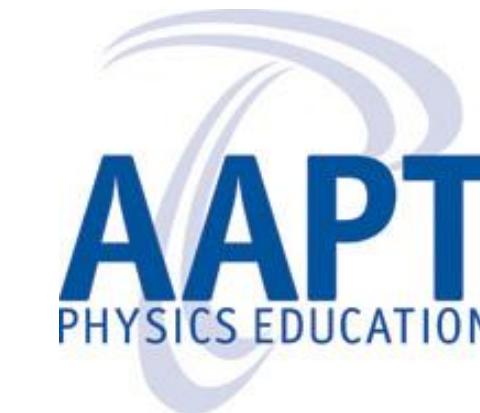


Spy Themed Science Outreach Catalyst Kit and Sense Based Early Childhood Physics Demos

Naomi Wagner: AGENT SOCK25



SOCK: Science Outreach Catalyst Kit

Who
SPS Chapters!



What

- 100 Demo Boxes
- Write Ups
- Videos

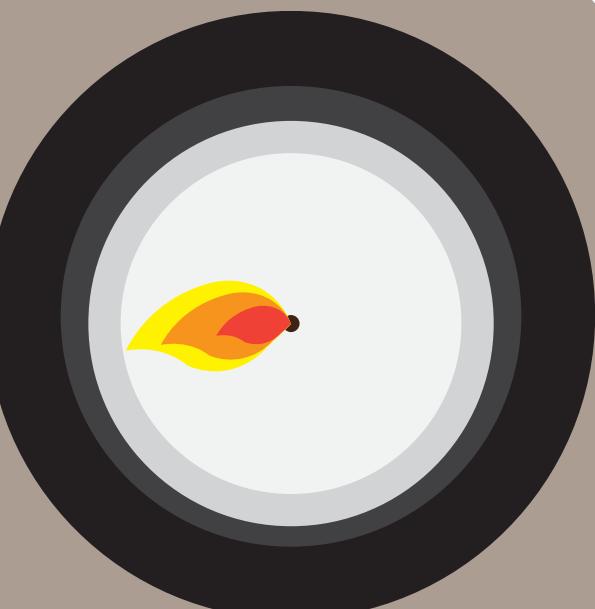
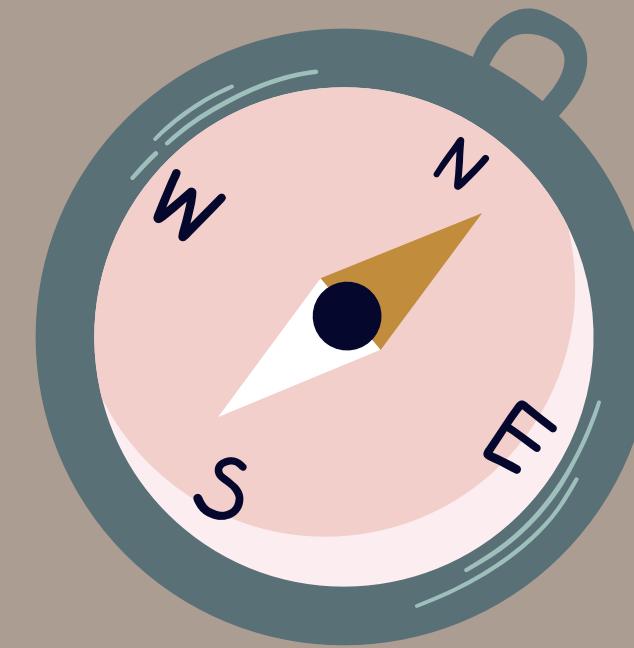
Why
Physics Outreach



SECRET

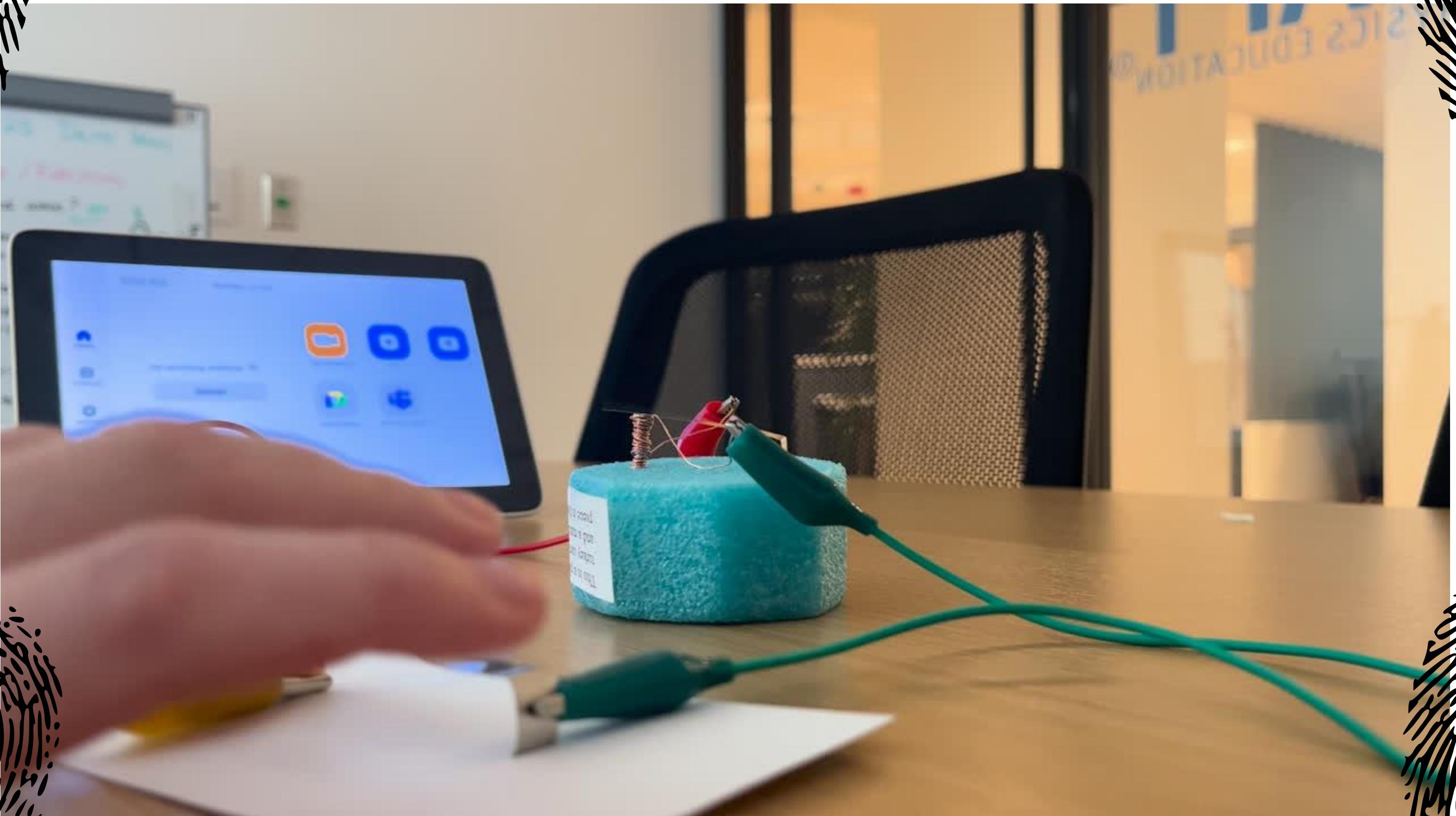
Spy, SOCK

- Telegraph: Circuits & Electromagnetism
- Invisible Ink: Heat Transfer
- Color Decoder: Light Absorption & Reflection
- Compass: Magnetization & Magnetic Fields
- Laser Reflection: Light Dynamics



Morse Code	
A	.-
B	...-
C	-...
D	--..
E	.
F	..--
G	:-
H
I	..
J	.-
K	-.-
L	..-
M	--
N	-.
O	---
P	.--.
Q	---.
R	...
S	...
T	-
U	--
V	---
W	.--
X	-.--
Y	--.-
Z	---.

Telegraph



Invisible Ink



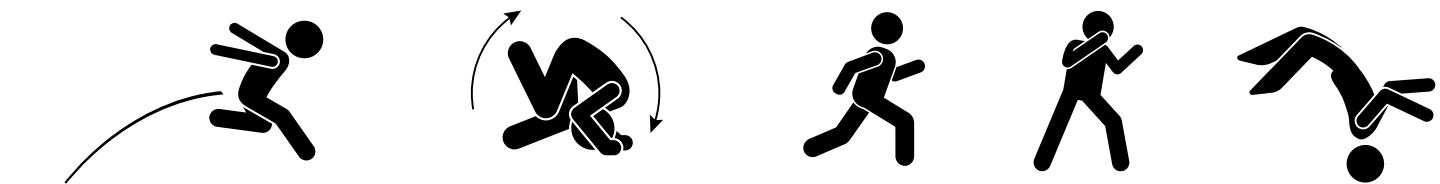
Color Decoder



Compass



Laser Maze



AAPT Internship

Who

K-12 Physics &
Science Teachers

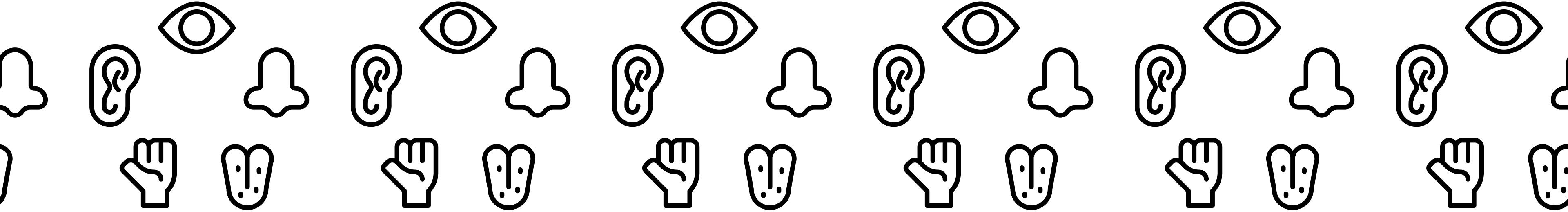
What

- Sense Based Class Activities
- AAPT Summer Meeting

Why

Optional Teaching
Resources





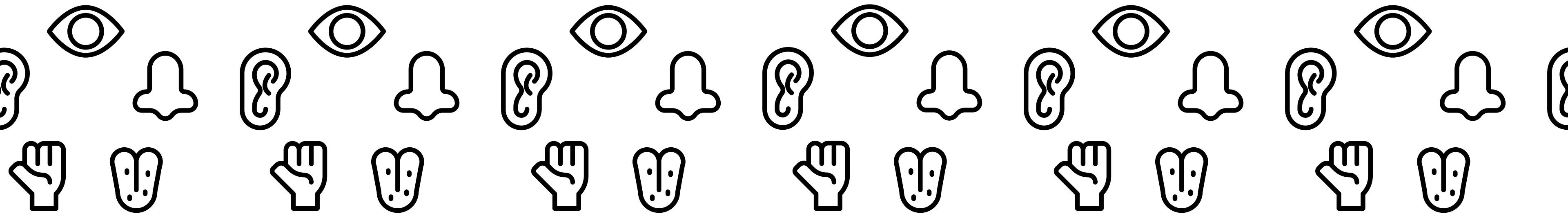
Sight - How Does Light Travel?

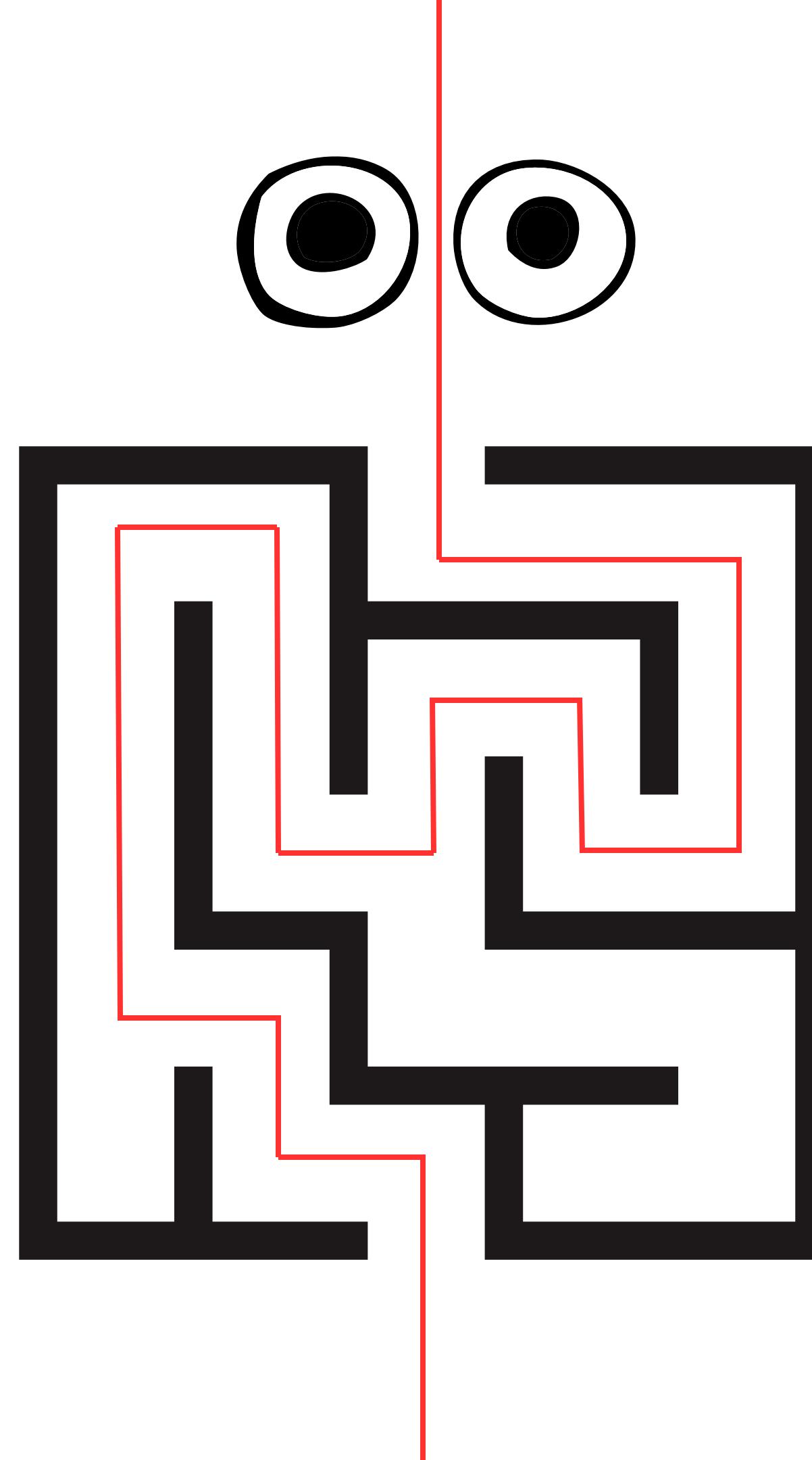
Sound - What Does Sound Look Like?

Smell - How Does Energy Smell?

Touch - How Does Friction Feel?

Taste - How Does Matter Taste?





Sight

K-2: Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light.



Sound
K-2: Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.

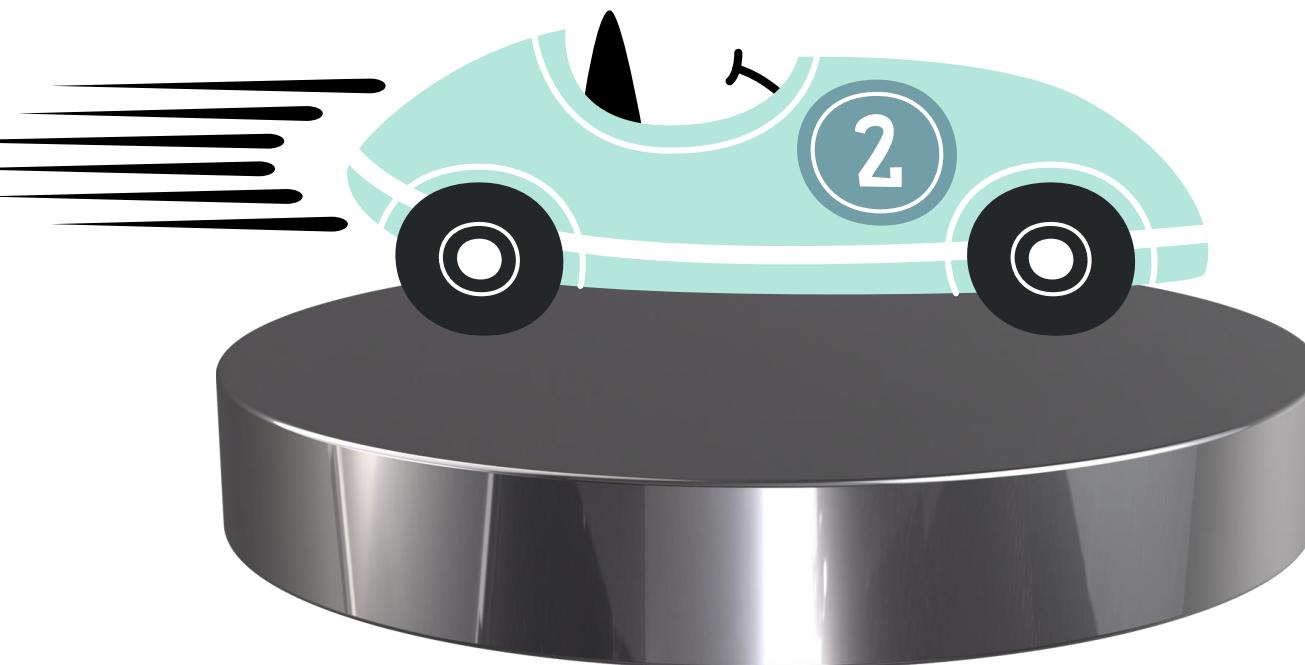
Smell

6-8: Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.

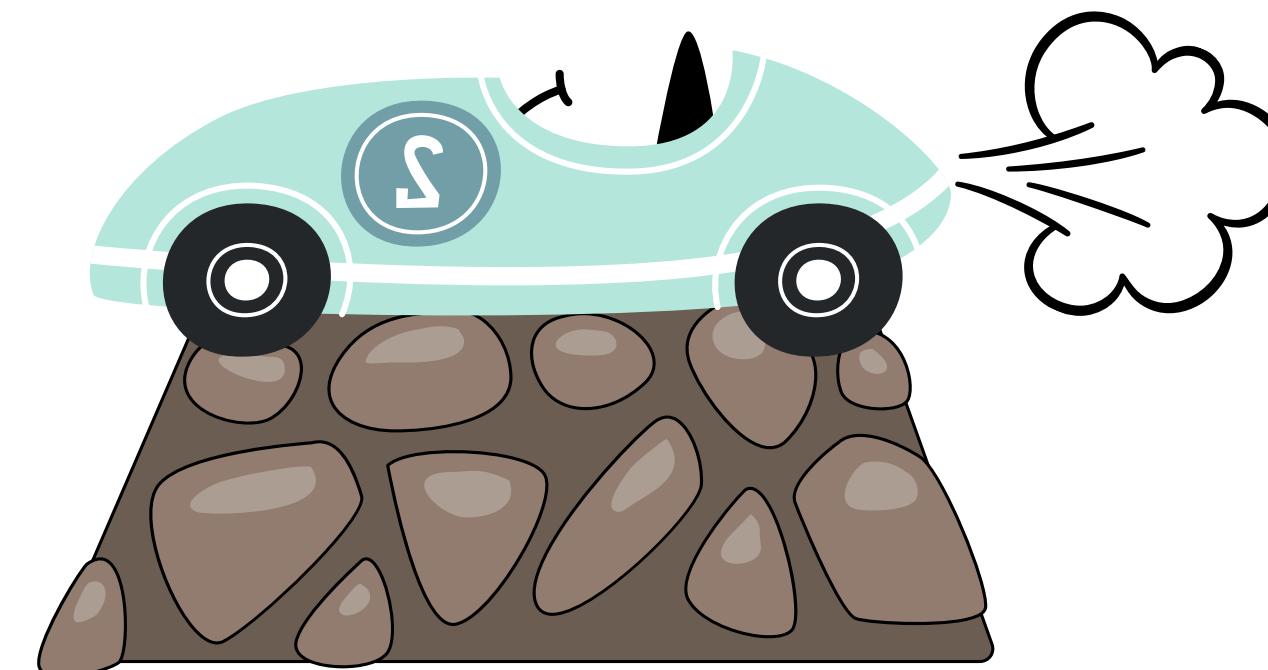


FRICITION

K-2: Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.



Touch

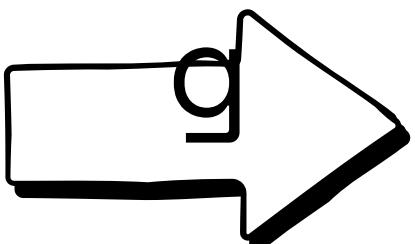


Taste

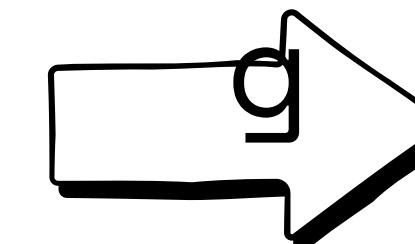
K-2. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.



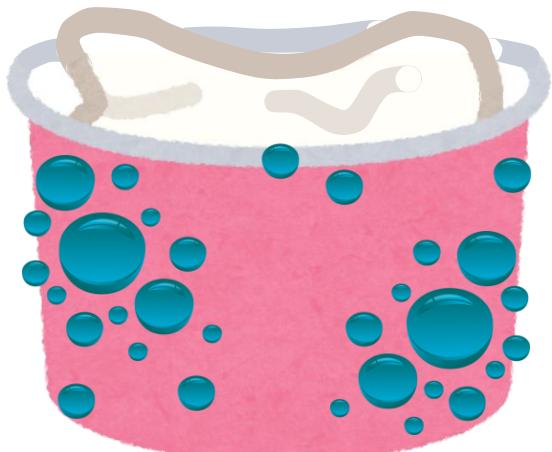
Freezin



Meltin

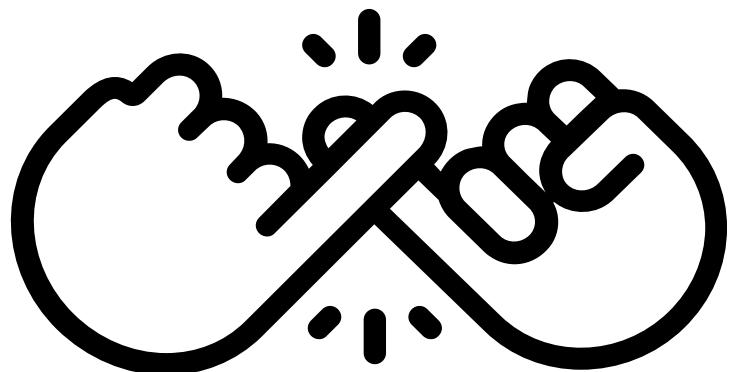


Condensatio



Why Outreach & Education?

Building trust
in science



Establish good
associations
young



Know how to
ask the right
questions



Acknowledgements

SPS - Mikayla Cleaver
AAAPT - Justine Harren

Thank you!

