



## WEEK 4: PLANTS



### Science in the News



A ginkgo tree in Xi'an, China, that an emperor planted some 1,400 years ago.  
Photo credit: Alamy



### Try it at home - Grow Something!

#### What do you need?

- A glass jar or clear plastic pot
- Cotton wool or a paper towel/tissue
- Dry beans or seeds- broad beans, green beans, coriander seeds or mustard seeds
- Soil (optional)

#### What am I learning?

For a seed to sprout it only needs warmth and moisture. It only needs the nutrients from the soil later on in life, once the seedling is getting bigger.

If you want to learn more about the science behind this, check out our lesson on our website - [Science Creates Outreach](#)

#### Instructions:

1. First, fill the bottom of the jar with cotton wool.



### A TREE SURVIVOR

Plants have varied life cycles. Some plants, for example, only live for one year but a lot of trees live for much much longer. The tree photographed in the article is called a ginkgo tree, and is over 1,400 years old. It was planted in China by an old emperor and has survived all these years - a really incredible feat. But how?

Recently scientists have found out that, unlike in humans and animals, the older ginkgo trees produce seeds, and fight off disease, at the same rate as the fresh, young trees. In some ways this means that the ginkgo tree that is over 1,000 years old is just as sprightly as a new, young tree!

This isn't the same for all types of trees. Some only live to be 100 years old, some only produce seeds at certain points in their life and some, like the ancient ginkgo, live for thousands of years. When you're next looking at a big old tree, think about how long it may have been around, and what it may have lived through, because it is probably older than you think!

2. Next, gently place your bean in the jar in the cotton wool. Top tip - place your beans at the side of the jar so you can watch it grow.

3. After that, water the cotton wool until it is damp, but not soaking wet.

4. Then, place your jar in a window with lots of sun.

5. Finally, keep an eye on your bean.

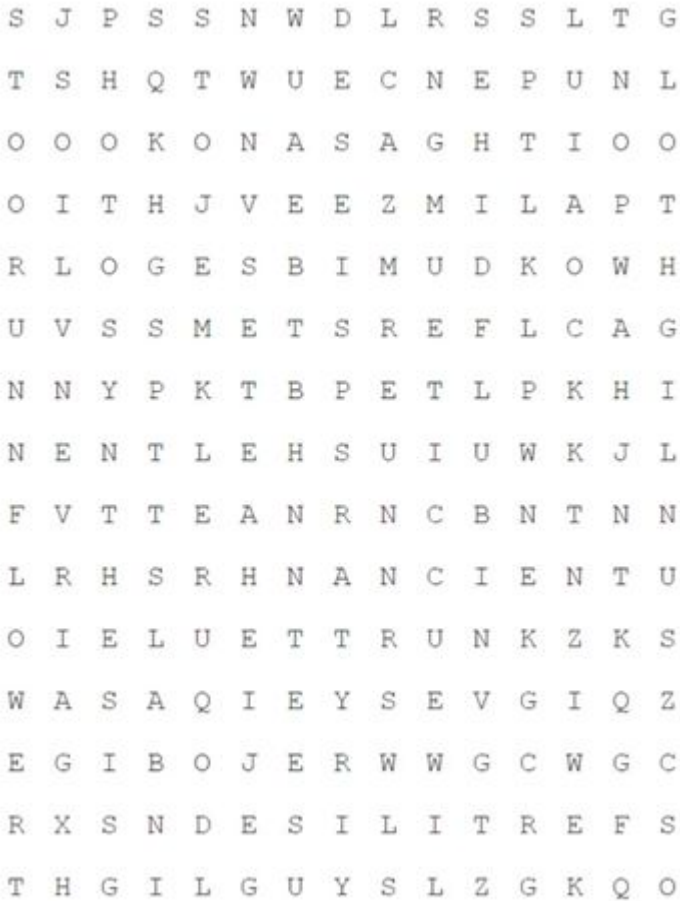
It should start sprouting in the first couple of days, but it may take a little longer. If you want, you can keep a journal of what's happening to your bean as the days go by. How quickly is it growing? Does it have roots, a stem, leaves? You could try two jars and place them in different windows, which one grows quicker?

6. When a complex network of roots have formed in the jar and the new bean plant has got a few leaves, you can carefully take it out and plant it in some soil.

7. Keep watering it and giving it lots of sun. Watch it grow! We would love to see what you're growing, so please take a photo and send it to [info@sciencecreates-outreach.c.uk](mailto:info@sciencecreates-outreach.c.uk)



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- Air
- Ancient
- Beans
- Bees
- Fertilised
- Flower
- Photosynthe
- sis
- Plants
- Pollination
- Roots
- Seedling
- Soil
- Stem
- Sun
- Sunlight
- Tree
- Trunk
- Water

## Read, Watch, Ask



Have a read of our [lesson](#) to learn more about plants.



What is a plant? Watch [here](#) to find out.\*



Got any questions about today's topic? Email us at [info@sciencecreates-outreach.co.uk](mailto:info@sciencecreates-outreach.co.uk) and we'll answer them!



## Did you know?

Not all plants live on the land. The majority of plant life (85%) is found in the ocean... This includes big plants such as seaweed and coral, and small ones like algae and plankton. Some cover the ocean floor and some float around in the water - they are quite different from the plants we have on land!



## Competition Time

Plants have been recorded over the past 500 years, starting with drawings and now moving into photography. These records are very important for our learning of plant species. For this week's competition we would like you to take a photograph of a plant or flower. Imagine you're a scientist recording a new species!

### Your competition entry should:

- include your first name and age e.g. Patrick, 12 years old.

Finally, send your drawing to [info@sciencecreates-outreach.co.uk](mailto:info@sciencecreates-outreach.co.uk)

The deadline for this issue's competition is Thursday 21st May 2020.

### Last week's winner!

We loved looking at your animal discoveries from last week's competition. Thank you to all of you that entered. Congratulations to our winner, George, age 7. We love 'Pezza'! We would really like to discover this new animal with it's house on it's back.



COMPETITION NOW CLOSED