⛽ Biofuel & Energy notes (A3, A5, A6, A7, A8)

Biology A · Unit 3 Biofuel & Energy · Level 2 guided notes. Use with the class slides.

Name: _____

Fill in each blank with a word from the word bank in that box. Each word is used one time.

A. Matter and energy (A3)

1. Matter has _____ and takes up space.
2. Energy has no mass. It makes things move or _____.
3. Match the energy to the example:

Potential	food and fuel
Kinetic	heat
Chemical	water behind a dam
Thermal	a rolling boulder

4. Energy moving to a new place is a _____. Energy changing form is a transformation.

Word bank: **change** **mass** **transfer**

B. Lipids (A5)

5. Fats and oils are called _____.
6. A fat is made of glycerol and three fatty _____.
7. Which stores more energy per gram? (circle 1)

lipids (fats) sugar

Word bank: **acids** **lipids**

C. Making biofuel (A6)

8. Biodiesel is made from plant or algae _____.
9. Biodiesel is _____ because plants grow back fast.
10. Number the energy changes when a bus burns biodiesel (1-3):

_____ heat when it burns

_____ chemical energy in the fuel

_____ mechanical energy moves the bus

Word bank: **oil** **renewable**

D. Energy reactions (A7)

11. A reaction that gets hot is _____.

12. A reaction that gets cold is _____.

13. Baking soda + vinegar made the cup… (circle 1)

colder hotter

Word bank: **endothermic** **exothermic**

E. Carbon cycle (A8)

14. Coal, oil, and natural gas are _____ fuels.

15. Plants and algae take carbon dioxide out of the _____.

16. Which do NOT put carbon dioxide into the air? (circle 1)

photosynthesis burning breathing

Word bank: **air** **fossil**

Level 2 version of the gen ed "A3 Characteristics of Matter and Energy, A5 Making Lipids, A6 Making Biofuel, A7 Energy Reactions, A8 Carbon Cycle."