



STAR



Tea Bag Trouble

Organiser's Card



About the activity

This activity is designed to get children thinking about materials.

Uncle Astro wants to make a nice cup of tea but he's run out of tea bags. The shop is only selling packets of loose tea leaves. Uncle Astro doesn't like tea leaves floating around in his drink, so Cosmic and Gem wonder if they can make him some tea bags.

Through this activity you will support your group to:

- Think about what makes a good tea bag
- Test different materials and observe how they behave when used as a tea bag
- Record their results and share them .

Kit list

- Loose tea leaves and tea bags
- Water from the hot tap (see Safety).
- Clothes pegs
- Selection of different materials e.g. tissues, newspaper, kitchen roll, silk, cotton, tissue paper, crepe paper
- Teaspoons, clear containers, measuring jug, minute timer.
- Scissors and thermometers
- Coloured pencils, including brown



What to do

1. Give out the activity cards and introduce the activity by reading the story together.
2. Get the children to talk about the questions and the opinions of Aunt Stella, Gem and Cosmic.
3. Look at some tea bags together. Talk about making tea.
4. If possible let them choose their own materials.
5. Check that they understand how to make tea bags using the pegs. Let them talk about what makes a good tea bag (lets colour and flavour out and keeps tea in).
6. Discuss safety issues when using hot water.
7. Ask the children to draw cups of tea to show what happened. Encourage the children to use lighter or darker browns to show the tea colour and to draw in tea leaves.

Things to think about

They need to fix the peg so that the tea leaves cannot escape through the top. Children may need to practice. Thin or soft materials are easier to use.

Some materials will absorb a lot of water and some will tear easily. Encourage children to notice this.

Children should be encouraged to use the same amount of tea in each bag, the same sized piece of material, the same volume and temperature of water, and to dunk for the same amount of time.

Encourage children to observe differences in tea colour and the number of escaping tea leaves.

To show off their research, children can draw pictures of cups of tea. They can stick a piece of the appropriate tea bag material next to each picture.

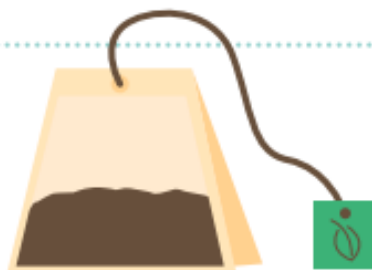
Take it further

The first tea bags were made from silk muslin in 1903 in the USA. Tea bags weren't popular in the UK until the 1950's. Now 96% of all tea sold in the UK is contained in tea bags.

Modern tea bags are usually made of paper fibre and heat sealed. They come in square, rectangular, circular and pyramidal shapes. The quality of the tea in the bags varies. Some can have a high quantity of tea dust in them. Bags with whole leaves tend to take longer to brew.

Keywords

- Hot Water
- Tea
- Absorption
- Filtration
- Materials



Watch out!

Water from the hot tap will work. Check its temperature before use to make sure it is not too hot for children to use.

Try to prevent over vigorous dunking and splashing.

Children should not drink the tea.





STAR

Tea Bag Trouble

Activity Card



Uncle Astro loves drinking tea. He drinks tea with his breakfast and with a biscuit mid-morning. He has tea after his lunch and with a piece of cake at 4 o'clock. He has tea with his evening meal and a cup just before he goes to bed.

"No wonder the tea bag tin is empty," sighs Aunt Stella.

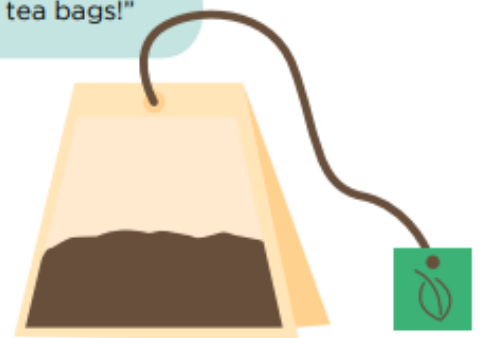
"We'll go to the shops to get some more," offer Cosmic and Gem. But when they come back there are no tea bags in their shopping basket. "The shop has run out of tea bags. We had to buy a packet of loose tea instead."

"Oh no!" says Uncle Astro. "That won't do. I'll end up with a cup full of tea leaves. How am I going to make a nice cup of tea this afternoon?"

"We can try to make some tea bags for you Uncle Astro," they answer eagerly.

"That's very kind of you, but remember - I don't like tea leaves in my tea. I just like a nice cup of lovely brown tea."

"Come on," says Aunt Stella. "Let's start testing tea bags!"



Your challenge



Uncle Astro doesn't like tea leaves floating around in his drink, so Cosmic and Gem wonder if they can make him some tea bags.

Have you ever helped to make a cup of tea?

Do you know how tea bags work?

Aunt Stella thinks they should make Uncle Astro some tea bags out of kitchen roll

Cosmic wonders if newspaper would work

Gem thinks thin fabric would be better

What do you think?

Find the best material to make a tea bag for Uncle Astro.

Discuss



Plan how you can test different tea bags. How will you know which is the best tea bag?

Getting started

Cut out a square of kitchen roll.

Put a teaspoonful of tea leaves in the middle.

Gather up the corners with a clothes peg to make a bag.

Half fill a clear beaker with water from the hot tap.

Holding the peg, dunk the teabag up and down in the water for one minute.

Try other papers and fabrics to see which type makes the best tea bag (lets the flavour and colour out, and keeps the tea leaves in).

Take care with the hot water and don't drink the tea!

Test your ideas

Can you think of other ways to test tea bags?

Extra things to do

Are all tea bags the same shape?

Are some shapes better than others?

Why do some have string attached?

Find out when tea bags were invented.