

## THE CHALLENGE:

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Your challenge is to take those cute icons and make them into curriculum icons through these explorations.

~ Cross-Curricular Team ~  
Dream. Explore. Discover.

### BREAKING NEWS!

Did you hear?! Mark your calendar for March 15-18 2021. The first ever NB Science week is bringing you virtual explosions, hands-on activities and special guest speakers including STEVE SPANGLER! Keep your eyes and ears open for more updates soon!



## Explorations

### Exploration 1

**Be a Chemist!** Bring two mixtures together to create a brand-new substance!

**Task:** Conduct an investigation to create your own plastic by combining milk and vinegar. A chemical reaction will take place when the protein from the milk (casein) meets the vinegar. The tiny molecules will move around to form a *casein plastic*.

Your investigation should start by first observing what happens when you combine specific measured amounts of each liquid. Record your observations. Then write a testable question to investigate. Ex: How does the type of milk affect how the casein plastic sticks together?

For investigation tips & information CLICK [HERE](#)

*Did you know?* Casein plastic was used to make jewelry for Queen Mary of England in the early 1900s!

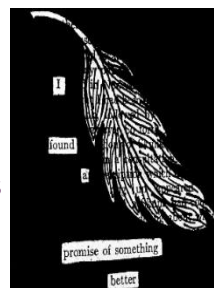


### Exploration 2

Saying I love you doesn't come from the heart; it comes from the brain! Our emotions are controlled by parts of our brain while our feelings are controlled by our senses from the outside.

**Task:** Read "In my Heart" by Jo Witek, to help understand different emotions. Choose one emotion and write a black out poem to express an emotion you have felt.

Click here for more info on Black out poems



You will need newspaper clippings, magazines or even books your library wants to toss in the trash to help create this artistic piece of literature.

### Exploration 3

It feels so sweet to have a healthy heartbeat!

Your heart beats normally 50 to 100 times every single minute. It has to push so much blood through your body that you can feel a little thump in your arteries each time it beats! This is called your *pulse*. Learn how to find your heart rate (beats per minute) [HERE](#).

Exercise makes your heart pump faster which strengthens it as well as the muscles that you are using in your body.

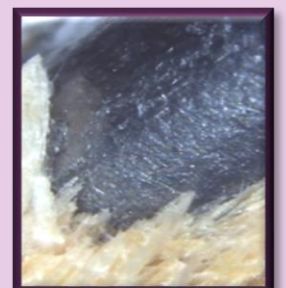
**Task:** Get your heart pumping! Take your heart rate before and after exercising (Try [These!](#)). What do you notice? Does it change depending



on the type of exercise? Keep track in a chart and write down your observations!

Close-up Capture

Can you identify this close-up picture?



Issue 3 Answer: Hockey skate lace

## Explorations – Possible Outcomes & Extensions

### Exploration 1-

#### SCIENCE

**Skills:** All strands of skills can be met through a full investigation at each grade level:

- Initiate & Plan
- Perform & Record
- Analyze & Explain
- Communication

**Prioritized Key Concepts: Gr 4** (Properties of Materials, Sustainability)

#### FILA

3<sup>e</sup>: Enquête 4

4<sup>e</sup>: Enquête 6

### Exploration 2 –

#### LITERACY

**Writing & Respresenting:**  
GCOs – 8, 9

#### PERSONAL WELLNESS:

Gr 3 SCOs: 2.1

Gr 4 SCOs: 2.1, 2.3

#### SOCIAL STUDIES

Gr 3: 2.3

Gr 5: 5.1

#### FILA

3<sup>e</sup>: 1.1, 2.1, 3.1, 4.2, 5.1,5.3

4<sup>e</sup>: 1.1, 3.1,4.2, 4.4, 5.1

5<sup>e</sup>: 1.1, 2.1, 3.1, 4.6, 5.3

#### Art

Development of Imagery

### Exploration 3 -

#### PERSONAL WELLNESS

Gr 3 SCOs: 1.1, 1.2

Gr 4 SCOs: 1.1

#### PHYSICAL EDUCATION

Gr 3/4/5 SCOs: 1.1, 1.3, 3.2

#### NUMERACY

Gr 3: N8, SP1, SP2

Gr 4: N10, SP2

Gr 5: N4, SP2

### First Nation Education Extension

#### [Explorations](#)

### Additional Resources & Extensions

Steve Spangler [Sick Science](#)

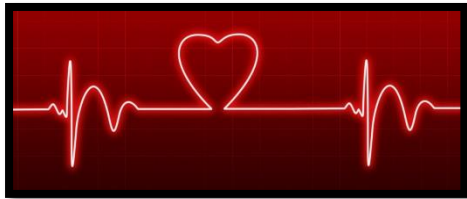
Brilliant Labs [Maker Fun and After-School Virtual Programs](#)

Science East [Inquiry-based Learning](#)

Smarter Science [Step into Inquiry](#)

Chris Wood [dailySTEM](#)

Mark Rober [NASA/Apple Engineer/Youtuber](#)



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(<http://stemnorth.nbed.nb.ca/>)

