

WB Monday 13<sup>th</sup> May 2024



LQ: Can I understand what abstraction is?

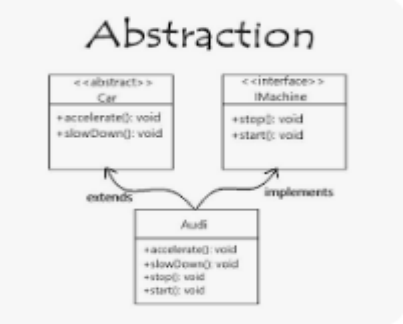
### Steps to success

- *I can explain what abstraction is.*
- *I can give an example of when abstraction might be useful.*
- *I can use abstraction in my work.*



# STAR WORDS

*abstraction*



*unnecessary*



*Key features*



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TP:

*Discuss 3 things you learnt about writing algorithms.*

*Then tell your partner 2 things you found interesting about writing algorithms.*

*Write down 1 question you have about writing algorithms.*

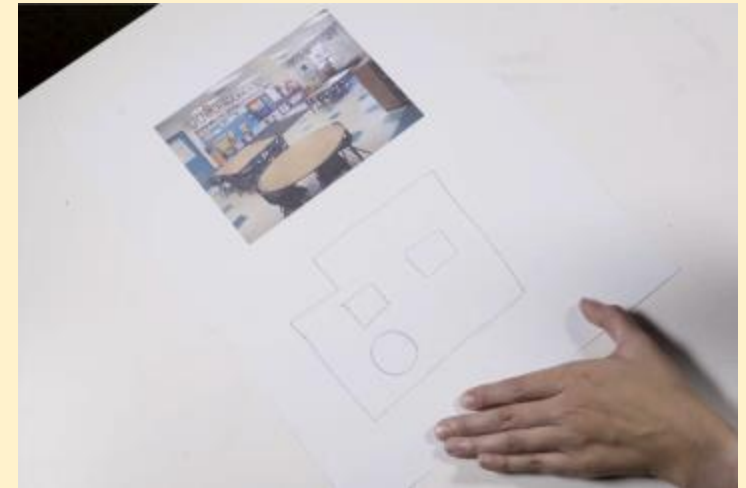


LQ: Can I understand what abstraction is?

*What does the word Abstraction mean?*

*Abstraction means removing unnecessary detail to help solve a problem.*

*We use abstraction to read digital maps. It helps to decide how much detail we need to see.*



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## MAPS:

<https://www.google.com/earth/about/>

*Let's look at the map.*

*We cannot see our town because we have zoomed out too far.  
However, it is easy to get lost when we zoom into street view.*



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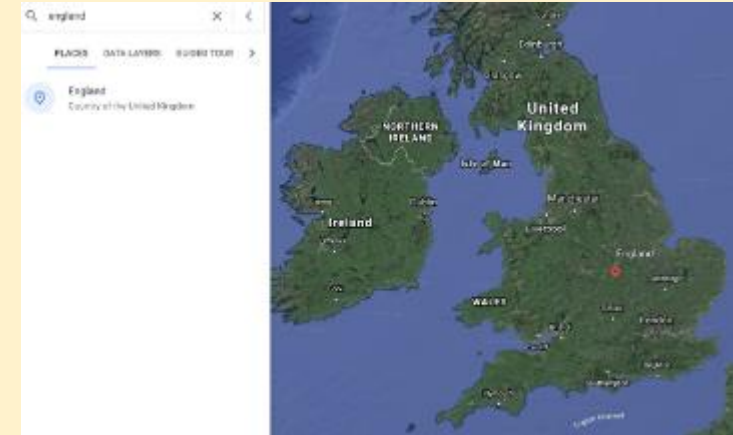
## MAPS:

<https://www.google.com/earth/about/>

*Let's look at the map.*

*Do you recognise anything?*

*Can you spot or name any key features?*



LQ: *Can I understand what abstraction is?*

## SHAPES:

<https://www.google.com/earth/about/>

*On a map, Italy looks like a boot.*

*Removing unnecessary details (e.g. not including the cities) is called Abstraction.*



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## COMPARISON:

<https://www.google.com/earth/about/>

*Compare the shape drawing of the UK with the Google Earth Version*





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## COMPARISON:

[Tube - Transport for London \(tfl.gov.uk\)](http://tfl.gov.uk)

The underground map is colour coded with straight lines to represent the train lines without unnecessary details.

Compare the London Tube Map to the Geographically accurate Map.

Is it harder to see the train lines?



[https://www.whatdotheyknow.com/request/geographically\\_accurate\\_map/response/560395/attach/3/London%20Connections%20Map.pdf](https://www.whatdotheyknow.com/request/geographically_accurate_map/response/560395/attach/3/London%20Connections%20Map.pdf)

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## COMPARISON:

*Getting the right level of abstraction is important.  
If something is too detailed we lose the focus of what we are doing.*

*Similarly, if something is 'too zoomed out' there will not be enough detail to help us.*



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SCHOOL PLAN:

# TASK 1

Look carefully at the photos of our classroom.



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## TASK 2

*Use abstraction to make a plan of the classroom*

Self assessment

Do you understand what to do?



*What can you leave out of the map?*

*Would colour coding make it clearer to identify the location?*

*Are tables, doors, whiteboards and windows identified in the plan?*

*Is there too much detail?*

*Is there too little detail?*

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## How Did You Do?

*Can you match up the plans to the photos of the classroom?*

*What features helped you to make your decision?*

*Does it need more or less detail?*

