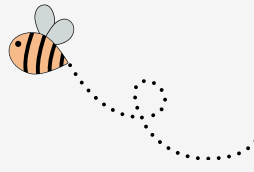


BioBeo Buzz



Meán Fómhair 2024

We are Back! Welcome to our first edition of the new school year of BioBeo Buzz. It is BBBBBrilliant to be up and flying again! We are kicking things off with a special 'Chocolate' edition to ease us back into school! If you are new to the newsletter, let us give you the buzz! You are signing up for a newsletter filled with updates, activities, and eco-tips from our EU-funded BioBeo project. You can find out all about the project and read our past newsletters [here](#). Keep reading for a bumper edition full of activities, jokes, riddles and news from the world of BioBeo!

Dictionary Corner

Last June we asked you what "**Biomimicry**" meant. That was a hard one but we're sure you came up with some great answers! Here is our definition:

Nature's Genius: Biomimicry involves learning from nature's solutions to create new and better technologies. It's like being an inventor who takes tips from trees, animals, and plants! We will be learning about the links between Biomimicry and Chocolate in this newsletter so keep reading!

Now it's your turn! Do you know what "**Renewable Energy**" is? Have a guess or maybe do some research to find out. Come back for our definition in October!



Joke Spot

What fruit loves chocolate?

Answer: A Cacao nut!



What is the opposite of Chocolate?

Answer: Choco EARLY!



Solve the Riddle!

I take old food scraps and turn them
into gold,
Helping new plants grow strong and
bold.

I'm found in a bin or pile out back,
What am I, in the gardener's sack?

Find the answer on the last page!

Biomimicry and Chocolate

Before our chocolate experiment, let's take a closer look at the connections between biomimicry and the different stages of making chocolate.

Biomimicry in Growing Cacao

Forest Layers: Sustainable cacao farms grow cacao trees under the shade of taller trees, similar to rainforest layers, supporting a diverse ecosystem.

Natural Pest Control: Insects like ants and birds help control pests naturally. Farmers encourage these helpful creatures to live on their farms, reducing the need for pesticides.

Biomimicry in Chocolate Production

Bees and Pollination: Bees help cacao trees produce more pods. Some farms use bee-friendly practices to increase pollination without harming the environment.

Fermentation Inspired by Nature: Scientists study natural fermentation processes to improve cacao bean fermentation, enhancing their flavour.

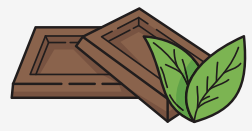
Biomimicry in Chocolate Packaging

Fruit Skins: Inspired by fruit skins, chocolate makers are creating biodegradable packaging to reduce plastic waste.

Coconut Shells: Some companies use coconut shells for packaging, offering strong and biodegradable protection similar to coconut fruit.

Nature-Inspired Chocolate Experiment!

Create Your Own Leafy Chocolate Treats!



Hello, young scientists and chocolate lovers! Today, we're going to explore how nature can inspire us to make delicious and eco-friendly chocolate. Let's embark on a fun experiment that mimics nature's way of protecting plants. Ready for some chocolate magic? Let's go!

You Will Need:

- Sustainably sourced chocolate (dark or milk) (see link on page 3 for help!)
- Leaves with interesting shapes (mint, basil, or rose leaves)
- Small silicone moulds or ice cube trays
- Wax paper
- A microwave-safe bowl and microwave
- A spoon



Steps:

1. Gather Your Leaves: Find clean, dry leaves with interesting shapes like mint, basil, or rose leaves etc. Wash them gently, and dry them in a soft towel before use.
2. Melt the Chocolate: With an adult's help, break the chocolate into small pieces and microwave in 30-second intervals until smooth.
3. Coat the Leaves: Dip each leaf into the melted chocolate, using a spoon if needed. Place on wax paper to cool.
4. Fill the Moulds: Pour the remaining chocolate into silicone moulds or create freeform shapes on wax paper.
5. Cool and Set: Refrigerate the chocolate-covered leaves and moulds for about 30 minutes until hardened.
6. Reveal Your Chocolate Shapes: Peel the leaves off the chocolate to reveal beautiful leaf shapes. Pop the chocolate shapes out of the moulds. Clean the leaves with warm water and place in compost bin (or eat if they are edible leaves like mint!).
7. Enjoy & share your homemade treats. Discuss how nature inspired your sustainable creations!

What Did We Learn?

Biomimicry in Action: Like fruit skins protect the fruit, the chocolate coating protected the leaves, creating beautiful shapes.

Sustainable Choices: Choosing sustainable chocolate helps protect the environment and supports fair trade.

Natural Packaging: Nature's protective packaging, like fruit skins and leaves, inspires us to use biodegradable and eco-friendly packaging.

Fun Facts About Chocolate and Biomimicry

Rainforest Helpers: Sustainable cocoa farming protects rainforests and supports diverse ecosystems.

Eco-Friendly Practices: Some chocolate makers use renewable energy, inspired by how plants use sunlight.

By learning from nature, we can enjoy delicious chocolate in a way that's kind to our planet.

Sweet and sustainable – that's the best way to enjoy your treats!



Chocolate Wordsearch!



For more information on sustainable chocolate production and sourcing, click [HERE](#)

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

biodegradable

sustainable

biomimicry

rainforest

farming

cacao

technology

chocolate

ecosystem

pesticide



The Riddle is Solved!

Did you work it out?
 The answer is...
Compost!



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