



## Sweet Inquiry 1



Predict:

What would happen If we put a  
Gobstopper in a Petri dish of  
water?



# Teacher Demo

The background of the slide is a gradient of blue, transitioning from a darker blue at the top to a lighter blue at the bottom. In the lower right quadrant, there are several thick, wavy, blue lines that resemble stylized water ripples or abstract brushstrokes.



1 Gobstopper in center of dish of room temperature water. 1.5 minutes lapsed



## Sweet Inquiry 2



Predict:

What would happen If you put two Gobstoppers in a Petri dish of water? Draw a picture of what you will see.





# Sweet Inquiry!



1. Fill the Petri dish with water
2. Choose two different colors of Gobstoppers.
3. Place the candy on opposite sides of the dish.
4. Wait about 1½ minutes.
5. What happened?
6. Why?



# Brain News

- You do not gain mass in your brain.
- You learn and get smarter by gaining connect (dendrites).









## Sweet Inquiry 3



1. What other color shapes could you make using 3 or 4 Gobstoppers, water & the Petri dish?
2. Predict and experiment
3. Compare your results with other Gobstopper experiments

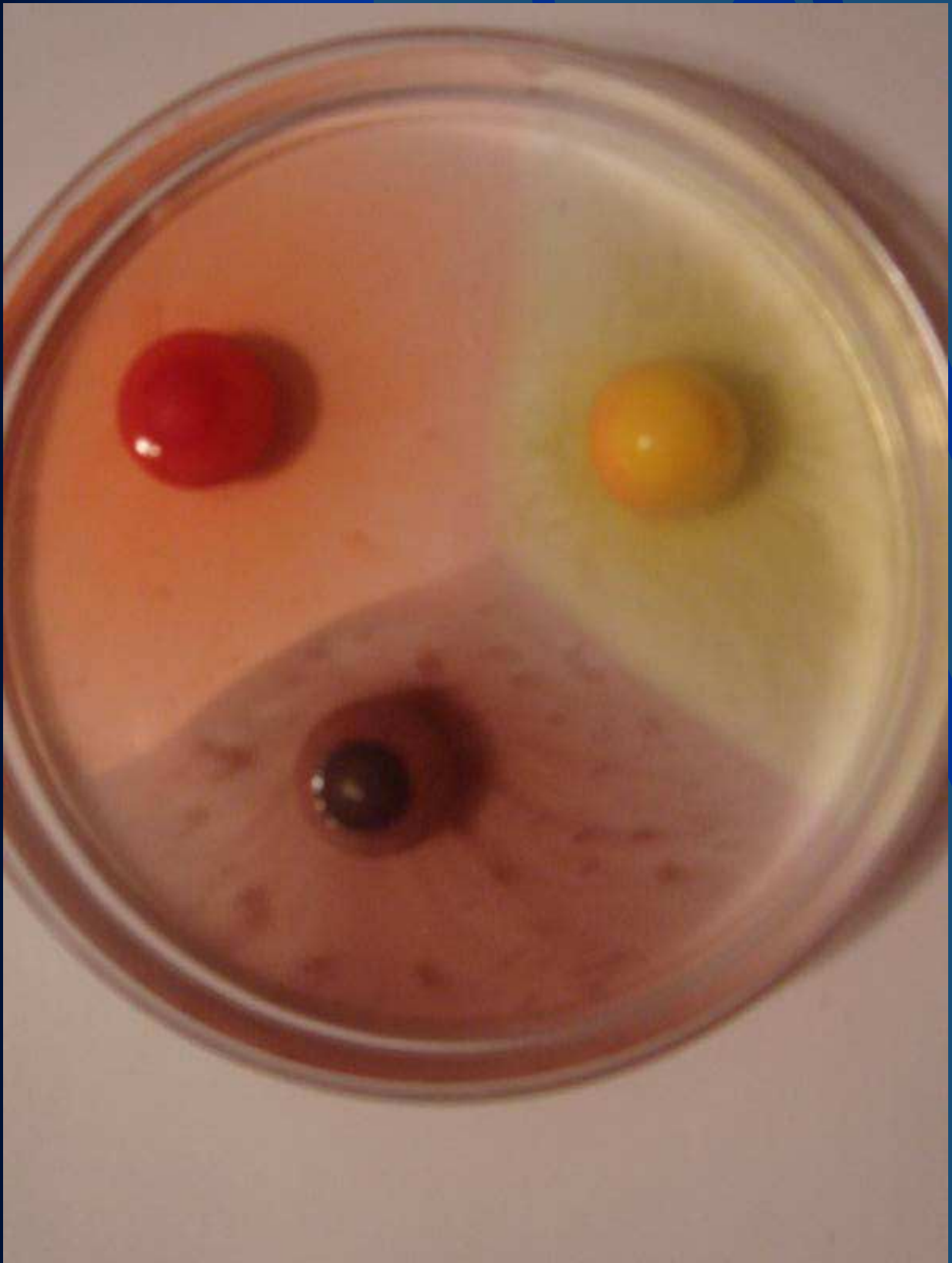




# Dendrites

- You have about 100 billion when you are born
- After age 18, you lose about 60,000 per day.

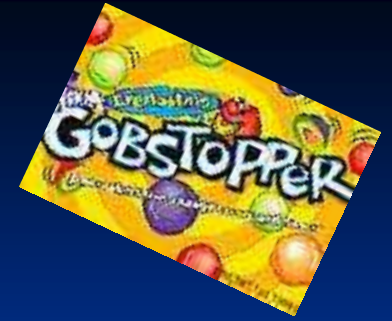








## Sweet Inquiry 4



1. What questions do you have now?
2. What experiments could you do to answer your question(s).
3. What variable(s) would you change?





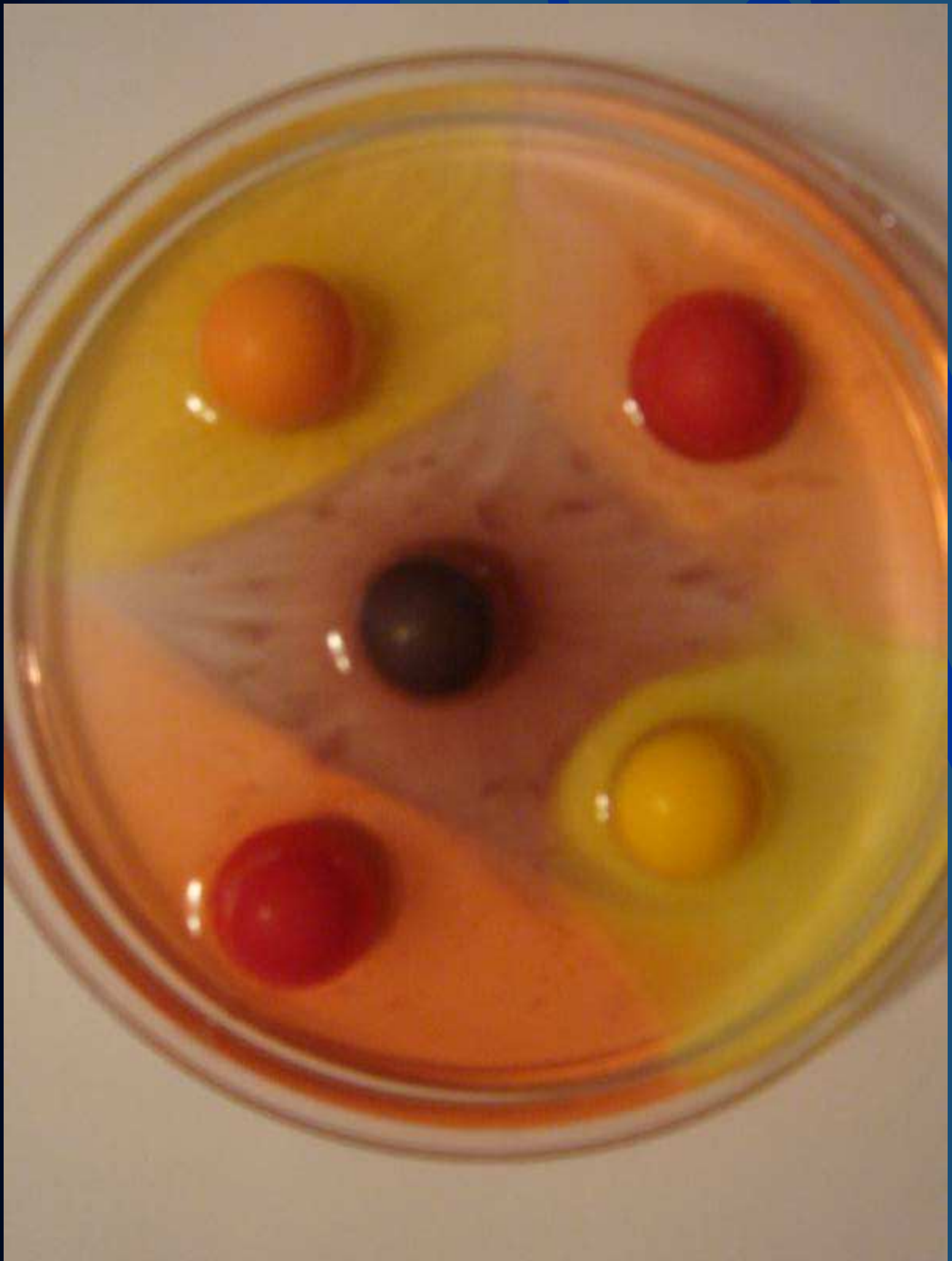
# The Inquiry Method



1. Write your question.
2. Create a hypothesis
3. Experiment
4. Write and/or chart your results and/or data
5. Make a conclusion.











**Students using water temperature as a variable.**

# Scaffolded Inquiry

Open Inquiry

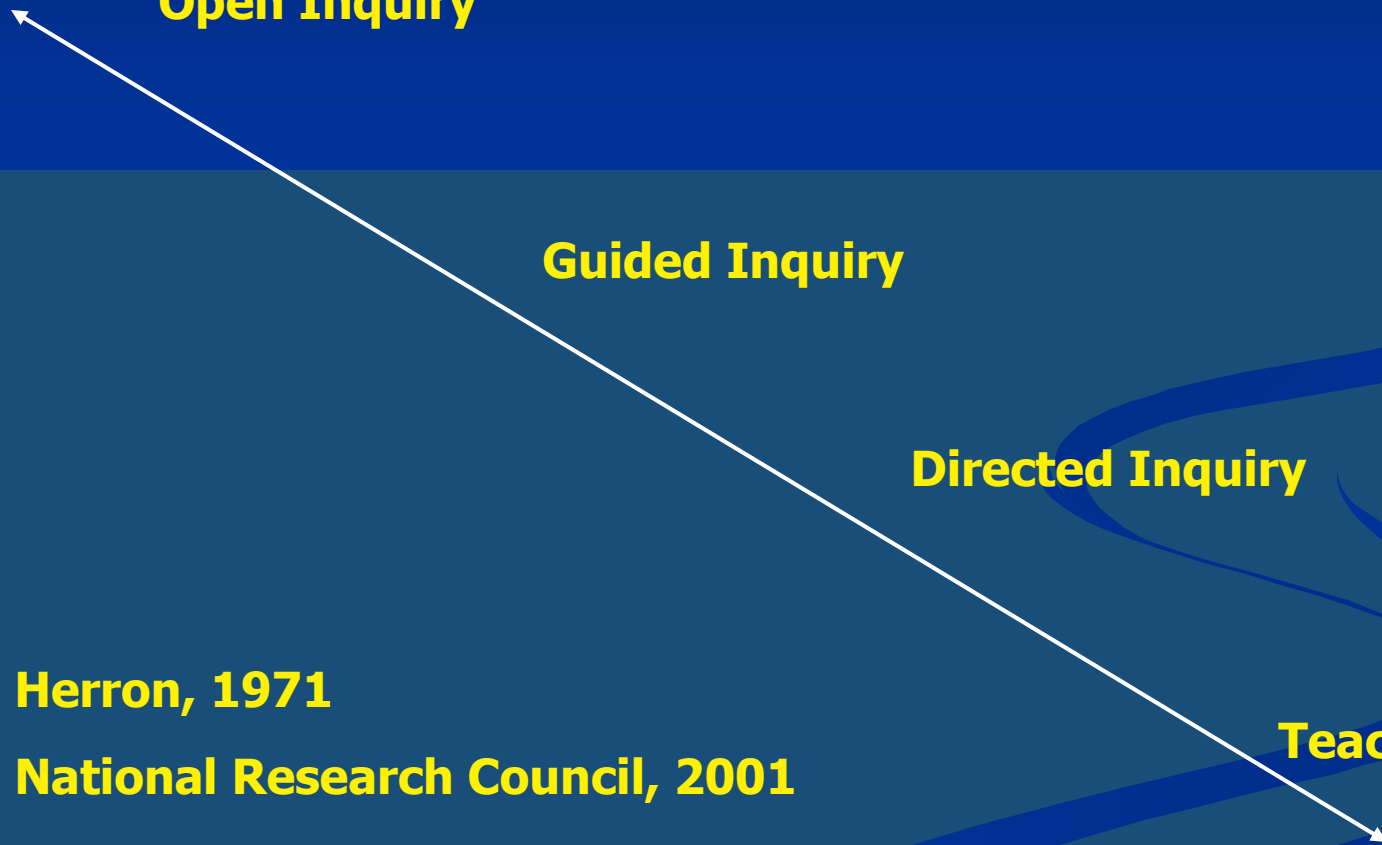
Guided Inquiry

Directed Inquiry

Teacher Demonstration

Herron, 1971

National Research Council, 2001



# Scaffolded Inquiry

- A process of scaffolded inquiry, reflection and generalization developed students' metacognitive knowledge.

(White and Fredrickson, 1998)

