

Mathematicians Brewing a Perfect Cup of Coffee

VOCABULARY WORDS

1. odd /äd/ different from what is usual or expected; strange.
Example: His coworkers thought of him as odd.
2. component /kəm'pönənt/ a part or element of a larger whole, especially a part of a machine or vehicle.
Example: The repairman replaced the stereo components that are no longer working.
3. complex /,käm'pleks,kəm'pleks,'käm,pleks/ not easy to understand or explain
Example: That question is quite complex for a 6 year old.
4. overall /'övə,rôl/ taking everything into account.
Example: The overall decision was in favor of the new employees.
5. adjust /ə'jəst/ to change something slightly, especially to make it more correct, effective, or suitable
Example: You can adjust your chair so that you can sit more comfortably.



Mathematicians are using their skills to make the perfect cup of coffee. It is **odd** that mathematicians are trying to find what is behind the perfect cup of coffee, but coffee consists of 1,800 chemical **components**. If you combine these with the different ways of brewing coffee, there are many numbers involved.

Mathematicians used some **complex** calculations to find out how to make an ideal cup. Researchers Dr William Lee and Dr Kevin Moroney focused on what happens to coffee as it goes through different filter coffee machines.

The scientists hope their research will change the way coffee machines are made. Dr Lee said: "Our **overall** idea is to have a complete mathematical model of coffee brewing that you could use to design coffee machines, rather like we use a theory...to design racing cars."

Coffee lovers might soon be able to **adjust** the things that affect the taste of the coffee as it is filtered and brewed. These include how hot the water is and how fast it flows, the size of the ground coffee, the length of time it is brewed, and more. The research is published in an Applied Mathematics journal.

DISCUSSION

1. How important is coffee in your culture?
2. What do you think of cafes and coffee shops?
3. At what age is it OK to start drinking coffee?
4. What different types of coffee are there?
5. When is the best time to drink coffee?