



Activities

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About the Artist: Maurits Cornelis Escher

Maurits was born in summer on 17 June 1898 in the Netherlands. He was the youngest in a big family of five brothers.

Even though he was very clever, Maurits didn't do well at school, but he did enjoy art classes and making linocut prints. Maurits went to art school to study printmaking and after he graduated he spent a lot of time travelling and working on his art.

During his life, Maurits made more than 2400 drawings and prints.

He also illustrated books, and designed postage stamps and murals. Today people from all over the world enjoy his work. Lets look at some of his artworks and the techniques he used!



Still life

A picture of a table with some books and a view of a street - what's unusual about that? Nothing at first, until we look again and see that the tabletop and street are one surface – nothing separates the indoors from the outdoors.

Now the books are as big as the buildings and the people seem extraordinarily tiny.

It's fun to imagine these little people leaving their street stalls and walking into a world of giant objects! They could climb the stack of books or play hide and seek in the giant matchbox!

Still life and street March 1937 (detail)

The street in this print is based on a street in Savona, Italy.

and street

Activity 1 Unreal!

In his works of art, Maurits used drawing techniques that help create realistic scenes. Have you noticed that some objects drawn on paper look so real that you can imagine picking them up? Or perhaps you have seen a painting of a scene that seems so real you can imagine walking under the trees or along the street?





Can you find the techniques that help make **Maurits's pictures look realistic?**

OVERLAP: This brick building seems to be behind the buildings in front.

SIZE:

The small street lantern looks further away than the large lantern.

LINEAR

PERSPECTIVE: The road seems to narrow and disappear into the distance.

SHADING:

The cat seems to have form.

Activity 1 Unreal!

Now is your chance to try your hand at the amazing perspective techniques that Maurits used in his artworks. Follow the prompts to fill in your drawings below.

Add your big and little drawings to fill this perspective challenge.



Draw something close to you.

Draw something you can see far away.

Eye tricks

Maurits experimented with optical illusions, also known as eye tricks, and images of impossible objects.

What do you see when you look at these eye tricks?



COMPARE THE LENGTHS OF THESE TWO LINES. WHICH LINE IS LONGER? TO FIND OUT MEASURE THEM WITH A RULER.



ARE THE HORIZONTAL LINES SLOPING OR STRAIGHT?

ANSWER: Check with a ruler and you will see they are straight. The blue and white blocks trick your brain into thinking that the lines are on a slope.

NOW TRY THIS ONE! ARE THE TWO GREEN PARALLEL LINES THE SAME LENGTH? USE YOUR RULER TO FIND OUT.





THIS IMPOSSIBLE OBJECT, CALLED SCHUSTER'S CONUNDRUM OR THE DEVIL'S FORK, WAS CREATED BY D. H. SCHUSTER IN THE 1960s.



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Activity 2 Trick your friends



DO YOU SEE A DUCK OR A RABBIT? Did you know your brain cannot see both at once?



THE PENROSE TRIANGLE **IS THIS TRIANGLE POSSIBLE?**



WHO IS SHE: A YOUNG PERSON **OR AN OLD WOMAN?**



WHAT DO YOU SEE: **TWO FACES OR ONE VASE?**



DO YOU SEE TREE TRUNKS OR SPACES BETWEEN TREES?

Turn to the next page to learn how to create your own picture of this eye trick.

- The dark section creates the shape of a vase while the two white spaces appear to be two faces.
 - She is both! The older woman looks down while the younger woman looks away.
- This is the Penrose triangle, which can only exist as a drawing. It is impossible to create as a three-dimensional object.
 - Look closely: the duck's beak is also the rabbit's ears.

SNSWERS

Activity 2 Trick your friends

Draw seven vertical lines like this:

Now look carefully at the drawing and sketch in the branches like this:

Follow these steps to create

your own eye trick.

START



(Make sure you skip the first vertical line on the left, and start your first tree on the second vertical line. Notice that there is a space between each tree?)

Then draw in details such as bark

and leaves and add shading at the

top and bottom of the trunks.

5 line.

Then sketch in the tree roots starting with the first vertical





NOW SHOW YOUR DRAWINGS TO YOUR FRIENDS! CAN YOU TRICK THEM? DO THEY SEE TREE TRUNKS OR SPACES BETWEEN THE TREES?



Go around in circles

The reptiles in this print seem to come to life before our eyes! Follow them as they go around and around in circles. What happens to them on their way? The reptiles travel in and out of two- and threedimensional worlds. They enter the tessellation, then exit it and stomp over Maurits's things on the table.

But wait – that's not quite right! Maurits is playing a little game with us. In fact all of the reptiles exist only in the two-dimensional world because this is a picture on a flat sheet of paper!

Reptiles March 1943 (detail)

Picture puzzle

Who are we?

- We are cold-blooded and most of us lay eggs.
- We are called vertebrates because we have a backbone.
- We are covered in scales or bony plates.
- We have lived on Earth for more than 300 million years.
- We are not mammals, birds, fish or amphibians.
- Snakes, lizards, crocodiles and turtles all belong to our group.

We are R____

We are the group of animals called reptiles.

Do you recognise the lizards in this tessellation? These creatures appear in *Reptiles* on the previous pages. Look carefully and see how the shapes lock together like a jigsaw puzzle.

Regular division of the plane no. 56 (Lizard) November 1942 (detail)



Activity 3 **Tizzying Tessellations**

What is a tessellation?

A tessellation is a pattern of geometric shapes on a surface called a plane. The shapes lock together like a jigsaw puzzle. The shapes repeat on the plane and never overlap or have gaps between them. For example, a brick wall, repeated tiles in a bathroom or kitchen, and a chessboard of white and black squares are all tessellations.





Now's your chance to create your own pattern design.



Illustrated list of works

In order of appearance

All works are from the Escher Collection, Gemeentemuseum Den Haag, The Hague, the Netherlands. Numbers in brackets at the conclusion of the caption are accession numbers of the Gemeentemuseum Den Haag, The Hague.

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M. C. Escher Dutch 1898–1972



Stars October 1948 wood engraving 32.0 x 26.0 cm (image) 40.1 x 32.1 cm (sheet) (PRE-1980-0338)



Cycle May 1938 lithograph 47.5 x 27.9 cm (image) 55.4 x 35.3 cm (sheet) (PRE-1980-0295)



Still life and street March 1937 woodcut 48.5 x 48.7 cm (image) 56.4 x 56.5 cm (sheet) (PRE-1980-0289)



Reptiles March 1943 lithograph 33.4 x 38.5 cm (image) 48.5 x 53.7 cm (sheet) (PRE-1966-0874)



Regular division of the plane no. 56 (Lizard) November 1942 pen and black and gold ink, coloured pencil and poster paint 22.0 x 20.7 cm (image) 30.4 x 22.9 cm (sheet) (TEK-1980-0060)

Adapted from *Make Believe: M. C. Escher for Kids* published by the National Gallery of Victoria, available from the NGV design store and selected bookshops.

INCREDIBLE ILLUSIONS

and a

Stars, mirrors, eye tricks and the impossible!

These are just a few of the things that inspired artist M. C. Escher to create some of the most fascinating images of the twentieth century.

During this workshop, you will try your hand at a series of optical illusions that play tricks on your mind and test your wits with riddles and quizzes.

Let's get started!

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