The beauty of maths
for early level (ages 3-6 years)
Notes for the group leader

This resource offers prompts to inspire learning about maths, through art. You can adapt this powerpoint to suit your learners, pick and choose what is most relevant for your learners and use the prompts in any order.

Prompts include:
- Colour and shape
- Pattern
- Large and small
- Favourite numbers

Each prompt features:
- A picture of an artwork
- Discussion ideas
- A maths/ art related suggestion

Questions are deliberately open-ended to encourage learners to make their own associations with each artwork.
There is no right or wrong way to see art – we all see things differently.
This resource supports a range of Experiences and Outcomes in line with the Scottish Curriculum for Excellence

Numeracy and Mathematics
I am developing a sense of size and amount by observing, exploring, using and communicating with others about things in the world around me. MNU 0-01a
I have explored numbers, understanding that they represent quantities and I can use them to count, create sequences and describe order. MNU 0-02a
I have spotted and explored patterns in my own and the wider environment and can copy and continue these and create my own patterns. MTH 0-13a
I enjoy investigating objects and shapes and can sort, describe and be creative with them. MTH 0-16a
I have had fun creating a range of symmetrical pictures and patterns using range of media. MTH 0-19a

Art and Design
Inspired by a range of stimuli, I can express and communicate my ideas, thoughts and feelings through activities within art and design. EXA 0-05a
I can respond to the work of artists and designers by discussing my thoughts and feelings. I can give and accept constructive comment on my own and others’ work. EXA 0-07a
I have the freedom to discover and choose ways to create images and objects using a variety of materials. EXA 0-02a
These artworks are from the National Galleries of Scotland.

Which one is most beautiful?

Which one is least beautiful?
Colour and shape

Sol Lewitt, Wall drawing #1136
Let’s jump inside the picture.

What can you see, hear, touch?

How many colours can you see?

How many shapes can you see?
What’s your favourite colour?

How many places can you spot it?

What other colours can you spot?
Make something with your favourite colour.
You could explore colour and shape more by...

making shapes with your body,

finding colours,

mixing colours,

or looking at books...

Hooray for Fish by Lucy Cousins
Elmer by David McKee
This is a sculpture called ‘Old Lady II’.

Take a good look.

What do you notice?

Does she look like anyone you know?

What questions would you like to ask her?
Could you make something for her, to add to this sculpture?

What do you think she needs?
Here is some more art with patterns and shapes.

What do you notice?

What do you wonder?

Zoom in to see the details!
Which one is your favourite?

Why?
You could explore pattern more by...

- finding patterns around you,
- printing patterns,
- looking at books.

Here are some stories about older women...

- Little Red Riding Hood
- A Squash and a Squeeze by J Donaldson
- There was an old lady who swallowed a fly
Large and small

Look closely at the picture on the next slide for 9 seconds only.

Try to remember everything you see...
Large and small

Rene Magritte, La Légende des siècles [The Legend of the Centuries]
What do you remember about the picture?

What was unusual about it?

Now have another look. What didn’t you remember?
Here is some more large and small art.

What do you notice in the pictures?
What’s the largest thing you can find?

What’s the smallest thing you can find?

Try sorting things in order of size – pencils, toys, your friends!
What’s the longest line you could draw?

What’s the tallest thing you could build?

What’s the largest thing you could make from old newspaper?
You could explore ‘large and small’ more by...

measuring things in the room or looking at books

How big is a million? by A Millbourne
Crash! Boom! A Maths Tale by R Harris
Favourite numbers
Barbara Hepworth, Conversation with magic stones
Take a good look at this sculpture.

What do you notice?

Count the parts...

The title of this artwork is ‘Conversation with magic stones’.

What magic powers do you think the stones might have?

What do you think they are talking about?
The artist Barbara Hepworth liked the number 3 and it inspired her art.

She also had triplets!

What’s your favourite number?
Take a walk outside and collect things.
If your favourite number is 3, collect 3 things.
If your favourite number is 7 collect 7 things etc.
Make something with the things you find.
You could explore numbers more by looking at books

Alfie’s Numbers by Shirley Hughes
Ten Little Monsters by Mike Brownlow
Cockatoos by Quentin Blake
Thanks to