

Lesson Title: All that Rubbish?	Key Stage: 3
Curriculum Links: Ma2 /1a, 2e, 4a and Ma3/1b	
Key Words ratio, weight, percentage	
Key Questions: <ul style="list-style-type: none"> • What is the simplest form of a ratio • What is the ratio of the weight of different items to the amount of packaging they come in? • What percentage of packaging is made from recycled material? 	
Objectives <ul style="list-style-type: none"> • To calculate the simplest form of a ratio confidently. • To calculate percentages confidently. 	
Possible Activities:	
<u>Starter</u> <ul style="list-style-type: none"> • Show the students different items with their packaging on – discuss why they think companies package items. 	
<u>Main</u> <ul style="list-style-type: none"> • Recap to students what ratios are and how we calculate them. • Explain simplest form ratios. • Split students into groups of 3-4. Ask students to unpack the items they have bought in and then split the items into two piles: 1) the useable item and 2) the packaging • Students need to weigh each pile, rounding up to the nearest gram. • Students need to record their results in the table on the worksheet, including the simplest form of the ratio. 	
<u>Plenary</u> <ul style="list-style-type: none"> • As a class discuss whether there is any link between the type of item and the ratio of the packaging. • Can the class come up with any reasons for this? 	
Extension Activities Pupils can calculate the percentage of recyclable materials that the packaging is made up of.	
Cross Curricular Links Geography, Citizenship	Points to note
Homework ideas Ask students to write down the type of packaging on 5 items. As a class collate the most common materials for packaging into a graph, eg glass, plastic, paper, cardboard.	
Resources <ul style="list-style-type: none"> • Worksheet – All that rubbish! • Items that students have bought from home with their packaging on (items can include fruit, toys, food, Easter eggs.) • Weighing scales. 	