

Some ideas for creating mathematical trails

These ideas are to be used as a stimulus to developing maths trails at school level. They constitute ideas only and will have to be adapted to class levels and appropriate content inserted. Maths trails take a little time to develop but can then be used over and over again. It is important to keep a balance over the strands and not always concentrated on the Number strand.

The examples below were developed by Seán Delaney of Coláiste Mhuire, Marino Institute of Education, Griffith Avenue, Dublin 9

MEASURES

- Name three things that are longer/shorter/heavier than the _____.
- Put the following objects in order starting with the shortest: ■ How many pencils long is the bench?
- Which do you think is longer, the bench or you lying down?
- What day was it yesterday etc.?
- If you want to use the _____ what do you have to do?
- How much is the _____? If you have _____ how much more money do you need?
- How many centimetres long is the _____?
- How many _____ would it take to cover the _____?
- How heavy is the _____ in grams?
- Estimate how many _____ of water will fit in the _____. Check your answer.
- On what date was the _____ opened? How long ago is that in days, months, years?
- How many _____ can be bought with ____.
- How long is the _____. Give your answer in metres (using decimals or fractions, if necessary).
- If the train leaves the station at _____ and arrives in _____ at _____ how long will the journey take?
- Draw an analogue clock face showing the time on the _____.
- How many pennies/cents does the _____ cost?
- How long is the perimeter of the _____?
- Find the area of the _____?
- What is the exchange rate today for buying US dollars? How many dollars would I get for €100?
- How long does it take to _____?

SHAPE AND SPACE

- Where is the _____? (over/under/beside etc.)
- Walk towards/away from the _____.
- How many corners on the _____?
- What shape is the _____?

- Draw a _____ in the sand.
- What shapes can you see in this area?
- Find one example of symmetry in the area.
- Face the _____. Make one complete turn. Where are you facing?
 - Now make one half turn. Where are you facing?
- Why, do you think, is the _____ in the shape of a _____?
- Use marla to make a model of the _____.
- Find lines that are parallel/vertical/horizontal.
- Face the _____. Turn one right angle to the right. What are you facing now?
- Find an example of a right angle in the area. Find an angle that is less/more than a right angle.
- What shape is the sign?
- How would someone in a wheelchair enter the building?

NUMBER

- How many _____ are there?
- Are there more _____ or _____?
- How many more _____ than _____?
- Add the _____ and the _____.
- How many more _____ would you need to make 10?
- Write down the number on the _____.
- Estimate how many _____ there are.
- Run from ___ to __. Write down the order in which you came using these words: first, second, third, fourth.
- Add the numbers on the _____.
- If each bench has four legs, how many legs in total in the park?
- If someone ate $\frac{1}{4}$ of the apples in the basket how many would they eat?
- What number is on the _____? Is the number greater than or less than _____? Round this number to the nearest thousand.
- Add the number on the ___ to the number on the ___.
- What do you get if you multiply all the digits in the number by each other?
- How many seats are in this room? If the room were full of people and each person paid 50p to enter how much money would be paid in total?
- How many sweets are in the box? If they were divided among _____ children how many would each child get?
- If one bun costs ___ and you can buy 4 for €1, what is the percentage saving?
- What will this coat cost in the sale if 15% is taken from all items?
- What temperature is it here today? In winter the mean temperature is -2 . What is the difference between the two?
- There is a number written in Roman numerals on the grave stone. What is the number in Hindu-Arabic numerals?

ALGEBRA

- If the pattern on the _____ was continued what colour would be next?
- Write down 3 interesting things about the number on the _____.
- What number would you take from 400 to give you the number on the _____?

DATA

- If you had a choice would you buy a _____ or a _____?
- Stand at the school gate. How many cars, lorries, vans, tractors pass in 15 minutes. Show this on a graph. Why do more lorries than cars pass at this time?
- How likely is it that _____ will happen here today?
- Put these statements in order of likeliness to happen.
- What is the average price of _____?