



Makes Maths Fun

Level 1

Length

Bloomsmath is a comprehensive mathematics program which provides a fun way for every student to be learning to the best of their ability.

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BLOOMSMATH

Makes Maths Fun

Also Available in the Level 1 Program

Whole Number
Addition
Subtraction
Multiplication & Division
Fractions & Decimals
Probability
Patterns & Algebra
Data
Area
Volume
Mass
Time
3D Shape
2D shape
Position

Length

Level 1 is designed for students in their first year at school. The Length strand allows students to compare lengths and distances using direct comparisons.

Knowledge: Students are given 8 pencils of differing lengths which they must cut out and paste in order from shortest to longest on the sheet provided.



Students who demonstrate proficiency in this activity move on to Comprehension.



Students stop here as they require additional teacher support to master this activity.

Comprehension: Students compare length and group the 3 shapes in each set which are of equal length. Not all shapes are in the same rotation so some form of informal measuring will be required by students.



Students who demonstrate proficiency in this activity move on to Application.



Students stop here if time has run out or they require additional support with this activity.

Application: Students are provided with 4 sets of shapes and must order the items within each set of shapes from shortest to longest.



Students who demonstrate proficiency in this activity move on to Analysis.



Students stop here if time has run out or they require additional support with this activity.

Analysis: Students must count the blocks in each tower to be able to order the towers from shortest to longest.



Students who demonstrate proficiency in this activity move on to Synthesis.



Students stop here if time has run out or they require additional support with this activity.

Synthesis: Students are asked to use centicubes matching those provided to be able to measure the length of each box. A ruler could be used if centicubes were unavailable but teacher assistance would be required.

Evaluation: Suggested questions and activities provide a starting point for discussions related to Length such as some of the problems people may encounter when using informal units for measurement.



Students may complete more or fewer activities for each learning outcome depending on the time allocated and their strength in the area being covered.

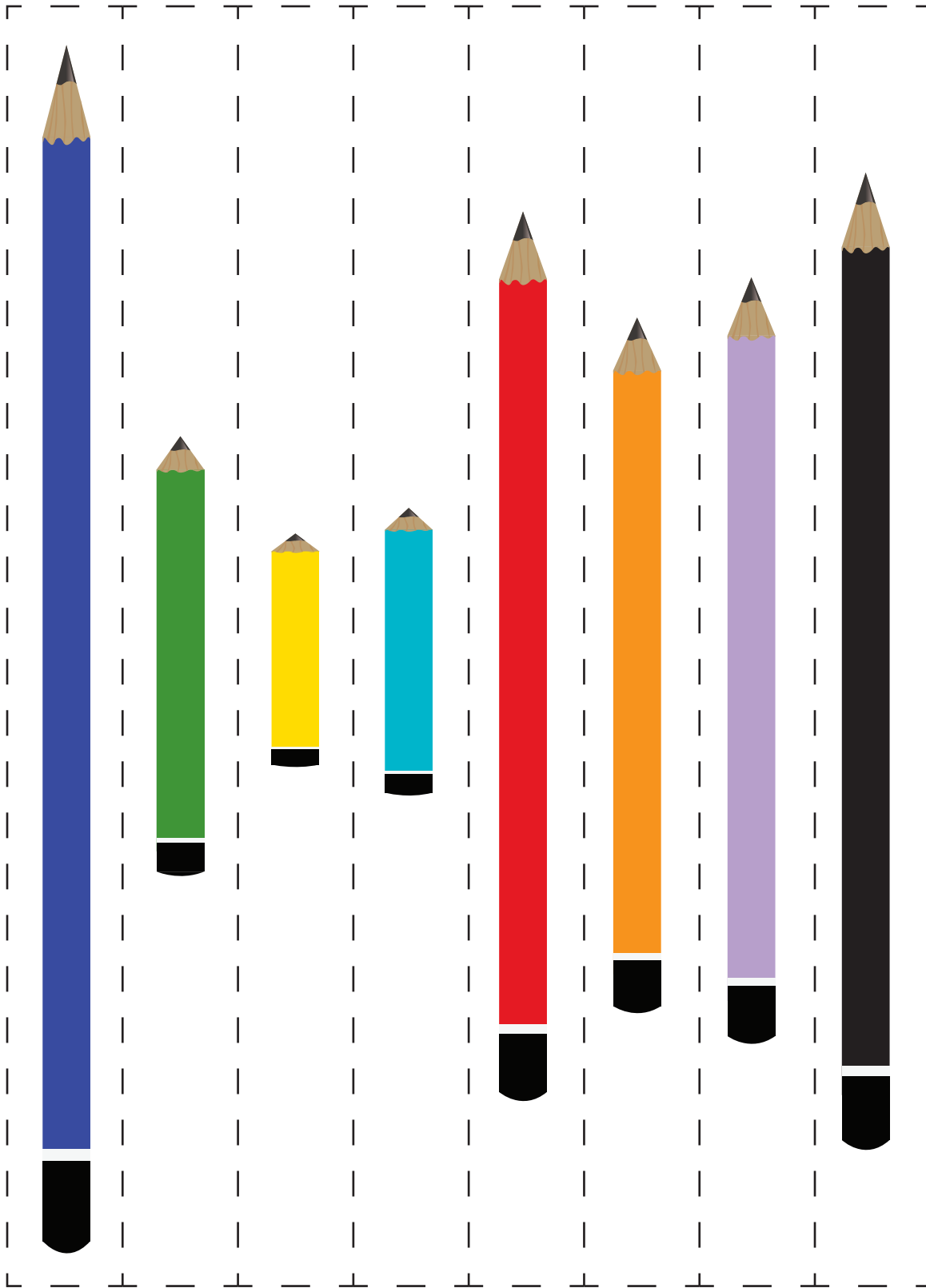


All students should participate in the Evaluation discussion to encourage the use of mathematical language, logical reasoning and reflection on that which they have completed.

Name: _____

Ordering By Length - A

Cut out the pencils below and place them in order on sheet B.



Knowledge

Comprehension

Application

Analysis

Synthesis

Evaluation

Length - Level 1 - Students will compare lengths and distances using direct comparisons.



Let's Try This Again



Progress To Comprehension

Name: _____

Ordering By Length - B

Paste the pencils you cut out in order from shortest to longest.

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Shortest  Longest



Let's Try This Again



Progress To Comprehension

LG 1 KN

Knowledge

Comprehension

Application

Analysis

Synthesis

Evaluation

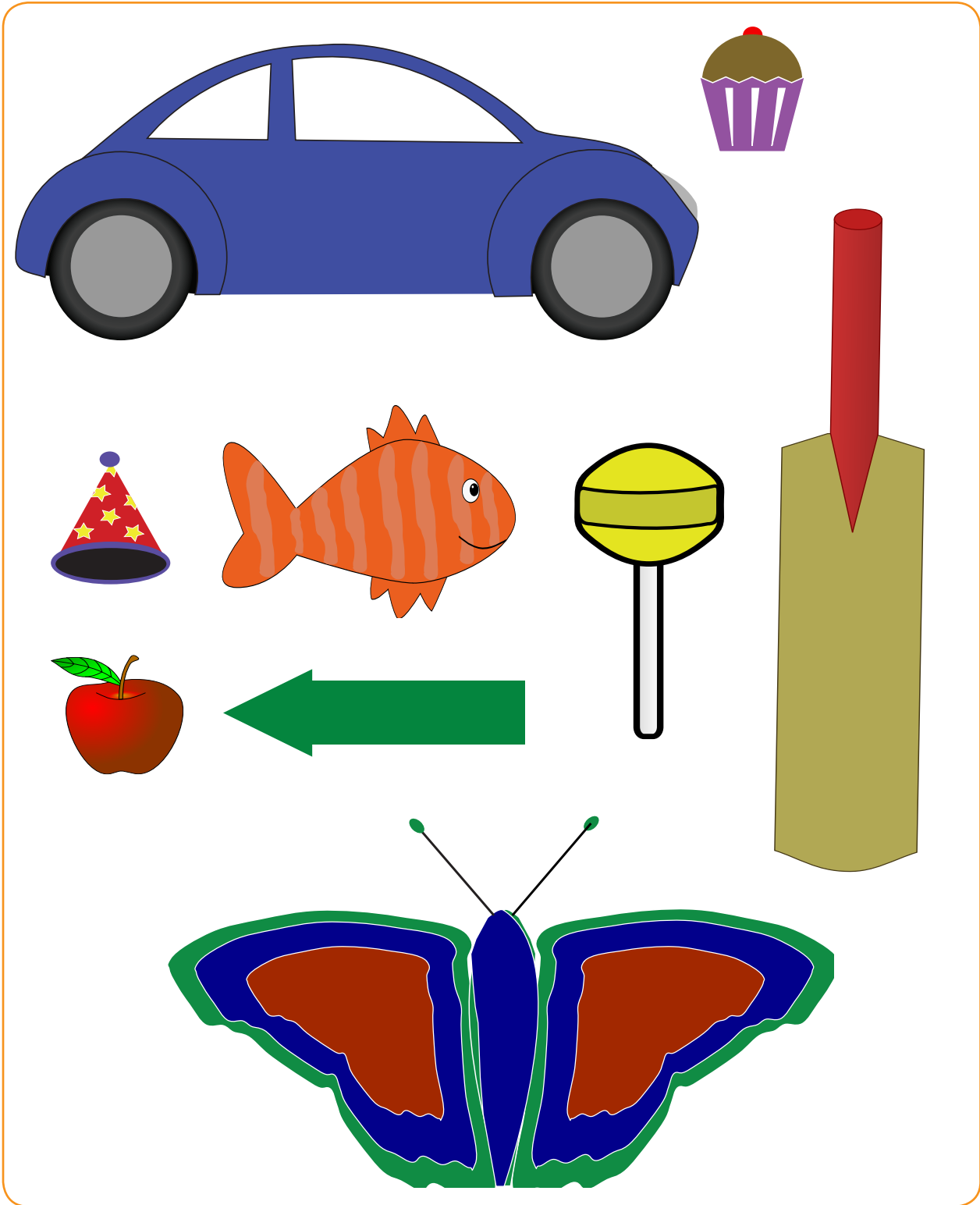
Length - Level 1 - Students will compare lengths and distances using direct comparisons.



Name: _____

Grouping Lengths

Join the three shapes which are the same length.



Length - Level 1 - Students will compare lengths and distances using direct comparisons.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation



Let's Try This Again

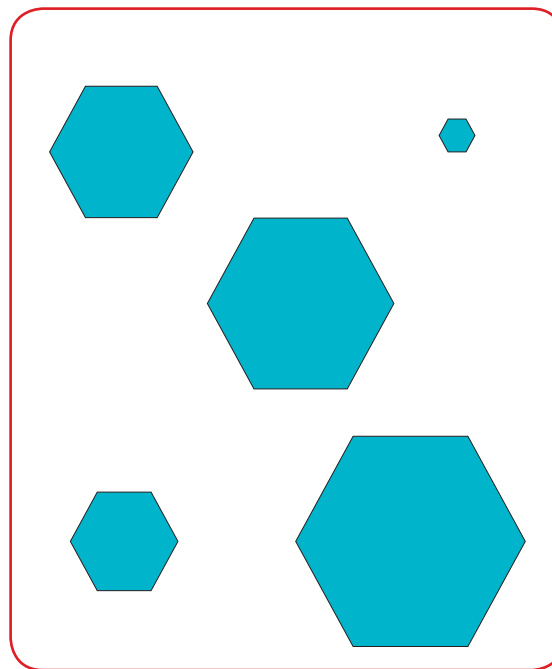
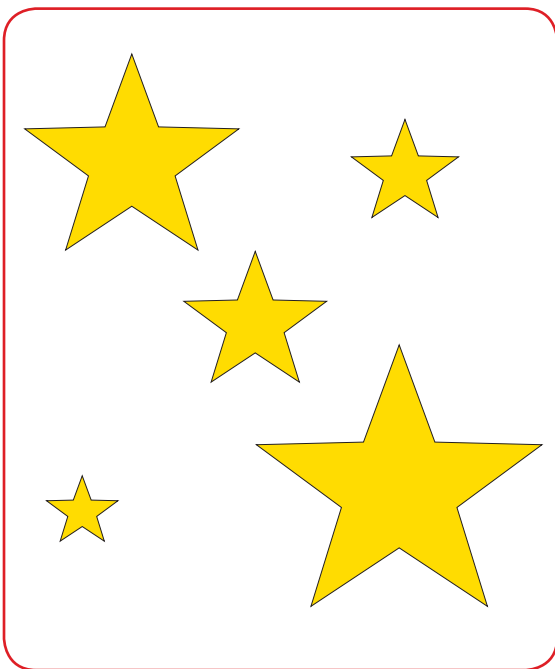
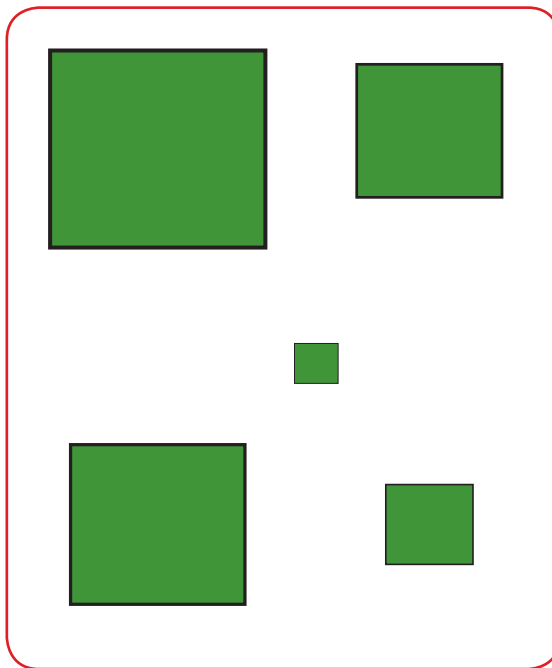
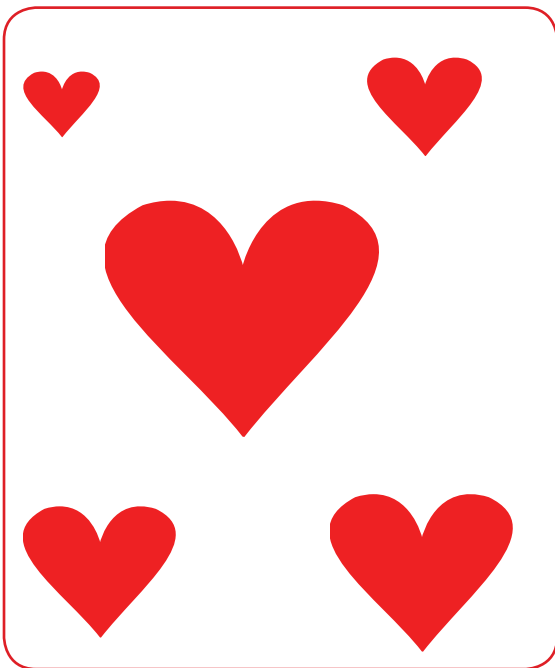


Progress To Application

Name: _____

Getting Things In Order

Order each set of shapes from shortest (1) to longest (5).



Length - Level 1 - Students will compare lengths and distances using direct comparisons.

Knowledge

Comprehension

Application

Analysis

Synthesis

Evaluation



Let's Try This Again



Progress To Analysis

Name: _____

Order With Blocks

Count the blocks to order them from shortest (1) to longest (8)

Eight stacks of colorful blocks are arranged in two rows. Each stack is composed of blocks of different colors (red, orange, yellow, green, blue, purple) and has a corresponding empty box next to it for the student to write the count.

- Stack 1 (top left): 5 blocks (red, orange, yellow, green, blue). Box:
- Stack 2 (top middle): 8 blocks (red, orange, yellow, green, blue, purple, red, orange). Box:
- Stack 3 (top right): 2 blocks (red, orange). Box:
- Stack 4 (middle left): 4 blocks (red, orange, yellow, green). Box:
- Stack 5 (middle right): 5 blocks (red, orange, yellow, green, blue). Box:
- Stack 6 (bottom left): 7 blocks (red, orange, yellow, green, blue, purple, red). Box:
- Stack 7 (bottom middle): 3 blocks (red, orange, yellow). Box:
- Stack 8 (bottom right): 4 blocks (red, orange, yellow, green). Box:
- Stack 9 (bottom far right): 1 block (red). Box:

Length - Level 1 - Students will compare lengths and distances using direct comparisons.

Knowledge

Comprehension

Application

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Evaluation



Let's Try This Again



Progress To Synthesis

Name: _____

Formal Measurements

Use centicube blocks like those at the bottom of the page to measure each box.

1.  _____ blocks

2.  _____ blocks

3.  _____ blocks

4.  _____ blocks

5.  _____ blocks

6.  _____ blocks

7.  _____ blocks

8.  _____ blocks



Let's Try This Again



Progress To Evaluation

Length - Level 1 - Students will compare lengths and distances using direct comparisons.

Knowledge
Comprehension
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Length Discussion

The following questions and activities are provide as a starting point for fun discussions related to Length. During these conversations students will have an opportunity to use appropriate mathematical language in its correct context, to engage in reflection on the Length activities they have completed and to use logical reasoning to tie their in-class mathematics to its everyday context.



What are some informal units that can be used for measurement?



What problems could there be with using informal measurements?



What are some forms of formal measurement for length?



Why do we need centimetres, metres and kilometres - why not just use centimeters?



How does everyone know how long an inch or a centimetre is?



Why are metric measurments in base 10 - ie. $10\text{mm} = 1\text{cm}$ and $1000\text{m} = 1\text{km}$?

