River Kingdom roller coasters

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.

The variables are as follows:

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

**Task 1: 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 a minimum of two questions, and remember that we can’t build a roller coaster over 350 ft.

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**Task 2: Visualising and analysing the data**

When directed by your teacher, visit the following website to view the data:

[ncce.io/ds3a3](https://ncce.io/ds3a3)

Use this website to visualise the data and help find answers to your questions. Record your findings below.

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| --- | --- |
| Question |  |
| Visualisation |  |
| Analysis of findings (write a few sentences describing what you have learnt from this visualisation) |  |

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| --- | --- |
| Question |  |
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**Explorer task:**

Copy and paste the tables from above if you have created more than two visualisations.

**Task 3: Conclusion**

Use the space below 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?

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**Next steps: What does your data not show you?**

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

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