

## Science

- Identify minibeasts—keys
- How do minibeasts move?
- How do minibeasts see?
- How do minibeasts eat?
- Where do they live?



## Technology & Engineering

- Creating structures
- Joining materials
- Resistant materials—cutting skills & tools
- Jointed legs
- Design fantasy beast with moving parts



# ELP Minibeast Sculpture Park

## Art

- Drawing and sketching
- Painting
- 3D sculpture
- 3D collage



## Maths

- Measuring length eg body, legs etc
- Scale eg what factor of enlargement will be needed to create a ladybird the size of the teacher's desk?
- Scale drawing
- Area



# Maths involved in mini-beast project

- Count and draw insect with correct number of eyes, legs etc.
- Draw the patterns on insect's backs etc.
- Measuring length eg body, legs etc.

## Reception Maths

Estimate then count up to 10 objects.  
Recognise numerals.

Select the correct numeral to represent a group of objects and then compare (more/less).  
Begin to represent numbers using fingers, marks on

Identify odd and even numbers

Add numbers using concrete objects, pictorial **representations leading to an expanded method that reinforces place value: recording in columns support place value** – two-digit number and ones, two-digit number and tens, two two-digit numbers, three one-digit numbers.

Choose and use appropriate standard units to estimate and measure lengths/heights accurately (m and cm) and to the nearest unit using rul-

## Year 1 Maths Curriculum

Work out and memorise addition facts up to 10 and then up to 20 e.g.  $4 = 2 + 2$ ,  $13 = 12 + 1$   
Read, write and interpret number sentences using + and =

Add numbers using concrete objects, pictorial representations – one- and two-digit numbers up to 20.

Create, copy, describe, continue and reorganise shape patterns and talk about/describe them.

Estimate lengths, widths or heights, begin to use measuring tools such as a rulers. Compare and describe lengths and heights e.g. long/short, longer/shorter, tall/short, double/half.

Measure and begin to record lengths and heights using pictures, symbols or numbers.

Read a numbered scale and the numbers in between – **read relevant scales to the nearest numbered unit.**  
**Use the language of length/height and record measurements using standard abbreviations**

**Compare and order lengths/heights and record the results using < > =**  
**Compare lengths/heights including simple multiples such as 'half as high'; 'twice as wide'**

## Year 2 Maths Curriculum

## Year 3/4 Maths Curriculum

Measure, using the appropriate tools and units, and compare lengths (m/cm/mm) – use  $<$ ,  $>$ ,  $=$

Measure, in cm, lengths of sides of 2-D shape accurately, (Y4 in cm and mm.)

Use scaling to increase measures e.g. twice as long or twice as high (link this to multiplication)

Draw, in different orientations, regular and irregular 2-D shapes accurately using a ruler, describe and label lengths

Make 3-D shapes (e.g. using Clix and/or modelling materials) including using ICT symmetrical and non-symmetrical polyhedral.

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## Year 5/6 Maths Curriculum

Draw and measure lines to the nearest mm (Y5). Draw 2-D shapes with accuracy using given dimensions .

Solve problems involving scaling.  
Solve problems involving similar shapes where the scale factor is known or can be found (Y6)

Recognise, describe and build simple 3-D shapes, including making and drawing nets accurately.

Calculate the area from scale drawings using given measurements.  
Estimate the area of irregular shapes.

(Y6) Illustrate and name parts of a circle, including radius, diameter and circumference and know that the diameter is twice the radius.

### Y6) Ratio and proportion

Solve problems involving the relative sizes of 2 quantities where missing values can be found by using integer multiplication and division facts.

Consolidate understanding of ratio when comparing quantities, sizes and scale drawing by solving a variety of problems (may use notation  $a:b$  to record work).

## ELP Giant Mini-beast Project—DT

### Technology & Engineering

- Creating structures
- Joining materials
- Resistant materials—cutting skills & tools
- Jointed legs
- Design fantasy beast with moving parts

- In year groups experience and/or make structures using:
- Junk modelling
- sewing
- Paper tearing/,folding and joining
- Wood
- modroc

- Use of apparatus to join materials:
- Glue (inc glue guns)
- Sewing
- Paper folding

- In year groups experience and/or make
- Structures created from wood frames
- Wire frame/Modroc
- Wire frame/plastic

- Study and evaluate models/toys with jointed legs.
- Experiment with levers using split pins and springs to make jointed parts.

#### Cross year group activity:

- Study minibeast models and toys. Focus on the materials and if/how they move and how the parts have been joined together.
- Design a fantasy beast with focus on the

## ELP Giant Mini-beast Project—Science

### Science

- Identify minibeasts—keys
- How do minibeasts move?
- How do minibeasts see?
- How do minibeasts eat?

Recognise that living things can be grouped in a variety of ways:

- Use classification keys to group a variety of mini-beasts.
- Give reasons for classifying mini-beasts based on specific characteristics.

Explore their habitat and the conditions they live in.

- Mini-beast hunt around the school grounds.
- Observations of habitats.

Everyday Materials:

- Think about suitable materials to make the mini-beast out of .
- Compare and group together a variety of everyday materials.

Fact files about different mini-beasts.

Can you identify them from the facts?

- Food chains
- Life cycle of a mini-beast.
- Explore flight
- Explore how different mini-beasts can see.

KS1

Collect pictures of mini-beasts and comment on the colours and shapes.

Use a combination of materials to collage images of mini-beasts.

Use rolled up paper, straws, paper, card and clay to make mini-beast sculptures.

Use weaving to create the pattern of butterfly wings.

Look at the artist Marcia Baldwin, talk about the colours used and the patterns they can see.



## ELP Giant Mini-beast Project—ART

### Art

- To develop ideas
- Collage
- Sculpture
- Painting
- Drawing
- Print
- Textiles
- Taking inspiration from Artists



KS2

Collect information, sketches and resources based on mini-beasts. Comment on the colours and the patterns they can see.

Use watercolour paint to produce washes for backgrounds then add detail from different mini-beasts.

Use willow and tissue paper to create mini-beast sculptures.

Use mouldable materials to create mini-beast sculptures.

Look at the artist Tracey Bush. She creates 3D butterflies out of paper.

