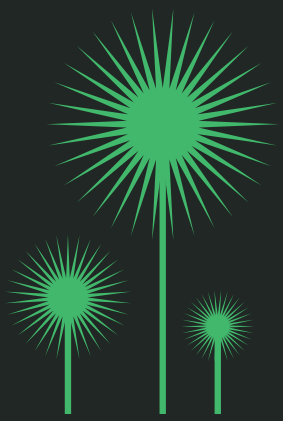
GEN B

QUIZ game



Funded by
the European Union

QUIZZES

GenB Bioeconomy quiz. Test your knowledge in a dynamic way.

Created by: AIJU, Technological Institute for children's products and leisure

Scientific validation by: BTG Biomass Technology Group B.V., Jawahar Navodaya Vidyalaya school and Nikola Karev high school.

Design by: GLOBAZ, S.A.

ACKNOWLEDGEMENTS

The GenB Bioeconomy quiz have been reviewed from both scientific-technical and educational perspectives, ensuring their quality and appropriateness for the target audience. John Vos and Marisa Groenestege from BTG Biomass Technology Group in the Netherlands, Professor Yogesh Kumar from Jawahar Navodaya Vidyalaya school in Karimganj, Assam, India, managed by Navodaya Vidyalaya Samiti, an autonomous body under the Ministry of Education, Government of India, and Professor Nikola Delevski from DSU-RCSOO secondary municipal high school “Nikola Karev” in Strumica, North Macedonia, have been actively involved in this review process. We extend our heartfelt thanks to these experts for their invaluable contributions and dedication.

ABOUT THE QUIZZES

Welcome to the GenB Bioeconomy quiz, a comprehensive and interactive educational resource designed to enhance your understanding of bioeconomy concepts. This material features 20 carefully crafted quizzes that assess and deepen your knowledge across various key aspects of the bioeconomy. The GenB Bioeconomy quiz covers essential topics such as sustainability, bio-based plastics and their life cycle, bioenergy and its applications, as well as waste management and the circular economy.

Multiple-choice and true/false questions serve as effective tools for self-assessment and enhancing understanding of the bioeconomy in a dynamic and engaging manner. This resource supports self-directed learning and is suitable for individual study, group educational activities or integration into training programs. This approach encourages active participation and practical learning in an interactive and enjoyable format.

WOULD YOU LIKE TO LEARN MORE?

The GenB Bioeconomy quiz material is directly linked to the corresponding GenB Bioeconomy educational cards. Look for the code EC#n in each quiz to easily find and explore the relevant educational card for more information.

Link:
https://genb-project.eu/genb_toolkit/bioeconomy-educational-cards-2/

WHAT ARE THE ADVANTAGES OF USING QUIZZES FOR LEARNING?

- Enhance knowledge: increase awareness and understanding of the bioeconomy and its relevance in daily life.
- Provide flexible resources: offer practical and accessible educational materials that can be used in various learning contexts.
- Encourage active participation: engage participants directly in the learning process through active question-solving.
- Enable self-assessment: allow teenagers to review and consolidate their learning, identifying areas where they need to improve their understanding of the bioeconomy.

WHO IS IT AIMED AT?

GenB Bioeconomy quiz is designed for teenagers aged 14 to 19, as well as teachers and other multipliers interested in educational resources on the bioeconomy. It is a valuable tool to foster interest and understanding of how the bioeconomy can contribute to a more sustainable and prosperous future.

ARE ALL *bio-based* PLASTICS BIODEGRADABLE?

01

A) Yes

B) No

ANSWER: B (EC 1)

02

CAN *bio-based* PLASTICS BE RECYCLED?

A) Yes

B) No

ANSWER: A (EC 20)

THE DOMINANT *application* FOR BIO-BASED PLASTICS IS... 03

A) Automotive

B) Packaging

C) Footwear

ANSWER: B

WHERE ARE bio-based PLASTICS RECYCLED?

04

A) Chemical recycling plants

B) They cannot be recycled

C) They decompose in the ground

ANSWER: A (EC 6)

YOU CAN *make* FUEL OUT OF 05

A) Wood

B) Used cooking oil

C) Horse poop

D) All of them

ANSWER: D (EC 15)

06

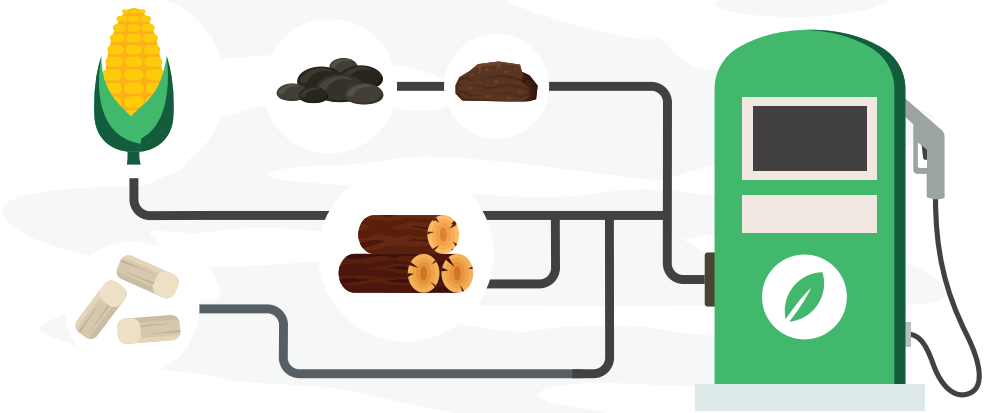
IN WHAT *forms* CAN BIOFUEL BE PRESENTED?

A) Solid

B) Liquid

C) Gas

D) All of them



ANSWER: D

07

WHAT ARE *barriers* TO THE DEVELOPMENT OF THE BIOFUEL MARKET?

A) High production cost

B) Lack of affordable raw materials

C) Insufficient infrastructure

D) All of them

ANSWER: D

08

WHAT *areas does* THE BIOECONOMY COVER?

A) Agriculture

B) Production and manufacturing

C) Forestry and fishing

D) All of them

ANSWER: D (EC 4)

09

WHY *do we use* RENEWABLE ENERGY IN THE BIOECONOMY?

A) To use up non-renewable resources

B) To reduce fossil fuel use and support sustainability

C) To ignore environmental issues in energy production

ANSWER: B (EC 2)

BIOECONOMY

10

A) Contributes to the reduction of CO_2 emissions

B) Reuses waste to produce new materials and energy

C) Creates new jobs

D) All of them

ANSWER: D (EC 3)

11

WHICH OF THE *following best* DESCRIBES LIFE CYCLE ASSESSMENT (LCA) IN THE CONTEXT OF THE BIOECONOMY?

A) A method to increase agricultural yield

B) A technique to evaluate the environmental impact of a product throughout its lifespan

C) A process to improve the genetic modification of crops

D) A strategy for marketing bio-based products

ANSWER: B (EC 5)

12

WHICH OF THESE *processes* OPTIMIZES RESOURCES THE BIOECONOMY?

A) Simply disposing of waste in landfills

B) Processing residues or by-products into raw materials

C) Burning all waste materials

D) Avoiding the generation of waste altogether

ANSWER: B (EC 7)

13

WHAT IS THE *difference* BETWEEN UPCYCLING AND DOWNCYCLING IN THE RECYCLING PROCESS?

A) Upcycling creates lower quality and value materials, while downcycling improves quality and value

B) Both processes create materials of the same quality

C) Downcycling produces lower quality and value materials, while upcycling enhances quality and value

D) Upcycling and downcycling are unrelated to recycling

ANSWER: C (EC 8)

14

WHICH OF THE *following* STATEMENTS ABOUT COMPOSTING IS TRUE?

A) Composting involves burning organic waste to generate energy

B) Composting converts organic waste and improves soil quality

C) Composting is a method for recycling plastics

D) All of them are true

ANSWER: B (EC 9)

15

WHAT DOES *biodegradation* REFER TO?

A) Burning organic waste to make energy

B) Making new materials with chemicals

C) Recycling plastics using machines

D) Microorganisms breaking down organic materials

ANSWER: D (EC 10)

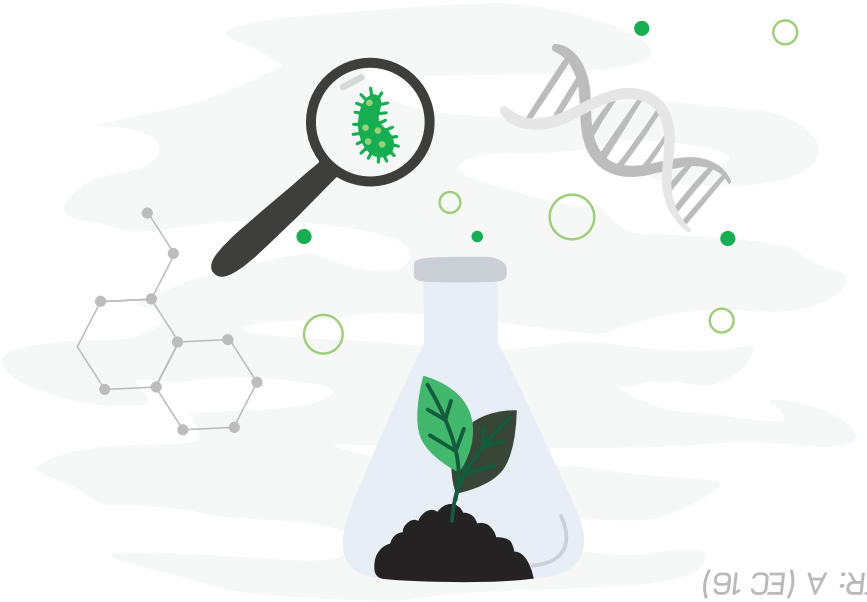
WHAT IS biomimicry 16

A) Imitating natural processes and systems to solve human problems

B) Creating synthetic materials using biotechnology

C) Breeding animals for specific genetic traits

D) The study of fossils and ancient life forms



ANSWER: A (EC 16)

WHAT IS biomimicry 16

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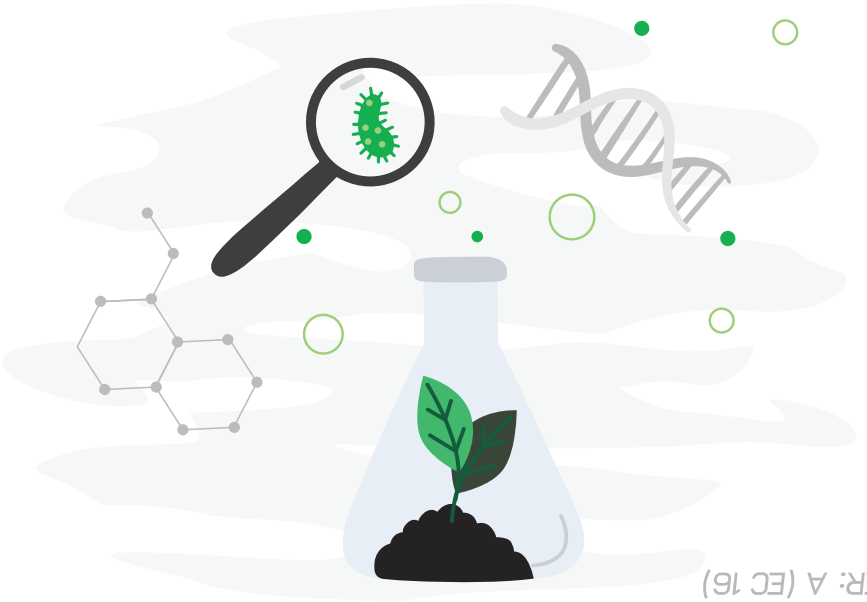


ANSWER: A (EC 16)

17

WHY DO *non-biodegradable* MATERIALS, LIKE PLASTICS, POSE LONG-TERM ENVIRONMENTAL RISKS?

A) They decompose quickly but leave harmful residues

B) They are easily absorbed by natural processes

C) They persist for a long time and can harm ecosystems and wildlife

D) They break down into harmless substances that benefit the environment

ANSWER: C (EC 17)

WHAT IS AN *important feature* OF NON-RENEWABLE ENERGY SOURCES?

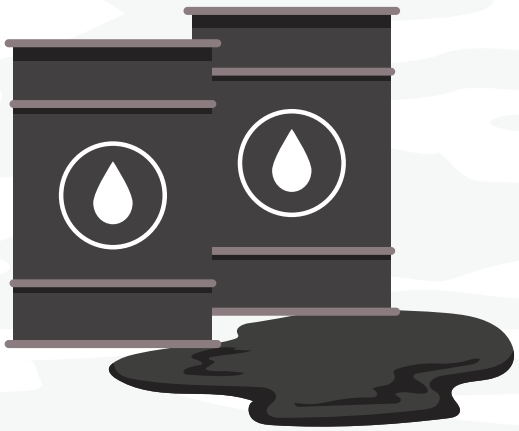
18

A) They are always being made by nature

B) They don't harm the environment much

C) They can be used forever without running out

D) They will run out because they can't be replaced quickly



ANSWER: D (EC 18)

WHICH OF THE *following* IS AN EXAMPLE OF A GREEN JOB?

19

A) Coal miner

B) Solar panel installer

C) Oil rig worker

D) Plastic factory worker

ANSWER: B (EC 19)

20

WHAT IS THE **benefit associated** WITH BIO-BASED PLASTICS THEIR RECYCLING, AND THEIR ENVIRONMENTAL IMPACT?

A) They increase greenhouse gas emissions

B) They reduce dependence on fossil fuels

C) They are non-biodegradable

D) They contribute to ocean pollution

ANSWER: B (EC 20)

SOURCES CONSULTED FOR ALL QUIZZES

- Increase public awareness of bio-based products and applications supporting the growth of the European bioeconomy. BIOWAYS. Grant agreement ID: 720762 https://cordis.europa.eu/project/id/720762

- Boosting European citizens knowledge and awareness of bioeconomy. *BLOOM.* Grant agreement ID: 773983 Bloom_Newsletter_December2020.pdf (bloom-bioeconomy.eu)

- Mobilization of a plurality of voices and mutual learning to accelerate the Bio-based sector. *BIOVoices.* Grant agreement ID: 774331 https://doi.org/10.3030/774331

- Mobilizing European Communities of Practice in bio-based systems for better governance and skills development networks in bioeconomy. *BioGov.net*. Grant agreement ID: 101060742 https://cordis.europa.eu/project/id/101060742

- *Life Cycle Assessment for strategical trade-offs in the bioeconomy* (n.d.). European Commission. https://visitors-centre.jrc.ec.europa.eu/en/media/animations/life-cycle-assessment-strategical-trade-offs-bioeconomy