

# Trial and Error Drawing

This is the third of six resources in the series: '[Drawing for Science, Invention & Discovery Even If You Can't Draw](#)' by Paul Carney, educational consultant and author. The projects enable teachers of both art and science to approach drawing from a new perspective. You can see all of the resources [here](#).

[By Paul Carney](#)

**Introduction:** Mistakes aren't an unwanted outcome of the creative process, they are integral; a vital part of making. In this session we learn how to develop our working memory so that we might understand the creative process of action, mistakes and action better.



## Notes for Teachers

### • Learning Objectives

- To enhance and improve our working memory.

- To learn how to embrace mistake making as part of the creative process of drawing.

## ▪ **Age Range**

Suitable for 7-16 years.

## ▪ **Time Required**

The activity takes approximately one hour.

## ▪ **National Curriculum Targets: Art & Design**

**Key Stage 2 and 3:** Pupils should be taught to record their observations and use them to review and revisit ideas and to improve their mastery of art and design techniques, including drawing.

## ▪ **National Curriculum Targets: Science**

To develop an understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.

**Key Stage 2:** They should begin to recognise that scientific ideas change and develop over time.

**Key Stage 3:** Pupils should understand that science is about working objectively, modifying explanations to take account of new evidence and ideas and subjecting results to peer review.

**KS3 Scientific attitudes:** Understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas.

**KS3 Experimental skills and investigations:** Make and record observations and measurements using a range of methods for different investigations; and evaluate the

reliability of methods and suggest possible improvements.

**Key Stage 4: Experimental skills and strategies:** Making and recording observations and measurements using a range of apparatus and methods. Evaluating methods and suggesting possible improvements and further investigations.

**Working scientifically** might be embedded by substituting the subject matter of the exercise for something within the content of biology, chemistry and physics, such as cell structure, anatomical features or chemical bonds.

## ▪ **Things You'll Need**

A4 paper, pencils, subject sources.

## ▪ **Extending The Lesson**

Making the source image more complex should result in an increase in challenge.

## ▪ **Supporting The Lesson**

Simplifying the source image will make the exercise easier.

## ▪ **Assessment Guidance**

Look for accuracy of information recorded and remembered, rather than the skill of execution.

## ▪ **Artist Links**

Henry Moore used this technique to draw, especially his air raid shelter drawings.

<https://www.tate.org.uk/whats-on/tate-britain/exhibition>

</henry-moore/henry-moore-room-guide/henry-moore-room-guide-room-5>

You might also look at the scientific drawings of Santiago Ramon y Cajal and use these as the subject matter for the exercise.

[https://en.wikipedia.org/wiki/Santiago\\_Ram%C3%B3n\\_y\\_Cajal](https://en.wikipedia.org/wiki/Santiago_Ram%C3%B3n_y_Cajal)

## • Cross-Curricular

How might we adapt this exercise in other subject areas to help us remember key visual information?

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## Methodical Drawing

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# Serendipity Drawing

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## Simple Easter Sketchbook

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## Playing with tape, projectors, Wicky Sticks and so much more!

Accessible approaches for collaborative drawing with visually impaired students with Sara Dudman and Debbie Locke at the Thelma Hulbert Gallery in Devon

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## Water and Rock: Teenagers explore building drawings with graphite and modroc

Teenagers look at pieces of chalk and flint and explore the physicality of rocks and geological processes with graphite and plaster.

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# Teachers Start the New Year with Sketchbooks

AccessArt introduces teachers from English Martyrs Catholic Primary School in Worthing, whistle stop introduction to drawing and sketchbooks as tools for recording and thinking.

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## Year 3 & 4 Making Club: Animal Parade – Week One

To use our Carnival Mask Template to create animal masks for an Animal Parade at the end of this half term.

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## Drawing Flames

Teenagers are led on several guided drawing exercises exploring mark making to the rhythm of a burning flame.

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**Life Drawing: Using Tone by  
Hester Berry**

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**Life Drawing: Understanding  
Foreshortening by Hester  
Berry**

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**Life Drawing: Drawing Hands  
and Feet with Hester Berry**

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**Life Drawing: Drawing the  
Head by Hester Berry**

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# Red to Green: Wax Resist and Scraffito

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## Red to Green: Steps to Observational Drawing

Foundations for students to be able to approach observational drawing without feeling inhibited or paralyzed and reinstate their confidence in their ability and right to draw.

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## Red to Green: Monoprinting

Monoprinting is an excellent way to access mark making and drawing but with a bit of 'distance' from the finished work. Results are always unexpected and the process itself very engaging, so any potential anxiety about what a finished drawing 'should' look like is taken away.

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# **Life Drawing: Capturing Gesture by Hester Berry**

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## **Red to Green: Taking Rubbings and Making Compositions**

process of recording by taken rubbings from natural and man made objects whilst incidentally making uninhibited gestures and marks with graphite

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## **Red to Green: Patterns in Nature, Line and Wire**

using drawing as a way into exploring designs and patterns in nature, followed by a making session using wire to extend ideas into 3D

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## **Aspire to Create: Inspired by**

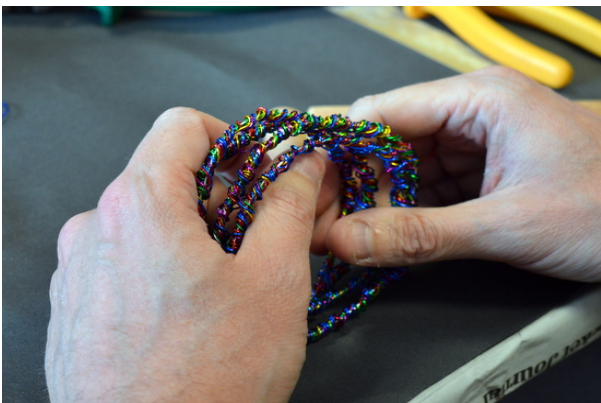
# Nature & Empowered by Creativity – Red to Green

## One: Casting



Exploring mark making into wet clay, mould making, mixing and pouring plaster

## Two: Patterns in Nature, Line and Wire



Using drawing to look at designs and patterns in nature to inspire the creation of wire sculpture

### Three: Taking Rubbings and Making Compositions



Recording the surrounding world by taking rubbings

### Four: Block Printing



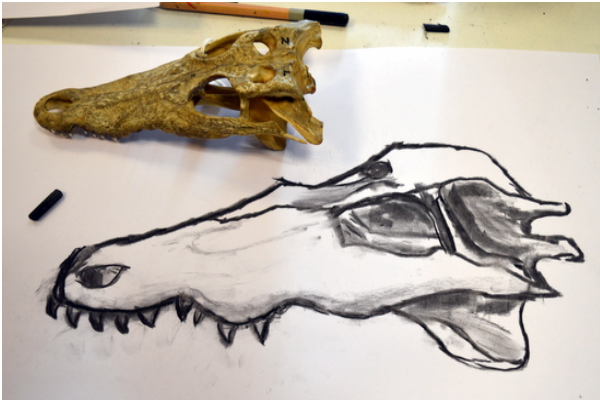
Learners are introduced to block printing

### Five: Monoprinting



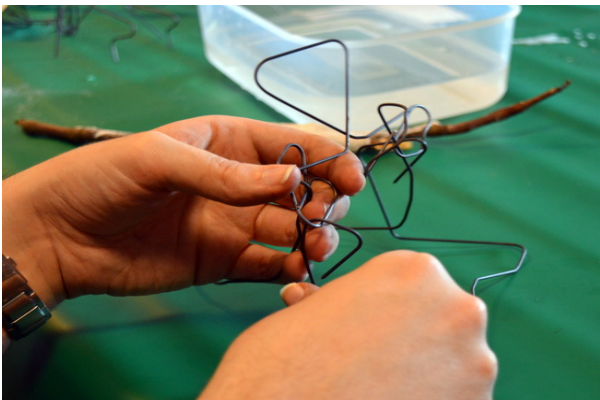
## Exploring texture, pattern and mark making through monoprinting

### **Six: Steps to Observational Drawing**



## Four steps to enabling observational drawing

### **Seven: Making Sculpture**





## Learners explore sculptural principles of form, space and balance

### **Eight: Wax Resist and Scraffito**



## Introducing colour with wax resist and scraffito techniques

