

BLACK GOLD – BIOCHAR PRODUCTION

HOW TO CONNECT CLIMATE EDUCATION WITH PRACTICAL WORK IN THE SCHOOL GARDEN OR SCHOOL GROUNDS

GOAL Children will try to make biochar and learn what it is and how it works.

YOU NEED tin containers (or a bucket, old pot, cans), paper, matches, and twigs

1 ESTIMATE

At the very beginning, ask the children to write down their guesses on:

- a) What is biochar,
- b) how it is produced,
- c) what it is suitable for and why.

2 PREPARATIONS

Show the children photos or videos of biochar production, explain how it differs from ordinary fire making, why the lowest possible oxygen intake is needed, what materials can be used, how to layer the branches, when to pour water. Also include safety rules for working with fire. Prepare a suitable place, tools and a container of water for each group.

3 BURNING

Enough theory, let's get to work. Each group will prepare everything they need then go through the garden and find suitable material for the production of biochar. They will make a fire in their container and gradually add material from the garden. When the container is full, the branches have burnt enough or if the fire burns too much, it is time to pour water and stir.

4 EXTINGUISHING

The groups put out their fires with the prepared water and stir the resulting biochar well. Share group results and experiences from the course of work.

! TIP

You can show the students on a cold charred twig how carbon is concentrated on it and can be used as charcoal for drawing.

5 USES OF BIOCHAR

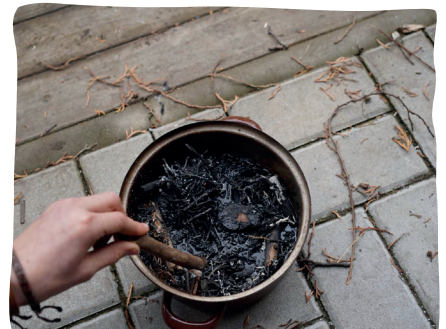
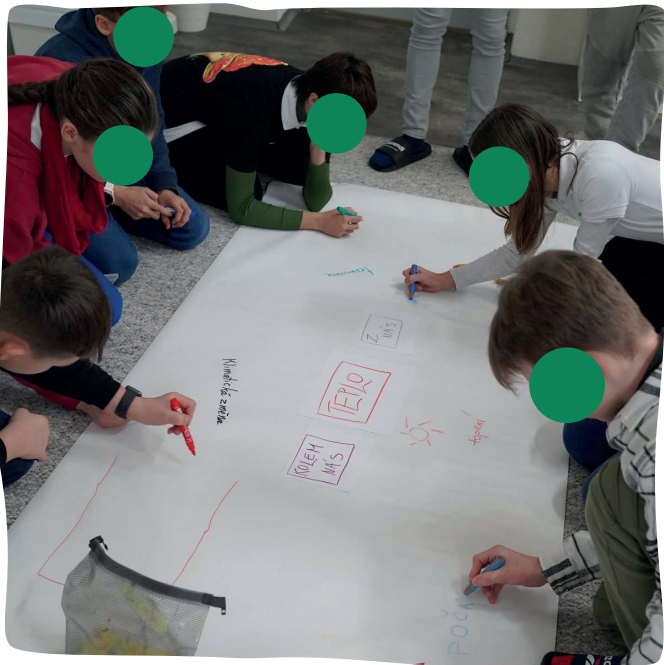
At the end, find places together where biochar can be used. It can be incorporated directly into flower beds, trees, shrubs, etc. into the soil, or on compost. It is good to cover it with a layer of soil.

6 REFLECTION

After finishing the work, stop and share together what was learnt, how everyone did and what was produced. Now return to the three opening questions. The students can write their answers again and share in pairs. Finally as a group, anyone can share their strongest experiences and what surprised them the most.







1.1 BLACK GOLD – BIOCHAR PRODUCTION CHECKLIST

GOAL: To try producing biochar

OUR GROUP:

DATE:

1. ESTIMATE:

- a) What is biochar?
- b) How is it produced?
- c) What is it good for and why?

2. PRODUCTION

Brief description and drawing of material preparation, fire making, burning, adding wood and extinguishing the fire.

1.2 BLACK GOLD

– BIOCHAR PRODUCTION CHECKLIST

3. RESULTS

What was produced?

How did the work progress?

What did not work?

What can you improve next time?

What results are worth sharing further?

4. CONCLUSION

Go back to the first step, the estimate.

What has changed?

What more does everyone know now?

What was discovered?

What was the wow-moment of the day?