

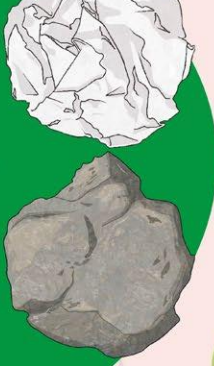


Year 5 Forces Science Discussion Starter - Follow-On Activities

- Investigate why a large ball of paper and a large stone would hit the ground simultaneously, when dropped from the same height, at the same time.
- Find out why the flattened paper ball wouldn't hit the ground at the same time as the stone.
- Investigate dropping objects of different shapes and sizes from the same height, at the same time.



Will a large stone or a large ball of paper hit the ground first?



The large stone will hit the ground first because it is heavier.

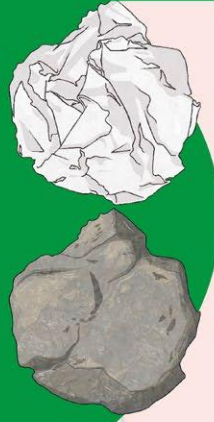
The large ball of paper will hit the ground first because it is lighter.

They will both hit the ground at the same time.

If you flatten the paper ball, the stone will hit the ground first.



Answers - Will a large stone or a large ball of paper hit the ground first?



Asking scientific questions is a great way for you to explore a new topic.

Although not all of your questions will be answered at this point, these facts may help you to understand how **some forces** work.

The large stone will not hit the ground first.

The large ball of paper will not hit the ground first.

This is the correct answer because they have the same force of gravity acting on them.

This is correct due to an increase in air resistance acting against the force of gravity.

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Year 5 Forces Science Discussion Starter - Teacher Guidance

This science discussion starter pack is designed to encourage children's scientific thinking. Included are two sizes of the discussion starter, a PowerPoint version and a follow-on sheet, giving you flexibility in the classroom.

Before showing the discussion points, you could ask the question to your class for them to share initial ideas. The starter page with the children's answers could then be displayed for the whole class to see and discuss as a class. Alternatively, children could work in smaller groups to discuss the points.

Points for children to consider include which children do they agree with and why. They should explain if there are any statements that they disagree with and whether there are some they partially agree with.

It is important that while using this resource, any common misconceptions that children have are addressed during the topic. Common misconceptions may include:

- when objects are dropped from the same height, the object that weighs the most will hit the ground first;
- weight is the same as mass.

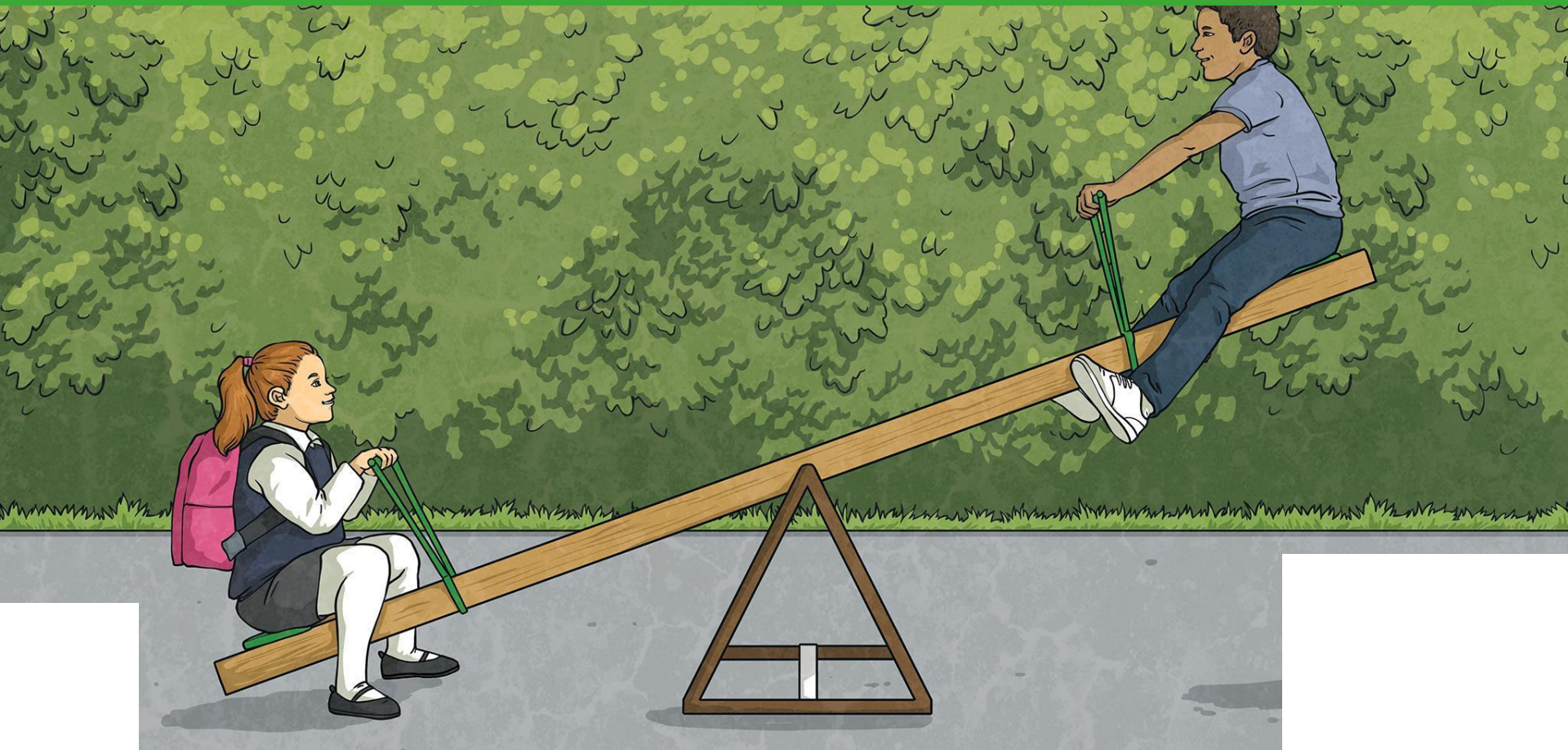
Disclaimer: We hope you find the information on our website and resources useful. The activities set out in this resource are potentially hazardous and may not be suitable for all children. Adult supervision will be required throughout. It is your responsibility to assess whether the children in your care are able to safely carry out the activities. You are responsible for carrying out proper risk assessments on the activities and for ensuring that activities can be carried out safely. We are not responsible for the health and safety of your group or environment so, insofar as it is possible under the law, we cannot accept liability for any loss suffered by anyone undertaking the activity or activities referred to or described in this resource. It is also your responsibility to ensure that those participating in the activity are fit enough to do so and that you or the organisation you are organising for has the relevant insurance to carry out the activity. If you are unsure in any way, we recommend that you take guidance from a suitably qualified professional.



Forces

Discussion Starter

KS2 Year 5 Science





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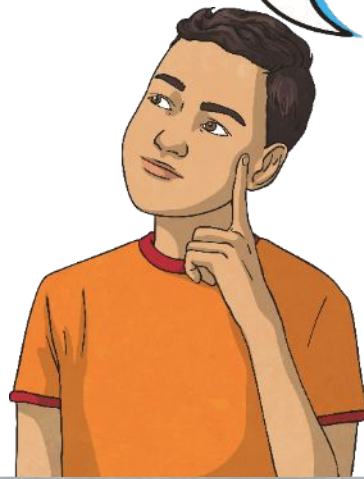


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