BLOOMSM4TH

Makes Maths Fun

Level 3

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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BLOOMSM4TH Makes Maths Fun

Level 3

Length

Level 3 is designed for students in their third year at school often called Year 2. The length strand allows students to estimate, measure, compare and record lengths and distances using informal units, meters and centimeters.

Knowledge: Students will use informal units of varying lengths to estimate and measure length and distance and will describe how the measurements relate to the size of the unit chosen.

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

STOP

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

Comprehension: Students will recognise the need for meters and centimeters and use them to estimate and measure length and distance.

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

STOP

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

Application: Students will create a hand print swan and will then measure the length of these to compare hand and print sizes.

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

STOP

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

Analysis: Students will select and use appropriate tools such as rulers and measuring tapes to measure how much longer one object is than another and express the difference in terms of a standard unit.

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

STOP

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

Synthesis: Students will solve addition and subtraction equations involving lengths.

Evaluation: Suggested questions provide a starting point for discussions related to Length.

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: _____

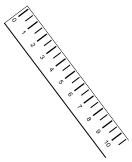
Comparative Lengths

Order the following items from shortest (1) to longest (8).

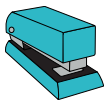

Rubber ☐


Chair ☐


Desk ☐


Ruler ☐


Book ☐

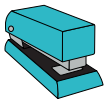

Stapler ☐


Pencil ☐

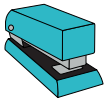

Pin ☐

Now compare items to find comparative lengths.

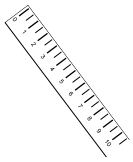
1.  
_____ Rubbers = Chair Seat

2.  
_____ Staplers = Long Pencil

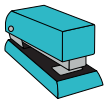
3.  
_____ Pins = Rubber

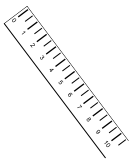
4.  
_____ Staplers = Chair

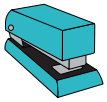
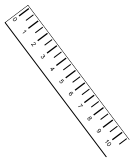
5.  
_____ Chairs = Desk Length

6.  
_____ Pencils = Ruler

7.  
_____ Rubbers = Book

8.  
_____ Staplers = Desk Top

9.  
_____ Rulers = Table Height

10.  
_____ Staplers = Ruler

 Let's Try This Again

 Progress To Comprehension

Name: _____

Paper Measures

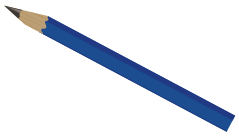
Use this worksheet to measure the height or length of each item below. Then suggest a better item to measure each such as a meter ruler, cloth tape measure, ruler or metal measuring tape.

1. Desk

Number of pieces of paper = _____

A better measuring tool would be: _____

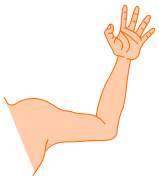
2. Pencil



Number of pieces of paper = _____

A better measuring tool would be: _____

3. Your arm



Number of pieces of paper = _____

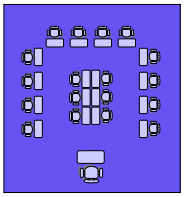
A better measuring tool would be: _____

4. Door

Number of pieces of paper = _____

A better measuring tool would be: _____

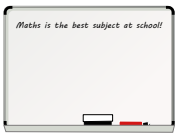
5. Classroom



Number of pieces of paper = _____

A better measuring tool would be: _____

6. Whiteboard



Number of pieces of paper = _____

A better measuring tool would be: _____

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

Length - Level 3 - Students will measure, compare and record lengths using meters and centimeters.

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Let's Try This Again

Progress To Application

Name: _____

Swan Print

Using paint create a hand print swan. Compare these with classmates to find the student with the largest and smallest hands.

Length - Level 3 - Students will measure, compare and record lengths using meters and centimeters.

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

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Let's Try This Again

Progress To Analysis

Name: _____

Shape Lengths

Using a ruler measure the length of each shape below.

1.  _____cms
2.  _____cms
3.  _____cms
4.  _____cms
5.  _____cms
6.  _____cms

Which shape is the longest? _____

Which 2 shapes are the shortest? _____

Use a ruler to draw each line below.

1. 3cms
2. 5cms
3. 1cm
4. 4cms
5. 6cms
6. 2cms

 Let's Try This Again  Progress To Synthesis

Name: _____

The Long And The Short

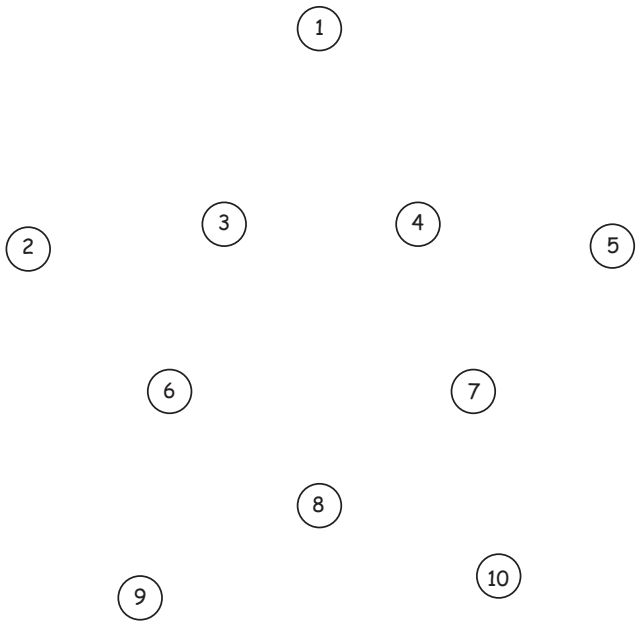
Use a ruler to draw and measure each line below.

1. Draw a line from 1 to 2. _____ cms
2. Draw a line from 1 to 5. _____ cms
3. Draw a line from 5 to 10. _____ cms
4. Draw a line from 9 to 10. _____ cms
5. Draw a line from 2 to 9. _____ cms

What shape have you drawn? _____

6. Draw a line from 1 to 4. _____ cms
7. Draw a line from 1 to 3. _____ cms
8. Draw a line from 4 to 5. _____ cms
9. Draw a line from 7 to 5. _____ cms
10. Draw a line from 8 to 10 _____ cms
11. Draw a line from 8 to 9. _____ cms
12. Draw a line from 6 to 9 _____ cms
13. Draw a line from 2 to 6. _____ cms

What shape have you drawn? _____



Let's Try This Again

Progress To Evaluation

LG 3 SS

Knowledge
Comprehension
Application
Analysis
Synthesis
Evaluation

Length - Level 3 - Students will measure, compare and record lengths using meters and centimeters.

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Length Discussion

The following questions and activities are provided 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.

Students line up in height order and the teacher records the result. Students then estimate their respective foot size order. Students measure their feet independently and compare this to their estimate. They can calculate how far out they were in their estimate.

Students are timed running a set distance such as 100 meters and compare their foot size and height to speed/time. Using this information students suggest ways by which athletes could maximize their running speed. Students compare their suggestions and discuss the practicality of each with reference to cheating.

Discuss the impracticality of using items such as pieces of paper to measure doors and rooms and why standardised measures were created.

Compare a number of different rulers and tape measures to demonstrate to students that they are always exactly the same measurements no matter which tool is employed.

Have a look at the star and hexagon created and discuss the number of lengths which are the same and those which are different in this picture and why this is the case,