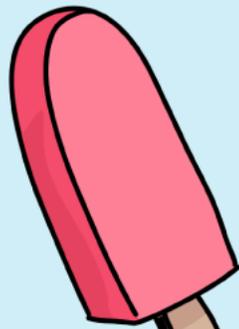
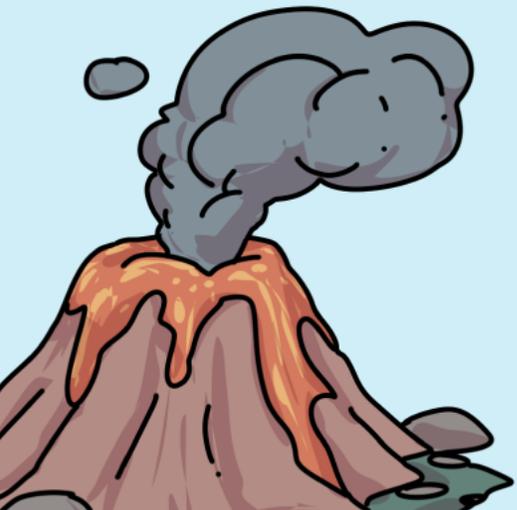




# States of Matter

I can make careful observations.

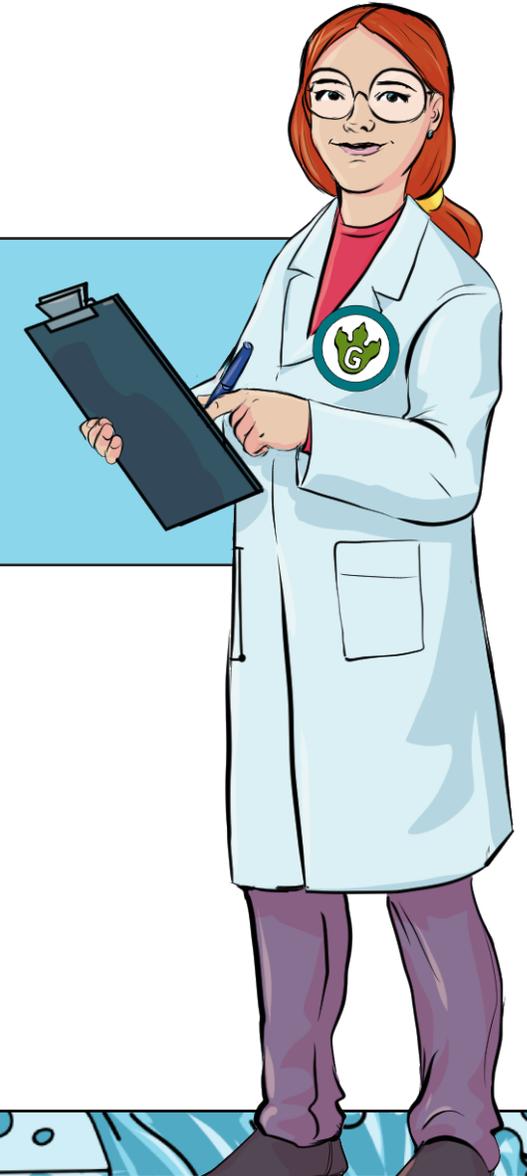
I can communicate my results.



# Thinking Time...



What do the words 'solid, liquid and gas' mean?



**Complete the pre-assessment task again so we can see what you can remember.**



# Do all liquids behave the same?



We have already discussed the **features of a liquid**.

- Liquids can **flow** or be **poured easily**. They are **not easy to hold**.
- Liquids **change** their **shape** depending on the container they are in.
- Even when liquids change their shape, they **always** take up the **same amount** of space. Their volume stays the same.



But do all **liquids behave** the same?  
Can you think of an **example** when they don't?

## Hint

Think about **honey** and **water**.  
Both are liquids but do they behave the same?

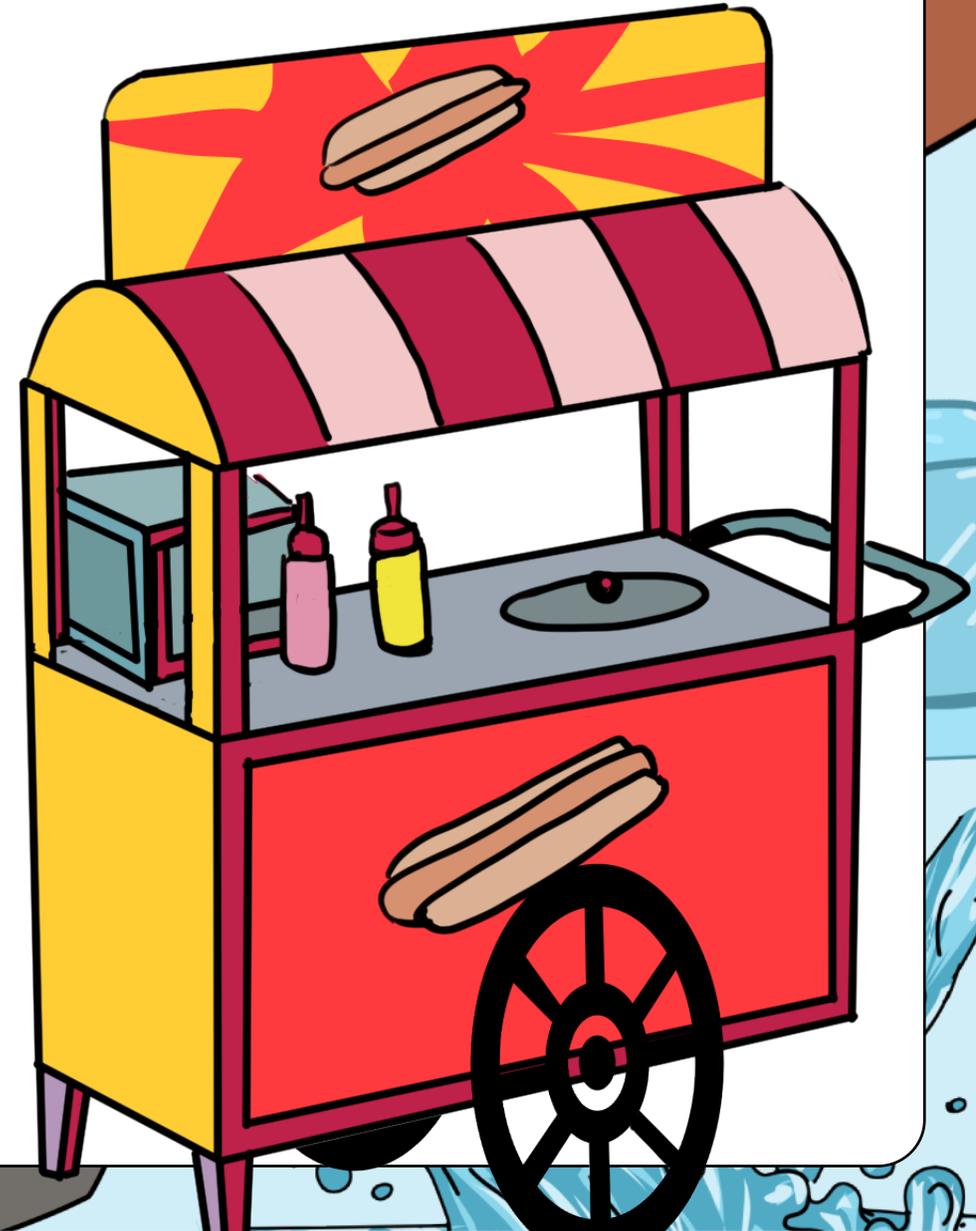


# Investigation



I have received an **email** from a local hot dog stand owner called **Kevin**.

He needs our **help**!



# How can we investigate this?

**To**

Year 4

**Cc**

## Investigation Results

Hi Year 4!

My name is Kevin and I own a hot dog stand. I've been having complaints from my customers about the ketchup I'm using. Some say it doesn't taste nice. Others say it is too runny and slides right off the hot dog. The rest say it is too thick and doesn't go on their hot dog properly!

Your teacher has been telling me that you are learning about solids, liquids and gases and I was wondering if you could do me a favour? Well, ketchup is a liquid and I want you to investigate if all ketchups behave the same. And if they don't, which one is the best ketchup for me to have on my stand. Do you think you could do this for me? Let me know!

Thanks,  
Kevin

**Send****Discard**

# Planning time



We are going to **investigate** if all liquids **(ketchups!)** **behave** the same.  
Now, **you are going to plan** how you are going to carry out this investigation.  
Talk it through **with your partner** and then fill in the planning sheet.



## Key things to investigate;

- How **runny** the liquid is
- How it **sits** on a hot dog
- How it **tastes**



# Investigation Time



Now is the time to **carry out** your planned **investigation!**



# Communicate results



Now that you have completed your investigation and **gathered your data**, we need to **communicate our results** with Kevin, the hot dog stand owner.



On your sheet, you need to **explain** to Kevin **what we did** and what our **results** were.



# What did we find out?

Talk to the other people on your table about your results.

Did you all get the same **results**?

Which results were **different**?

Which results were the **same**?

Why do you think **some** of us  
**have different** results?

