# **Edible Layers of Soil**

(IF YOU ARE ALLERGIC TO ANY OF THE MATERIALS FEEL FREE TO NOT USE THEM - as long as you understand their role - (THERE MAY STILL BE CROSS-CONTAMINATION) - If you are uncomfortable eating the assignment, please just throw it away!

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### Land Acknowledgement





We would like to acknowledge that we are located on the traditional and unceded territory of the TK'emlups te Secwepemc within the Secwepemcúl'ecw

## AGENDA FOR TODAY:

#### Mini Lesson

Some background to help with the activity.

#### **Discussion**

What did we learn?
What did we like? Dislike?

#### Intro

Who?

What?

### **Activity**

Let's build some soil layers! 10-15 minutes



## So What is Soil?

The changing layer of Earth's crust (8 m deep)

#### What does soil do?

- Storage (nutrients & water)
- Structure
- Living space

## LET'S TALK LAYERS

O Horizon - organic material (leaf litter, decaying material)

A Horizon - mineral layer/topsoil (weathered products from rocks - source of nutrients)

E Horizon - leaching layer/sand and silt (smaller particles carried through by water - usually only in tropical climates)

B Horizon - subsoil/clay

C Horizon - weathered parent material

R Horizon - unweathered parent material

## **NEXT STEPS**

Please come up to the front and grab a supply bag! (1 per person)

PLEASE DON'T START UNTIL INSTRUCTED

#### Each bag will include...

- 2 oreos
- Vanilla pudding
- Chocolate pudding
  - Gummy worm
- Coconut shavings
  - Cup & spoon



What's in a bag?

## BEFORE YOU BEGIN

Please brainstorm on the worksheet provided

#### WHAT DO YOU....

- SEE?
- SMELL?
- FEEL?
- HEAR?
- TASTE (FOR LATER)

### YOUR EXPERIMENT IN ACTION

Litter - Sprinkles on the top. (Horizon 0)

Topsoil – Chocolate pudding as the next layer. Add a gummy worm to the pudding. (Horizon A, E)

Subsoil – Vanilla pudding as the next layer. (Horizon B)

Parent Material – Crumbled cookies as the next layer. (Horizon C)

Bedrock - Oreo cookie in the bottom of the cup. (Horizon R)

T<sub>O</sub>P

### CHANGING A VARIABLE



Don't worry we're not going to ruin your snack...

But if it were to rain, what do you think would happen to your soil layers?

(Discuss in groups)

# Questions/ Comments?

- What did we learn?
- What did we like?
- What did we dislike?

### References:

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