

# Why Have a Wick?

10SCIE - Fire & Fuels

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## Learning Outcomes

- To be able to explain the function of a wick
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## What do you think a wick is for?

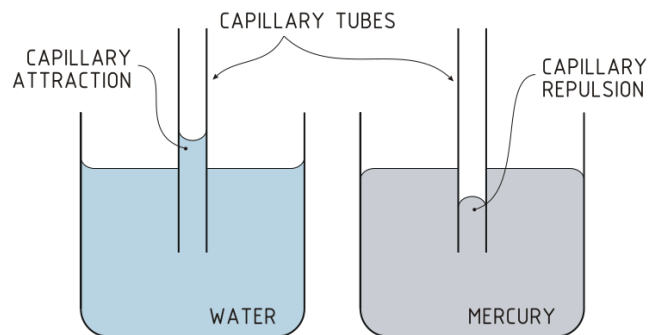
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## Walking Water Demonstration

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## Capillary Action

- Liquids can flow into narrow spaces, even against the direction of gravity.
  - E.g. paper in water, paint brushes sucking up water, a thin tube in water.
  - The surface tension and adhesive forces between the liquid and container propel the water into the narrow space.
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### How Things Ignite

When fire is held to paper  
1. Molecules that are bound closely to one another on the surface of the paper are ...

2. ... loosened by the heat. They move further apart from one another becoming a gas.

3. The gas molecules combine with oxygen molecules in the air and the paper begins to burn.



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### Wick Practical

1. Safety
  2. Practical read through
  3. Check understanding each step
  4. Explain must do Qs 1,2,3 during practical
  5. Timeframe (20mins)
  6. Clean up check
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### Discussion Points

1. Why didn't the solid paraffin wax ignite?
2. Did the liquid wax ignite? Why/ why not?

3. How does the wick allow the wax to burn? (think about last lesson's practical)
4. Why doesn't the wick burn? (clue: evaporation and sweating)