Maths on your daily walk 3 Natural Objects

	When you get home		
Week 3	**KS1**	**Y3/4**	**Y5/6**

You need a carrier bag.
On your walk collect about 25 natural objects, collect some the same, collect some of different sizes and colours.
You might collect stones, twigs, sticks, feathers, weather cones, leaves, bark, shells.
 	
Remember to wash your hands before you go and out and not touch your face with your hands on your walk.
Wash your hands as soon as you get home.
	Sorting
	
	• Sort your objects into sets?
	• How did you sort them?
	• Can you draw a picture of your sets?
	• What is the same/different about your sets?
	
	Order by size
	
	hoose 10 of your objects.
	an you order you objects by size?
	/hat was the largest you found?
	mallest?
	an you make a line of your objects smallest to rgest?
	an you take a photo of your line or draw it?
	
	Measuring
	
	• Choose 5 of your objects that you can measure the length of.
	• Use some cubes or a ruler or some pasta to measure them.
	• Make a table of your results.
	
	Geometry
	• Can you make a repeated pattern?
	• Can you make your pattern in a circle? Spiral?
	• Can you make your pattern go round the edges of a square?
	• If you collected some sticks can you use them to make a square, a triangle, a rectangle?
	• If you collected stones can you make a circle with them?
		Sorting
		
		• Sort your objects into 2 sets.
		• Create a Venn or a Carroll diagram using some of your objects – then take a photo or draw it.
		
		Perimeter
		
		• Can you draw round some of your leaves, measure with string and calculate the perimeter?
		• Use the twigs/sticks you found to make a stick man or animal. Estimate the total length of the sticks and then measure it.
		
		Angles
		
		• If you found some twigs can you use them to make the following angles:
		  ○ A right angle
		  ○ An acute angle
		  ○ An obtuse angle
		
		• Using the stick man or animal you made, can you have a go at drawing it with a ruler and then measuring the angles between the sticks.
		
		Length
		
		• Make a spiral using all the objects you found. Measure it with a piece of string.
		• Can you make the length of the spiral a metre long?
		
		3-D Sculptures
		
		• Use any sticks you collected and some blu tac/play dough or plasticine to make nets of 3-d shapes.
			Fractions
			
			• Sort your objects into sets.
			• For each set them calculate the fraction this set is of your whole collection. Can you write the fraction in its simplest form, or as a %?
			• Can you draw an image such as a bar model or a pie chart to show your different sets?
			
			Area and Perimeter
			
			• Can you estimate the area of any leaves you found?
			• How could you calculate the area of your leaves? Have a go.
			• Which object do you think would have the largest surface area?
			• How could you calculate this? Have a go.
			
			Angles
			
			• If you found some twigs can you use them to make the following angles on straight line where:
			  ○ Both angles are odd
			  ○ Both angles are larger than 70
			  ○ One angle is acute, and one angle is obtuse.
			
			Circumference
			
			• If any of your objects are round/cylindrical then use some string to calculate their circumference.