

Sweet Speedway

Best for Ages

6+

Workspace

Flat surface

Is electricity required?

No

Description

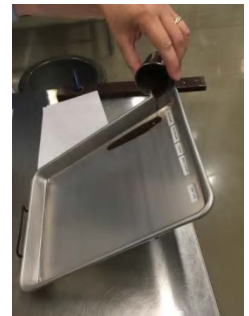
Bring the Hershey's Lab into your home with this fun experiment that uses different materials that can be found in your cupboard! Use your Amazeum YOU journal to document results or create a new one for science experiments! **In the Hershey's Lab, we use melted dark, milk, white and caramel chocolates, you can use these or any other kind of liquid you might have.**

Materials

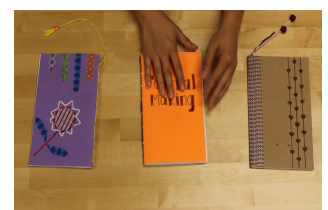
- Pen and paper or Amazeum YOU journal
- Spoon or tablespoon
- Timer
- Baking tray
- Melted chocolates or at least four liquid substances from your fridge and/or cupboard (Examples: oil, pudding, soda, dish soap, ketchup, honey, etc).
- Tape

What to Do

1. Gather the materials on a flat surface and prop the baking tray with a holder, against a wall or have another scientist hold it (it should be sitting "longways").
2. At the top of the baking tray, take four small strips of tape and put them side-by-side to create the lanes for racing.
3. On a piece of paper, write down each of the liquids that will be used and make predictions about which liquid you think will be fastest - and which will be slowest.
4. Time to race! One scientist will start the timer while the other scientist takes one spoonful of the first substance and pours it onto the first lane on the baking tray.
5. Once the liquid reaches the bottom or stops moving, stop the timer and record the results on the paper.
6. Repeat steps 4 & 5 with your remaining liquids.
7. Document and draw your results in your journal.



Type of Chocolate	Prediction: (1 st , 2 nd , 3 rd , or 4 th)	Time it took	Results
Milk			
White			
Dark			
Syrup			



Concepts Explored

- Viscosity
- Scientific Terminology

Sweet Speedway

Troubleshooting Tips

- Can't get your tray to stand up? Try leaning it against a wall or have someone help you hold it up while you race.
- Get creative with the liquids you use, try something crazy like barbecue sauce and see what happens!
- Want to keep on racing? Gather more trays and keep experimenting!



Which liquid was the fastest?
Slowest?

What would happen if you mixed two liquids together?

Did anything surprise you about the experiment?

What is Happening?

- **Viscosity** is the measure of resistance for a liquid to move. The thicker the liquid, the greater the viscosity. Liquids like honey and ketchup have higher viscosity than a liquid like juice and water.
- **Scientific terminology** can help you understand experiments and learning the terms is a useful skill. A scientist will make a **hypothesis** (educated guess), conduct an **experiment**, and will **compare and contrast** the **results**. Discuss how you used these terms in today's experiment!

Taking it Forward

- Connecting this activity to the real world:

Think about where you see viscosity in your daily life. For example, the water running out of your faucet and when you melt chocolate to make a sweet treat.
- If you like this activity, check out our other [Amazeum YOU](#) experiments and document your results in your journal.
- Check out this experiment that looks at viscosity in a different way:
<http://coolscienceexperimentshq.com/viscosity-of-a-liquid-experiment/>