St Dominic's College Maths Trail - California Hills Park, Ballyfermot.
Possible Answers

Station 1:

a)   Green, orange, red, green, orange, red , green, orange
b)   10th light = Green, 34th light = Green, 100th light = Green
c)   Speed = distance ∕ time

Station 2:

a)   Diamonds, Rectangles, Triangles, Squares, Parallelograms, Cuboids, Cylinders
b)   Isosceles, Right Angled Triangles, Equilateral Triangles, Scalene Triangles, Parallel, Horizontal, Vertical, Perpendicular lines
c)   Congruent Triangles are identical triangles
     4 cases- ASA,SAS,SSS,RHS

Station 3:

a)   Rectangles, Triangle, Circles, Cylinders, Squares, Cuboids, Hexagons
b)   Approximately 310 holes on the 4 benches
c)   11:17 yellow to blue poles

Station 4:

a)   16 vowels on the sign
     H,A,O,I,T,Y = symmetrical letters
b)   Yes they were parallel, 3.5:4:4.5 (ratio of heights of the 3 blue poles)
c)   Angles made by the poles = 120 degrees

Station 5:

a)   Cuboid, Rectangle, Diamond, Triangle, Squares,
      Use height of student to find approx height.

b)   Neither - they do not meet to make right angles and they don't travel side by side.

c)   Approx 45 and 135 degrees (as long as the two estimates add up to 180)

Station 6:

a)   Triangle

b)   Approx 45 degrees. This is an acute angle.

c)   Students should use their hands or feet to measure the length width and height of the monument. They can then measure whatever they used ie-length of their hand to get accurate measurements and then find the volume of the stone by using the formula
      Volume=length x width x height

Station 7:

a)   Students need to guess how many people live in the houses in total.

b)   Three methods that could be used to find the average:
Mean=add the total number living in houses divided by the total number of houses
Median=put the numbers in order and find the middle number
Mode= find the most common number of people living in the houses

c)   Students need to get a measurement of their own height and use this to estimate the height of the pole. Then using their feet they could estimate the distance from the wire to the pole. To find the length of the pole students could use pythagoras theorem. $h^2 = a^2 + b^2$

Station 8:

a)   Students need to walk between the trees counting their steps and then use a measurement of their foot length to estimate the distances.

b)   A range of answers can be found here as long as the 2 base angles are the same and the 3 angles add up to 180°

c)   Approx Area = ½ base x height

Station 9:

a)   Student's to count cars on the day.

b)   Lines of symmetry; windows, doors, roof, between houses, gates, red/brown/cream

c)   No not equidistant as result of calculation. Not collinear as they were not in a straight line.

Station 10:

a)   Rectangles, squares, triangles, cuboids, circles, cylinders
        Yes, lots of lines of symmetry.
        Students count number of apts, and guess how many live in each and estimate how
        many people live in the apartments in total.

b)   Distance: 1.7km
        Time= to be calculated as you complete the trail.
        Speed= Distance/Time (To be calculated when you have the time taken to complete the
        trail)

c)   Subtact 1964 from the current year .
        61 years old in 2025.