

## Beans in jars

**Challenge 1:** Growing a beanstalk in a jar to see and record the growth of the plant and see what happens to its roots.

**You'll Need:**

- dried beans
- A glass jar
- cotton wool
- Water



**Step 1:** Put some cotton wool in the jar.

**Step 2:** Drop one or two beans on the side of the jar so you can easily see them.



**Step 3:** Pour water in the jar until the cotton wool is damp but not wet.

**Step 4:** Place the jar onto the windowsill or somewhere it has access to sunlight.



Check out on your beanstalk every day. Measure the length of the plant and record its progress in a table.

**Final step:** Once the plant has sprouted leaves and is beginning to outgrow the jar, remove it from the jar and plant it in the backyard or in a pot with soil.

**Challenge 2:**

Yanika has **3 glass jars** and **20 beans**.



Yanika puts **different amounts** of beans in each jar.

She puts **5 more beans** in the first jar than in the second jar.

She puts **3 more beans** in the third jar than in the second jar.

Hint: You can use the Act-it-out strategy, work it a table or else use the bar model strategy (drawing) to work this out.

How many beans are there in each jar?



Jar 1	Jar 2	Jar 3	Total number of beans	
15	10	13	38	X
10	5	8	23	X
9	4	7	20	✓