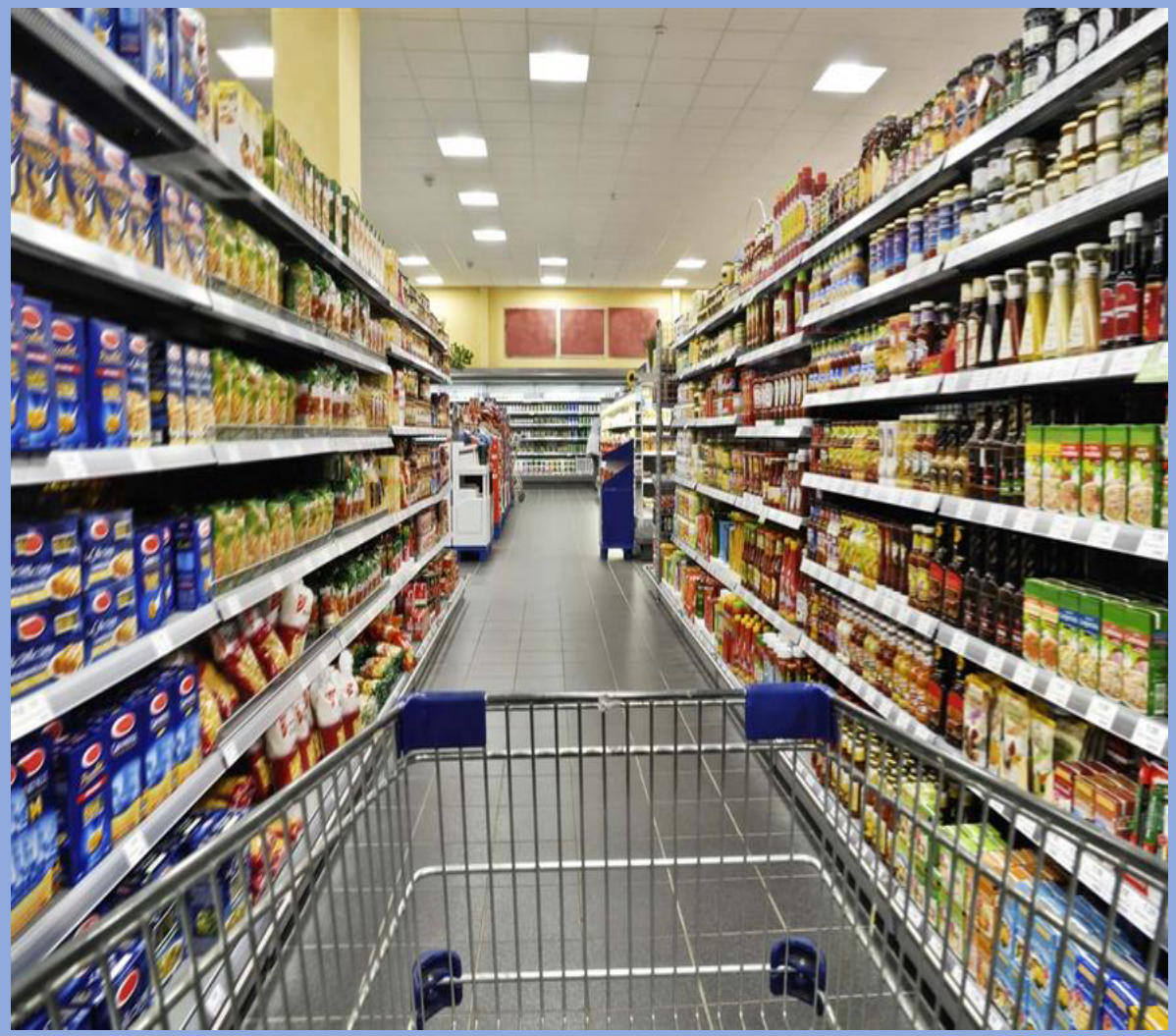
Science Task Two – Separating mixtures.

A local supermarket has had a disaster!

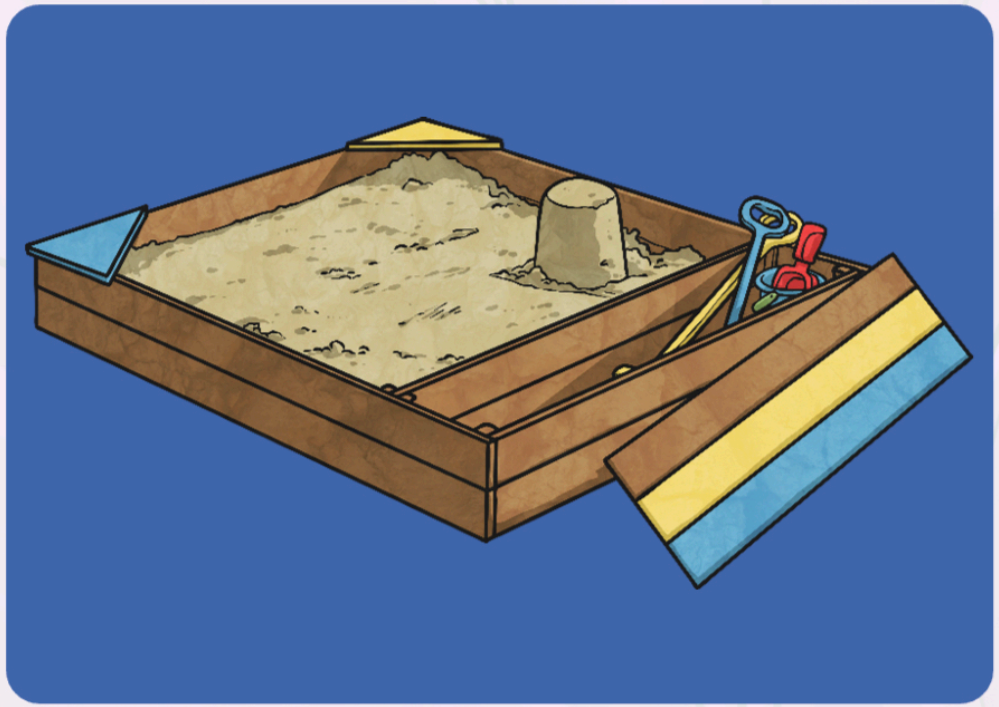
Lots of their goods have got mixed up after a delivery truck was loaded up incorrectly.

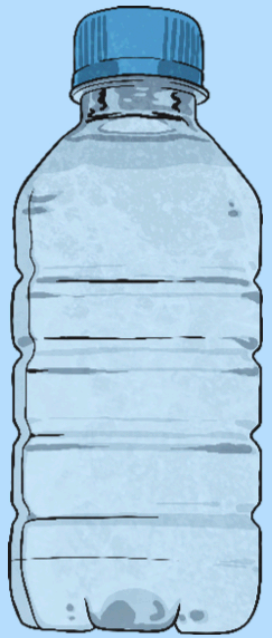
The manager of the supermarket has asked for your help in separating all the items so that they can be put out on the shelves.

Have a look at the jumbled up materials and think about how they have been mixed together.

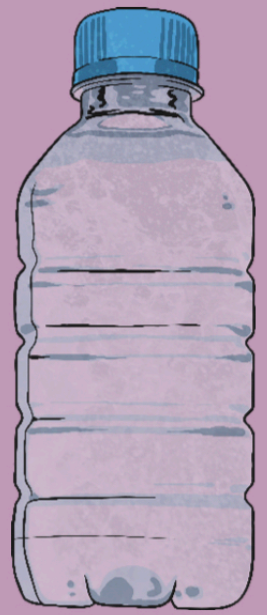


Several water bottles have leaked into a bag of play sand.



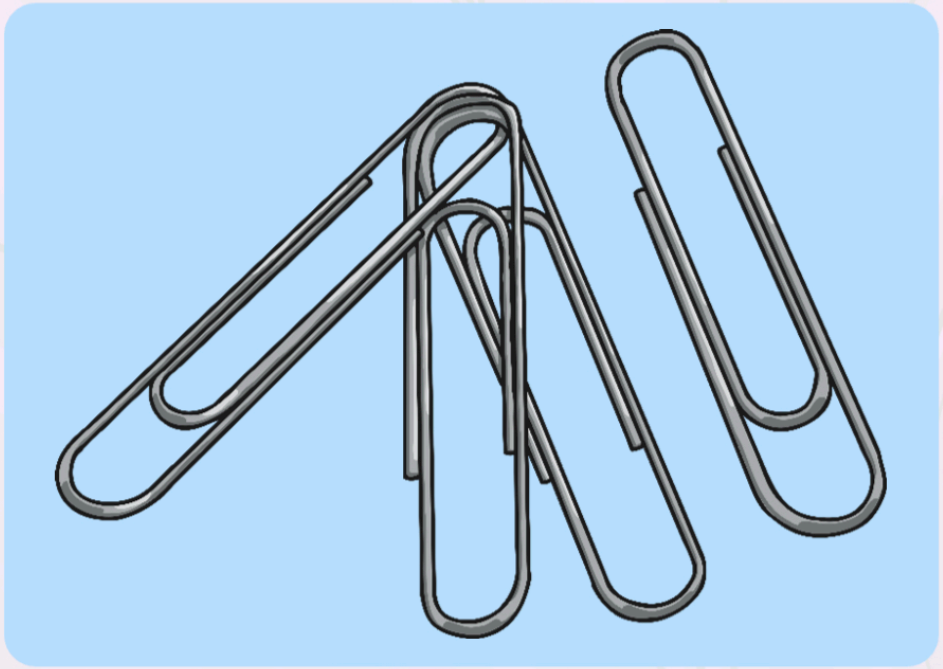


A bag of salt has split open and the salt has mixed with some water from the water bottles.



Raisins have poured out of their boxes into the bags of flour.

Some boxes of paper clips have spilled into the bags of rice.



Can you match the mixtures with their Scientific term? Record them in your books.

1. A suspension - a mixture of a liquid and solid particles that will not dissolve.	2. A mixture of two solids.	3. A solution - a solid dissolved in a liquid.	4. A mixture of two solids.
A. Sand and water. 	B. Raisins and flour. 	C. Paper clips and rice. 	D. Salt and water. 

How did you do? Give yourself a tick for each one that you got correct!

1. A suspension - a mixture of a liquid and solid particles that will not dissolve.

A. Sand and water.

2. A mixture of two solids.

B. Raisins and flour.

3. A solution - a solid dissolved in a liquid.

D. Salt and water.

4. A mixture of two solids.

C. Paper clips and rice.

Below are four processes that can be used to separate mixtures.

Process 1: Evaporation

Boil the mixture, or leave it for a few days, so the liquid evaporates leaving the solid behind.

For which mixture would this process work best?

Process 2: Magnetic Attraction

Use a magnet to attract any magnetic materials and remove them from the mixture.

For which mixture would this process work best?

Process 3: Filtration

Line a funnel with filter paper and place it over a beaker. Pour the mixture slowly into the filter paper. The liquid will get through and any insoluble solids will be caught in the filter paper.

For which mixture would this process work best?

Process 4: Sieving

Pour the mixture through a sieve held over a bowl. The smaller particles will get through it into the bowl and the larger particles will be caught in the sieve.

For which mixture would this process work best?

Can you choose the correct process for each mixture?

Draw a **diagram** of the process and **explain** each process. You could use the template on the next slide, or create your own in your remote learning books.

Please ensure that you follow all of our expectations on presentation.

Sand and Water.

To separate these materials I will use

_____.

Explanation:

_____

_____

_____

_____

Diagram:

Paper Clips and Rice.

To separate these materials I will use

_____.

Explanation:

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Diagram:

Raisins and Flour.

To separate these materials I will use

_____.

Explanation:

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Diagram:

Salt and Water.

To separate these materials I will use

_____.

Explanation:

_____

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Diagram: