

Evolution and adaptation Classroom activity pack

This pack contains a series of activities for you to complete with your class both before and after your visit to Kew.

You may choose to do all the activities or just select one. Post-visit activities are intended to build on the learning from the educational session at Kew. Many of the resources can be used on a whiteboard or can be printed.



Pre-visit teacher notes

KS4 Evolution and adaptation

Thank you for booking the Evolution and Adaptation education session at Kew. You can use the pre-visit activity to support your pupils' learning.

Ahead of your visit, your pupils could answer the question below. They can tell us about their answers when they come to Kew.



Scientists at Kew have been investigating a variety of species of Amorphophallus plants growing in the rainforest. They have found that the many species' flowers have a range of different odours including the smell of chocolate, bananas, cucumber, cheese, dead rats and fish.

Suggest why the various species of Amorphophallus plants have evolved to produce flowers with different odours.

More information about this research can be found at:

<https://www.kew.org/read-and-watch/amor-phew-phallus>



Pre-visit pupil activity

KS4 Evolution and adaptation



Scientists at Kew have been investigating a variety of species of *Amorphophallus* plants growing in the rainforest. They have found that the many species' flowers have a range of different odours including the smell of chocolate, bananas, cucumber, cheese, dead rats and fish.

Suggest why the various species of *Amorphophallus* plants have evolved to produce flowers with different odours.



An *Amorphophallus titanum* plant growing at Kew.

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We hope that the teaching session at Kew assisted in developing the skills and knowledge of your pupils and provided them with an insight into the amazing plants and world-leading plant science at Kew.

Following your visit, you can use the post-visit activity to further support your pupil's learning.

You can encourage your students to answer the question below.



Question:

Kew scientists and students from the University of Copenhagen have been studying the evolutionary relationships between water-storing succulent plants. There are thousands of succulent species growing around the world, including the famous *Aloe vera*.

Suggest why it could be useful to know which plants are more closely related than others.

More information on this research can be found at:

<https://www.kew.org/read-and-watch/medicinal-succulent-plants>





Thinking back to your visit to Kew

At Kew you found out about the story of plant evolution and how plants are adapted to their environment.

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