

Tuesday 26<sup>th</sup> January 2021 - Science 1

WALT: Identify and group different solids, liquids and gases.

## Task 1

Think back to the Science you did in week 1 of the Spring Term - What are the three states of matter?

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

Watch the clip: Are you correct?

<https://www.bbc.co.uk/bitesize/topics/zkqg87h/articles/zsgwvxrs>

Don't forget to play the game too!

## Task 2

Is it a solid, liquid or a gas?

Find examples of solids, liquids and gases in your kitchen. Fill in the grid below:

[illegible]

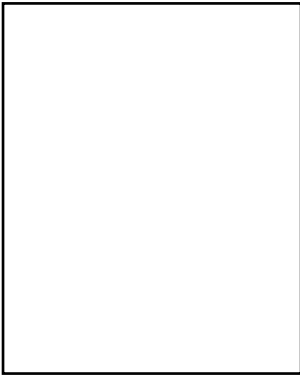
### Task 3

What are particles and why is that important when learning about solids, liquids and gases?

<https://www.youtube.com/watch?v=gez2rmeCpfE>

Using the information from the clip, draw in the particles that show a...

Solid



Liquid



Gas



Now that you have seen how solids, liquids and gases behave, fill the gaps in the paragraph. Use the words in the box below to help you. Cross each one off as you use it.

Liquids, solids and gases are all made up of \_\_\_\_\_.

In a solid \_\_\_\_\_ are held very \_\_\_\_\_ together to form a **regular** \_\_\_\_\_ and they can just \_\_\_\_\_+.

In liquids they are \_\_\_\_\_ together, but they can \_\_\_\_\_ past each other and they have \_\_\_\_\_ **regular** \_\_\_\_\_.

In gases, instead, \_\_\_\_\_ are free to \_\_\_\_\_ in all \_\_\_\_\_ at a very high speed.

move	close	tiny	no	slide	directions	pattern
particles	vibrate	particles	tightly	pattern	particles	

Optional challenge: Play the game to help recap what you've learnt in class time.

<http://www.crickweb.co.uk/ks2science.html#changingstate>

## Science - Thursday 28<sup>th</sup> January 2021

WALT: *observe that some materials change state when they are heated or cooled.*

WALT: *carry out a fair test.* What is a fair test?

<https://www.bbc.co.uk/bitesize/topics/z2ddmp3/articles/zpctrwxr>

Key vocabulary - *1 hp for every key word you use to explain your experiment.*

**Freeze** - *To change a liquid into a solid*

**Freezing point** - *Temperature at which a liquid changes into a solid.*

**Liquid** - *Something that flows easily*

**Solid** - *something that has a definite shape and volume*

You will now undertake an investigation looking at freezing points.

Investigation: What are the freezing points of different materials?

Item	What I think is going to happen (prediction)	How much of the liquid will be used? (Remember to make this a fair test!)	What had happened after leaving it in the freezer for 1 hour	Was I right? Can you explain why you were right?
Soup				
Olive oil				
Tomato Ketchup				
Golden Syrup				
Water				

How did you make your experiment a fair test?

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Optional challenges - If you'd like to do some more experiments at home here are some ideas:

- Which type of chocolate melts fastest? (Always remember to get an adult to supervise you if you are working with hot liquids.)
- Which magnet is the strongest?
- Which material is most suitable for an umbrella?
- Does a plant need light to grow?
- How can you go faster down a slide?
- Which kitchen towel absorbs the most liquid?
- Which shaped ice cube melts the fastest?

For each investigation consider what variable will change and which variables need to remain the same to make it a fair test. Think about what you are measuring. What equipment do you need? Can you make a prediction (a good guess, with a reason) before you begin?

Don't forget to make your experiment a fair test!