

Computing

# Lesson 3: Statistical State of Mind

**Data Science**

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# Task 1 - Analyse the graph

View this graph by typing the URL below into a web browser:

[oaknat.uk/comp-ds3starter](http://oaknat.uk/comp-ds3starter)

What data is being displayed on the graph?	
Does the graph show a trend?	
Where are the anomalies in the data?	
Why do you think those anomalies have occurred?	



## Task 2 - Posing questions

River Kingdom is a new theme park that is opening in the UK. They want you to recommend design considerations that would help them to make a great experience for their visitors.

One of the main restrictions that they know of is that they can't build a roller coaster over the height of 350 ft, due to limitations of the site.



## Task 2 - Posing questions

Use the variables above to help you pose precise questions to help us find the answer to the larger question of “What makes a cool roller coaster?”

You should try and write two questions on the next slide, and remember that we can't build a roller coaster over 350 ft.

- Speed
- Height
- Drop
- Number of twists and loops (inversions)
- Length (distance)
- Duration
- Position (e.g. sitting down, suspended)



# Task 2 - Posing questions

Question 1	
Question 2	



# Task 3 - Visualising the data

visit the following website to view the data:

[oaknat.uk/comp-ds3a3](https://oaknat.uk/comp-ds3a3)

Use this website to visualise the data and help find answers to your questions. Record your on the following slides.



# Task 3 – question 1

Question	
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<p>Findings:</p> <p><i>write a few sentences describing what you have learnt from this visualisation</i></p>	
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# Task 3 – question 2

Question	
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<p>Findings:</p> <p><i>write a few sentences describing what you have learnt from this visualisation</i></p>	
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## Task 4 - Conclusion

Use the space on the next slide to write your conclusion and to make your recommendation to River Kingdom about what would make the best roller coaster.

Use the following bullet points to help you structure your answer:

- What is your recommendation?
- How does the data support this?
- Is this data on its own enough to support your recommendation?



# Task 4 - Conclusion

Use the following bullet points to help you structure your answer:

- What is your recommendation?
- How does the data support this?
- Is this data on its own enough to support your recommendation?



# Task 4 - Conclusion

Next steps: What does your data not show you?

If you continue working on this problem, what further questions do you think need answering?

