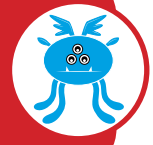# Unit 1.3: We are digital artists
Creating work inspired by great artists

Software: Brushes Redux and Autodesk SketchBook (alternatives: Microsoft Paint, Paint 3D, PaintZ for Chromebook)

Hardware: iPads (alternatives: laptop/desktop computers, Android tablets), styluses (optional)

Overview

In this unit, pupils use the Brushes Redux and Autodesk SketchBook apps on iPads to create paintings inspired by the work of famous artists. In:

- **Session 1** they create work based on Rothko's work
- **Session 2** they create work based on Kandinsky's *Squares with Concentric Circles*
- **Session 3** they create work based on Picasso's *Dove of Peace*
- **Session 4** they create work based on Matisse's *The Snail*
- **Session 5** they create work based on Julian Opie's outline style
- **Session 6** they create work based on Mondrian's grid paintings.

Alternatives

The unit sessions give step-by-step guidance to using Brushes Redux and Autodesk SketchBook. Brushes Redux works only on iOS (Apple), but Autodesk SketchBook is available for both iOS and Android. This unit could also be carried out on laptops or desktop computers using other painting programs, such as Microsoft Paint.

Knowledge, skills and concepts

In this unit, pupils will learn:

- how to select and set brushes and colours
- to create artwork in a range of styles on iPads
- to use the **undo** function if they make mistakes and to encourage experimentation
- to use multiple **layers** in their art
- to **transform** layers
- to paint on top of photographs.

Progression

In Key Stage 1:

- Pupils will build on their knowledge of working with images in **Unit 2.3: We are photographers**.

In Key Stage 2:

- Pupils are introduced to vector and turtle graphics in **Unit 4.5: We are artists**.

Assessment – by the end of the unit:

All pupils can:

- create blocks of colour
- paint shapes using a range of colours
- draw on screen
- fill the canvas with a colour
- paint on top of a photograph
- fill regions of an image with colours.

Most pupils can:

- create blocks of colour with well-defined edges
- use the **undo** tool to correct mistakes
- draw on screen using a variety of strokes
- create an image made of multiple **layers**
- choose colours appropriately to add to a photograph
- create images made up of lines.

Some pupils can:

- add additional detail to blocks of colour
- use the undo tool to experiment with different colours or effects
- understand how simple drawings are abstractions of real objects
- transform layers of an image
- understand how images are represented as dots (**pixels**) on a computer
- use the ruler tool to create a grid of horizontal and vertical lines.

Background information

- There are two main ways to create art on computers: **bitmap** graphics (painting) and vector graphics (drawing). Brushes Redux, Autodesk SketchBook and Microsoft Paint use the bitmap approach.
- In bitmap graphics, images are made up of many dots, or **pixels**, e.g. the resolution of an iPad screen is 2048×1536 pixels. The colour of each pixel is specified using three numbers – how much red, green and blue light is used at each point, on a scale from 0 to 255 – (0,0,0) would show as black, (255,255,255) as pure white.
- Lots of art is now created digitally, often using a pen-like **stylus**, such as an Apple Pencil on an iPad, although fingers on screen work almost as well.
- It is very easy to modify **digital** art, e.g. by **undoing** mistakes or applying **effects** such as brightening or darkening areas of the image.
- The Brushes Redux app provides a simple interface for painting on screen, but also allows professional artists to create artwork – it was used notably by David Hockney for work shown at the Royal Academy in 2012.

Key vocabulary

Analogue: using real-world traditional media, such as paint on paper

Bitmap: an image represented by a large, rectangular grid of pixels, each having its own colour value, typically in the range 0 to 255 for each of red, blue and green

Digital: numerical quantities, as stored, processed and transmitted by computers, such as colour values of pixels

Effect: change applied to an area of an image, such as increasing the brightness or changing the overall colour

Layer: one of a virtual stack of images forming a composite picture: think of these as painting on layers of transparent acetate

Pixel: picture element – one of the small, square dots that makes up a digital image

Stylus: input device in the form of a pen or pencil

Transform: to change the shape of an image or part of an image

Undo: to reverse the effect of a change in a program

Zoom: 'zoom in' is to change the magnification so that only part of the overall image occupies the whole of the screen; 'zoom out' reverses this

Differentiation

See each session (pages 33–38) for ways to increase support and add challenge to this unit. Some pupils may find it easier to use a stylus rather than their fingers, if these are available.

This unit can be made more accessible by providing pupils with some starting templates for some or all of the sessions.

Think carefully about how much support pupils may need for these sessions. Some pupils might appreciate a more step-by-step approach, while others might relish the opportunity to work independently on their art, perhaps just using the example works as a starting point for their own creative expression.

Some pupils might find some other apps or programs more accessible, whilst others might enjoy the challenge of using more sophisticated drawing or painting apps and programs if these are available.

Cross-curricular opportunities

Art and design: The unit takes as a starting point the work of some famous 19th- and 20th-century artists. Their work could be used as inspiration for work in paint on paper or other traditional media.

History: Pupils could learn something about the artists and their times.

Geography: Pupils could learn about where the artists lived.

Maths: Some of the art is based on geometric shapes, reinforcing geometric ideas and the language of shape and space.

Preparation for teaching the unit

↗ Things to do

- Check you have access to Brushes Redux and Autodesk SketchBook (see *Alternatives* on page 30).
- Read pages 30–31 to get an overview of the unit.
- Read the steps in the unit sessions (pages 33–38) and look at the associated online resources, printing out the worksheets as required.
- Watch the CPD video: Storing pictures, about how computers represent digital images.
- Work through the unit yourself so you know what is expected of the pupils.
- For Session 5, you will need a collection of simple, digital photographs for pupils to paint over.
- If pupils are going to share their work or save it online make sure they have accounts set up, that necessary permissions have been obtained and are integrated with the iPads.

? Resources needed

- **Software:** Brushes Redux and Autodesk SketchBook
- **Hardware:** iPads and (optionally) styluses such as Apple Pencils or Logitech Crayons
- See *Alternatives* on page 30

🖱 Online resources provided

Session resources

- Worksheet 1.3a: Rothko's painting
- Worksheet 1.3b: Kandinsky's Color Study
- Worksheet 1.3c: End-of-unit quiz
- Worksheet 1.3d: Pupil self-assessment
- Teaching slides 1.3a–1.3f
- Walkthrough videos V1.3a–1.3f
- Interactive end-of-unit quiz 1.3

Additional resources

- CPD video: Storing pictures

➤ Online safety

- Search for artists' work before the session. If searching during a session, ensure necessary filters are enabled.
- If pupils' work is uploaded to a cloud-based service, such as Google Drive or OneDrive, ensure that permission has been given and any terms and conditions are fully respected.

- If pupils' work is shown to others, remember that they own the intellectual property in their work and that you would need consent from their parents or carers to publish this. Your school may already address this through a letter securing parental consent on a number of matters.

🤝 Collaboration

- Encourage pupils to provide positive, constructive feedback to one another on their work, establishing from an early age the value of commenting positively on work in digital media.
- It is best if there is some way for pupils to share their work with one another and you. Google Drive integrates well with the iPad and, if the school has adopted G Suite for Education, this would provide a convenient place for pupils to save their work and to make available templates or shared photographs for pupils to use. Work on iPads can also be shared using the Apple Classroom App or AirDrop.

www Useful links

Software and tool

- Brushes Redux on the App Store
- Autodesk SketchBook on the App Store and Google Play Store

Online tutorials

- Brushes: **www.dummies.com/education/ipad-for-classroom/teach-students-to-paint-with-brushes-ipad-app**
- Autodesk SketchBook (search 'Finding SketchBook tutorials'): **knowledge.autodesk.com**

Information and ideas

- David Hockney: **www.hockney.com/index.php/works/digital/ipad**
- Mark Rothko: **www.markrothko.org/paintings**
- Wassily Kandinsky: **www.wassilykandinsky.net**
- Pablo Picasso: **www.pablopicasso.org**
- Henri Matisse: **www.henrimatisse.org**
- Julian Opie: **www.julianopie.com**
- Piet Mondrian: **www.wikiart.org/en/piet-mondrian**

Unit outcomes

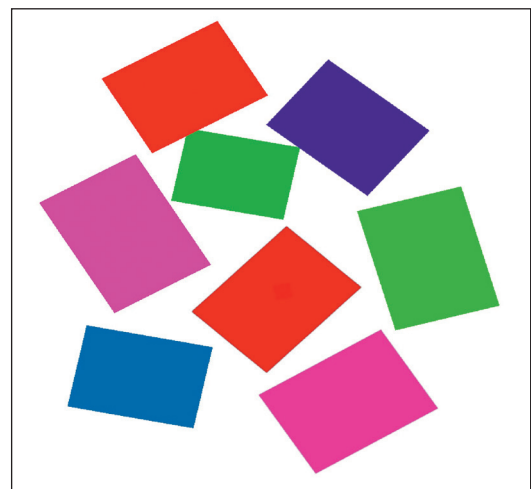Below are some examples of the outcomes you could expect from this unit.

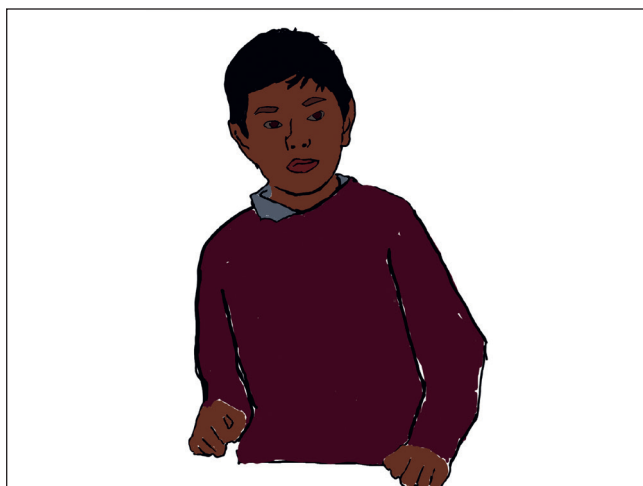
Session 1: Painting in Rothko's style in Brushes Redux

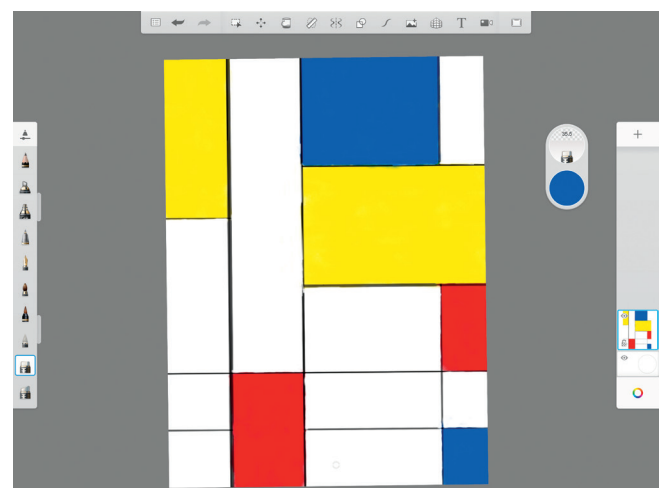**Session 2:** Painting in Kandinksy's style in Brushes Redux

Session 3: Painting in Picasso's style in Brushes Redux

Session 4: Painting in Matisse's style in Brushes Redux

Session 5: Painting in Opie's style in Brushes Redux

Session 6: Painting in Mondrian's style in Autodesk SketchBook