The Hot Water Tap Always Leaks

It wastes water to have any tap leak. But it's even worse to realize that it is always the hot-water tap that seems to be leaking.

What to do: Right in the middle of the bottom of each paper cup make a tiny pin hole. Then set the paper cups on top of the glasses like this:
Fill one cup half full of cold water. Drop in a couple of ice cubes to make sure it is really cold.
Fill the other cup half full of hot water out of the hot-water tap.
Now sit back and observe the tiny drips from the pin holes in the bottoms of the cups.

What happens: If the holes are the same size, you'll see the hot water leaking faster than the cold water. In fact, if the cold water is cold enough it may not leak at all.

Why: The molecules in hot water move much faster than they do in cold water. The faster they move, the easier it is for them to slip past each other. That's why hot water is more likely to leak than cold.

YOU NEED
- two paper cups
- straight pins
- small drinking glass
- water
- ice cubes