






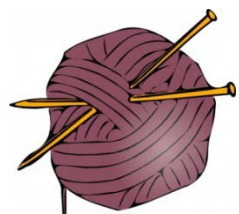


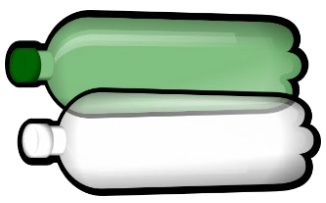


# Year 4 - Creating Processed Materials

## STUDENT WORKSHEET

With Street Science, you became a junior scientist and **processed materials** to produce some cool caviar, wacky worms and polymer balls!

1. Some of the materials we encounter everyday are **natural** products. Some materials are **processed** to have different properties.

Circle 'Natural' or 'Processed' to describe each of the materials below.

		
<i>Natural or Processed</i>	<i>Natural or Processed</i>	<i>Natural or Processed</i>
		
<i>Natural or Processed</i>	<i>Natural or Processed</i>	<i>Natural or Processed</i>
		
<i>Natural or Processed</i>	<i>Natural or Processed</i>	<i>Natural or Processed</i>

2. Choose one processed material from above and describe how it is used. Explain which of its **properties** make it useful for that purpose.

---

---

---



3. Alginate starts as brown seaweed in the ocean. Work in groups to correctly order the events below, showing how seaweed becomes the product that you used today! (Hint: you might have to do a little research!)

	<p>The pieces are washed in plain water, and in an <b>acidic solution</b> to help the alginate particles <b>get bigger</b>.</p>	
	<p>The brown coloured liquid is strained to become <b>clear</b>, and remove any <b>debris</b>.</p>	
	<p>Seaweed that grows naturally in the ocean is <b>harvested</b> by seaweed farmers.</p>	
	<p>The alginate is forced to <b>crystallise</b>. These crystals are dried and can be crushed into a powder.</p>	
	<p>The seaweed is removed from the acidic solution, and is put into a mixture of caustic soda, so it can be <b>extracted</b> from the seaweed.</p>	
	<p>The seaweed is <b>dried</b> until it is crispy, and is then <b>crushed</b> into smaller pieces.</p>	
	<p>Crushed alginate powder can be <b>combined</b> with many liquids, to create squishy solids!</p>	