



Fungus Garden

Find What You Need...

KIDS' SCIENCE

CHALLENGE

- A large, clear jar (like an old mayonnaise or jelly jar) with a lid
- Leftover food such as fruit, vegetables and cheese
- Water
- Tape
- Notepad and pencil for recording your results



Could you prove that there is a fungus in your fridge?

In this activity, we're going to ask you to grow fungus, starting with nothing but ordinary food. How is that possible? After all, you couldn't grow a plant without a seed. Fungi spread not with seeds, but with spores – tiny structures that can survive without resources for a long time. They grow into a new fungus when conditions are right. This happens when food starts to rot, or decay.

Like microbes, fungal spores are all around, and most are harmless. Given the chance, however, they will grow and grow. When you leave food in the refrigerator too long, it often grows a kind of fungus called mold.

See what spores are lurking near you by growing a fungus garden.

Fact:

Scientists have discovered a giant fungus in Oregon. It's bigger than 1,600 football fields, and thousands of years old.

Activity Instructions:

WARNING: After you've grown your fungus garden, you will have to throw everything–including the jar–away. Do not reopen the jar, because mold is not safe for people to smell or breathe.

- 1. Place the jar on its side on a table.
- Gather five or six types of food and make sure it all fits inside the jar without overcrowding. Fresh food such as fruit and cheese generally grows a nice garden. Packaged foods, such as cakes or cookies from the store, generally do not.
- 3. Dip each piece of food in some water and put everything back inside the jar.
- 4. Screw on the lid and seal it with tape. Label the jar with the words "Fungus Garden" so that everyone will know what it is. Place the jar in a spot where it will not be disturbed. Record any of the changes in the food everyday for two weeks.

Conclusions

When did you start to see changes inside your jar? What kinds of changes did you see? If something grew on your food, describe it. Was there one kind of fungus, or many? What colors and textures did you see? Did different types of molds grow on different foods? Did they spread from one to another?

Brain Squeezer:

Preservatives can prevent mold from growing. Experiment to test the power of preservatives by growing 2 mold gardens: One with prepackaged cake or cookies, and the other with homemade treats. Or try tesing a natural preservative such as baking soda. Set up one garden with an apple and a piece of bread, and another with the same foods covered with three or four tablespoons of baking soda. Which one grows fungus first?

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Kids' Science Challenge Science Projects are presented by the award-winning radio series, Pulse of the Planet



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