt to incorporate the scanned images in order to create composite images, based on direct observation of musical instruments. Encourage them to focus on particular details, such as tuning pegs or keys. Each child could be given a different viewpoint. Remind them of the importance of saving drafts. ♦ Ask children to print out multiple copies of their work and use the print outs, together with other collected images, to make a mixed media collage.	• use a variety of materials, created on and away from the computer, and use them to make a final image	• Also see the two distinct types of graphics in the Stamps Music folder. • Useful websites on Pablo Picasso, including biography and examples of his paintings: http://www.artchive.com/artchive/P/picasso.html http://home.xnet.com/~stanko/