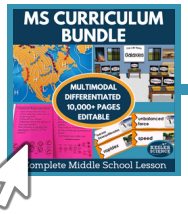
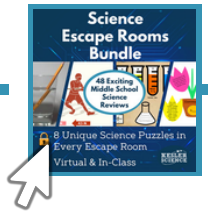
What Can Kesler Science Do for You?

4th - 8th grade science teachers love our Life, Earth, and Physical Science materials! With these easy and engaging materials, teachers can save planning time and put their focus back on the teaching that really matters.



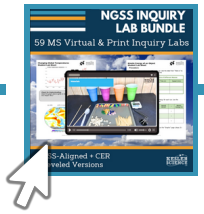
5E LESSONS

Two-week lessons with over 100 topics



ESCAPE ROOMS

Engaging activities for review

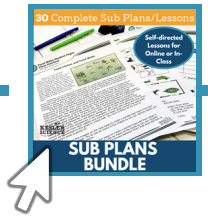


INQUIRY LABS

Three different levels to fit every student

AMAZING ANCHORS

Anchoring phenomenon to book-end your lessons



SUB PLANS

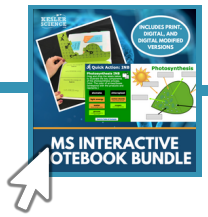
Never worry about planning for a sub again.

WARM-UPS

Bellringers for the entire year

STATION LABS

Student-led exploration

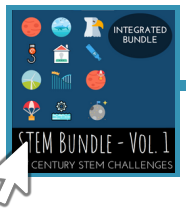


INTERACTIVE NOTEBOOKS

Bring science journals to life.

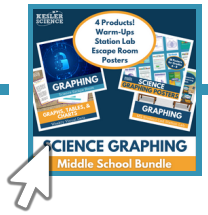
WIKI TICKETS

Quick formative assessments



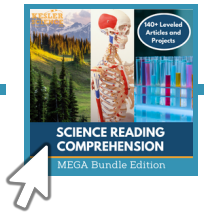
STEM CHALLENGES

Real-world STEM problem-solving



GRAPHING

Table and charts and graphs ... OH MY!

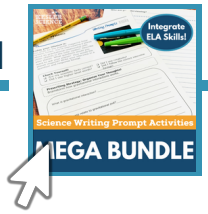


SCIENCE READING COMPREHENSION

Leveled reading passages with mini-activities

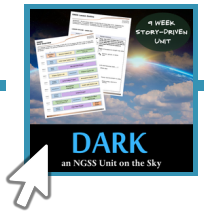
SPANGLER COLLABORATION

Exclusive Steve Spangler lessons and videos



WRITING PROMPTS

Writing activities covering 100+ topics



EXPLORIES

Story-driven units with integrated activities

The Kesler Science Professional Learning Network (PLN) group on Facebook has a huge community of engaged and supportive science teachers - come join us!

KESLER SCIENCE

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Name: _____

Date: _____

Virtual Tasting

When I was a kid getting the mail at my house in the 80's, I could always tell when some of my mom's magazines were in the mailbox. They had a distinct smell created by little paper perfume samples tucked inside their pages. Advertisers used these to create a virtual sensory experience for readers - you might be hundreds of miles from the nearest perfume bottle, but you could look at pictures AND smell the fragrance. It made an impression - decades later, I can still remember those smells!

Over the years, we've gotten better at transmitting sights and sounds, and with haptic technology, we can even deliver a few vibrations through our phones and video game controllers. The two toughest senses to experience at a distance are smell and taste, but researchers are experimenting with ways to "send" tastes - and they're getting some decent results!

The newest remote tasting technology is pretty remarkable. At one location, scientists break down and analyze the flavor components of a material. They send those measurements through the internet to a device that sits in the mouth of the person doing the test. The device has packets of chemicals like glucose and citric acid inside. When the device receives the flavor analysis, it pushes different combinations of chemicals through a gel layer to the right spot on the tongue. This creates sweet, sour, or salty flavors that should match the analysis.

How well does it work? Honestly, there is a long way to go. Researchers found **most** participants were able to detect the difference between the recreated flavor of cake versus fish soup - but about 30% couldn't tell them apart, which means at least one of them must taste pretty weird! 😂

Truly replicating a food experience is a long way off - the device cannot deliver spicy flavors, and a lot of our sense of taste is affected by the texture, aroma, and fat content of food. Our ability to perceive flavors changes over time, too, so two people at different ages might not experience the same flavors in the same way. Take a look at this graph on the next page showing how a test subject's ability to taste salty flavors changes with age.

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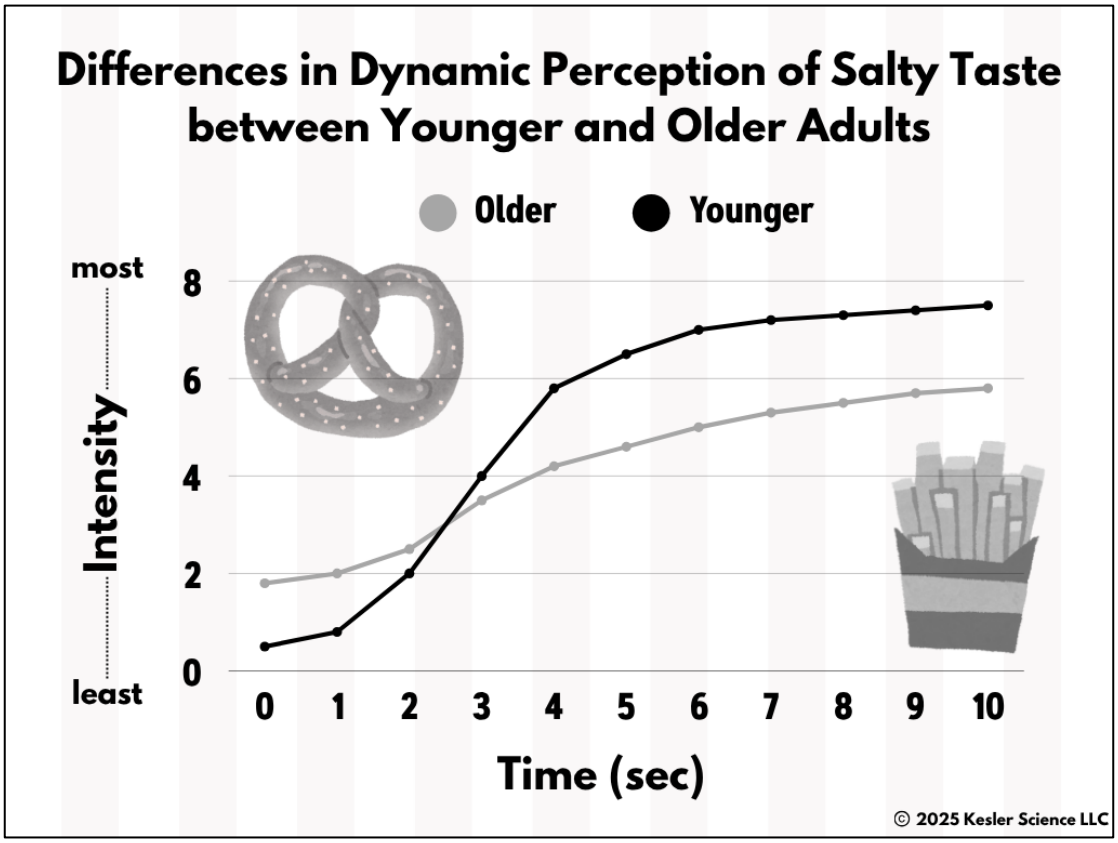
Virtual Tasting



1. What is the dependent variable for this graph?

_____

_____

2. Which age group notices the salty taste first? Which age group tastes the salt most intensely later in the test?

_____

_____

3. At what time on the graph do both the older and younger groups taste the salt flavor with the same intensity?

_____

_____

_____

_____

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Blog Link: https://blog.keslerscience.com/phenomenon-and-graphing/virtual-tasting

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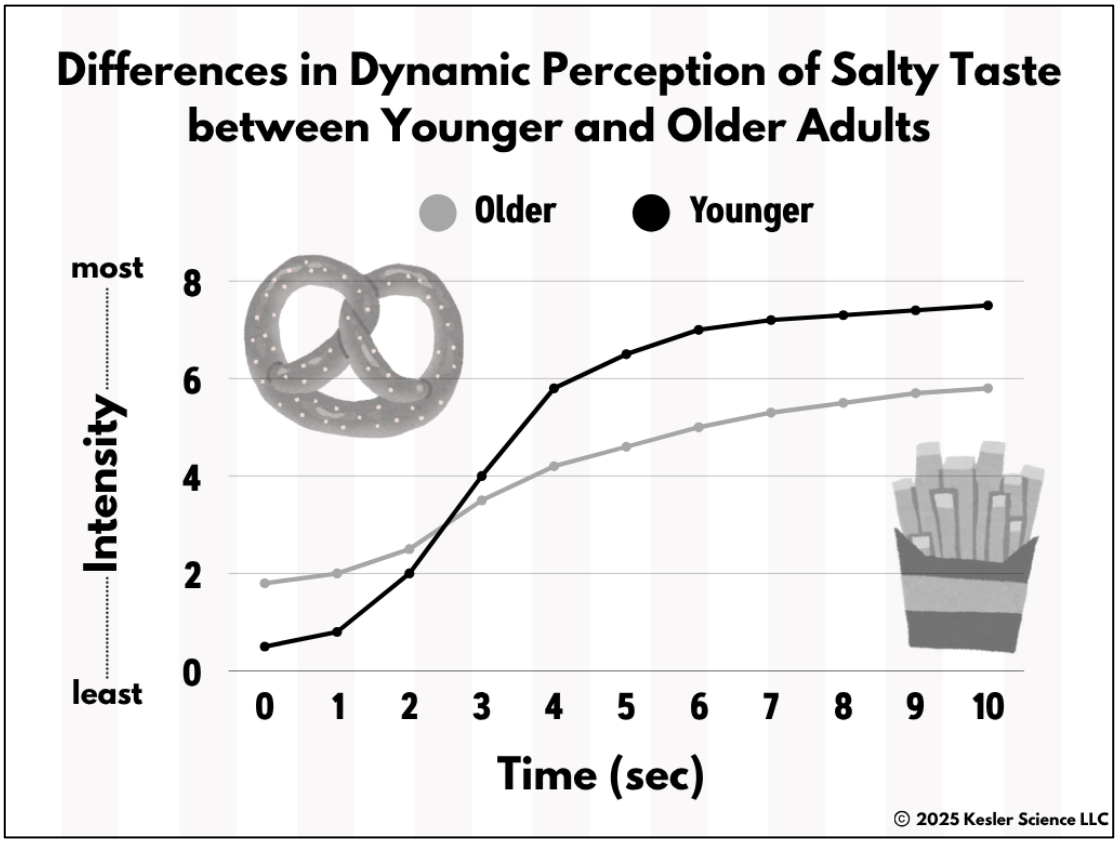

1. What is the dependent variable for this graph?

   The dependent variable on the Y-axis is "Intensity."

2. Which age group notices the salty taste first? Which age group tastes the salt most intensely later in the test?

   The older age group tastes the salty flavor first, but the younger group tastes the salt most intensely later in the test.

3. At what time on the graph do both the older and younger groups taste the salt flavor with the same intensity?

   The older and younger lines intersect and taste salt with the same intensity at a little over 2 seconds.

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