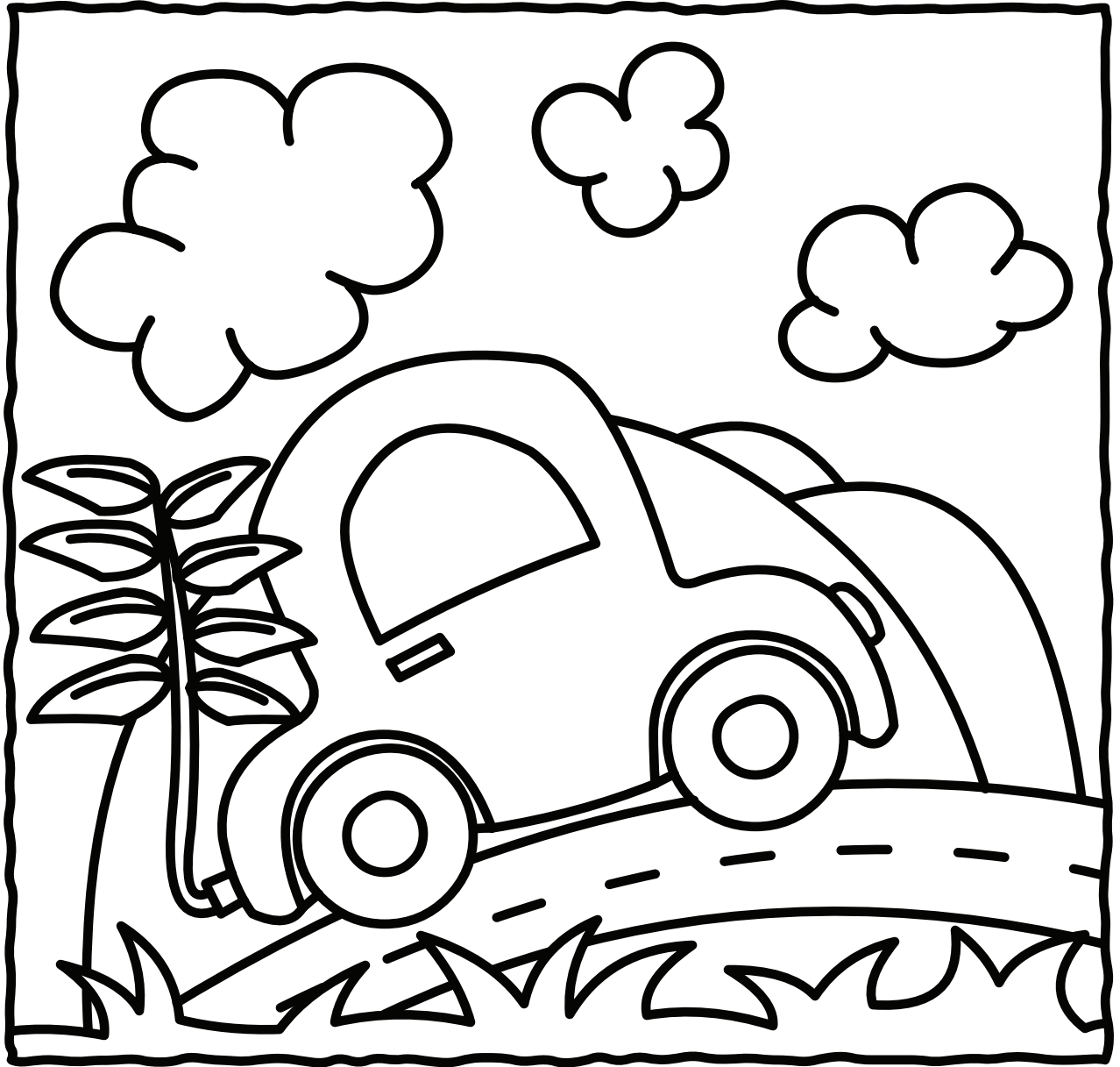


# FUEL YOUR FUTURE

Ethanol Activity Book



# Let's learn about ethanol!



Can a vehicle run on plants? That might sound like a silly idea, but many vehicles do get their power from plants, in the form of ethanol!

Ethanol is a clean burning, renewable fuel made from sugars found in plants. It is blended with gasoline to create less pollution and to keep our air clean.

**NLOEHAT**

— — — — —

**AELNC**

— — — — —

**RIA**

— — —

**ENEWRBLEA**

— — — — —

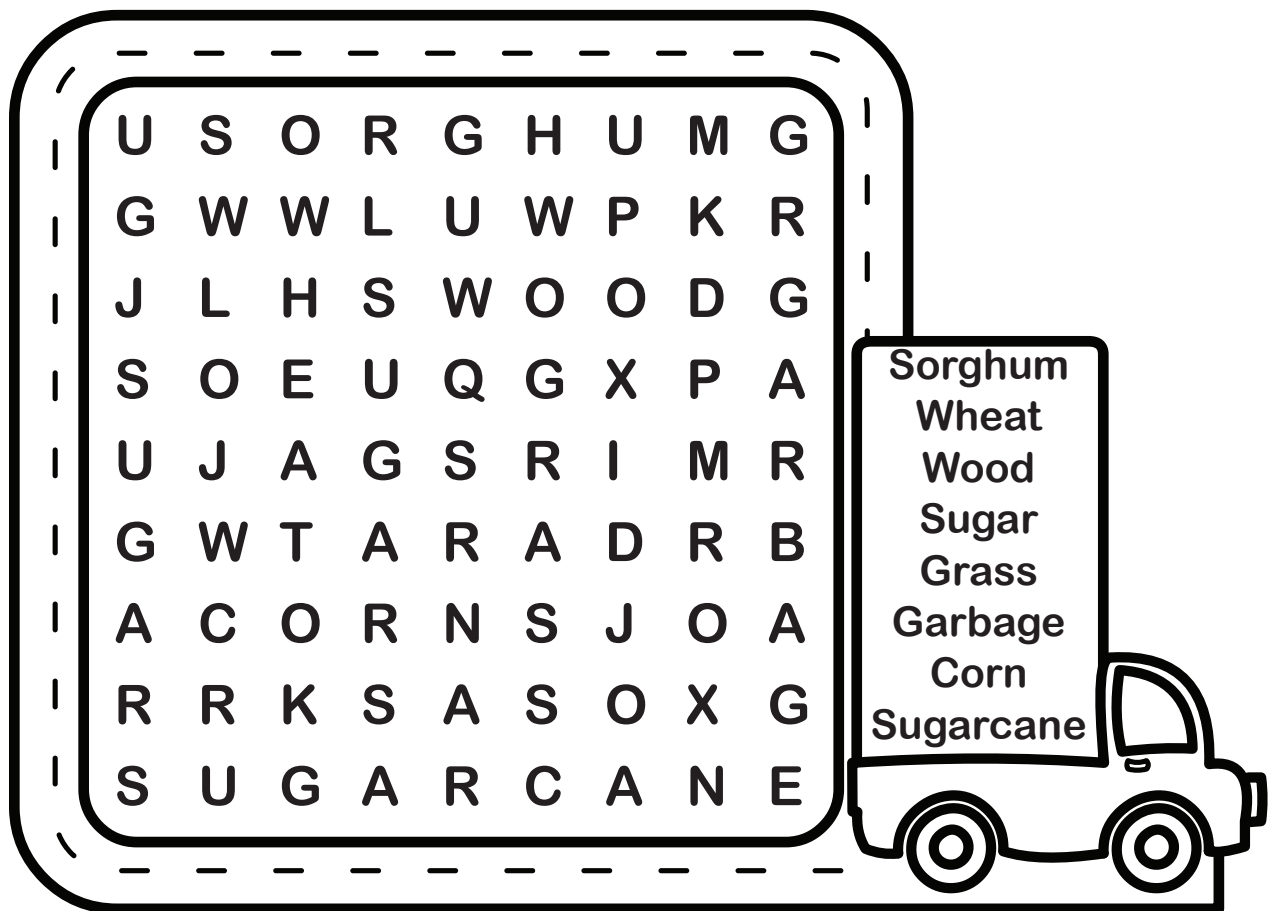
**LUFE**

— — — —

Unscramble the words above. Hint: All of the words can be found on this page!

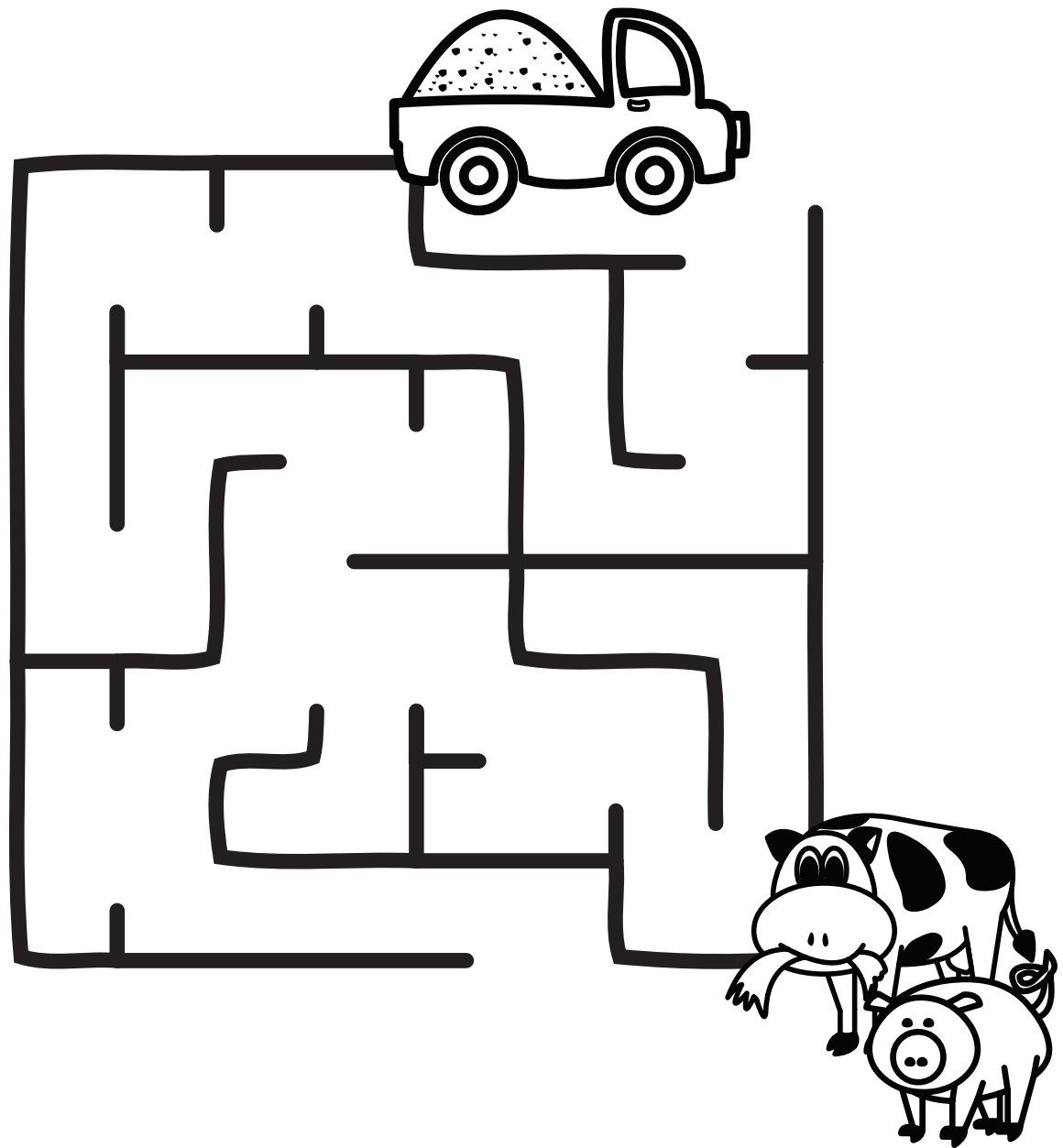
# How is ethanol made?

Ethanol can be made from many different things. The most common is corn and sorghum, but other options include wheat, sugarcane, grass, wood waste, cheese whey, potato waste and even garbage!



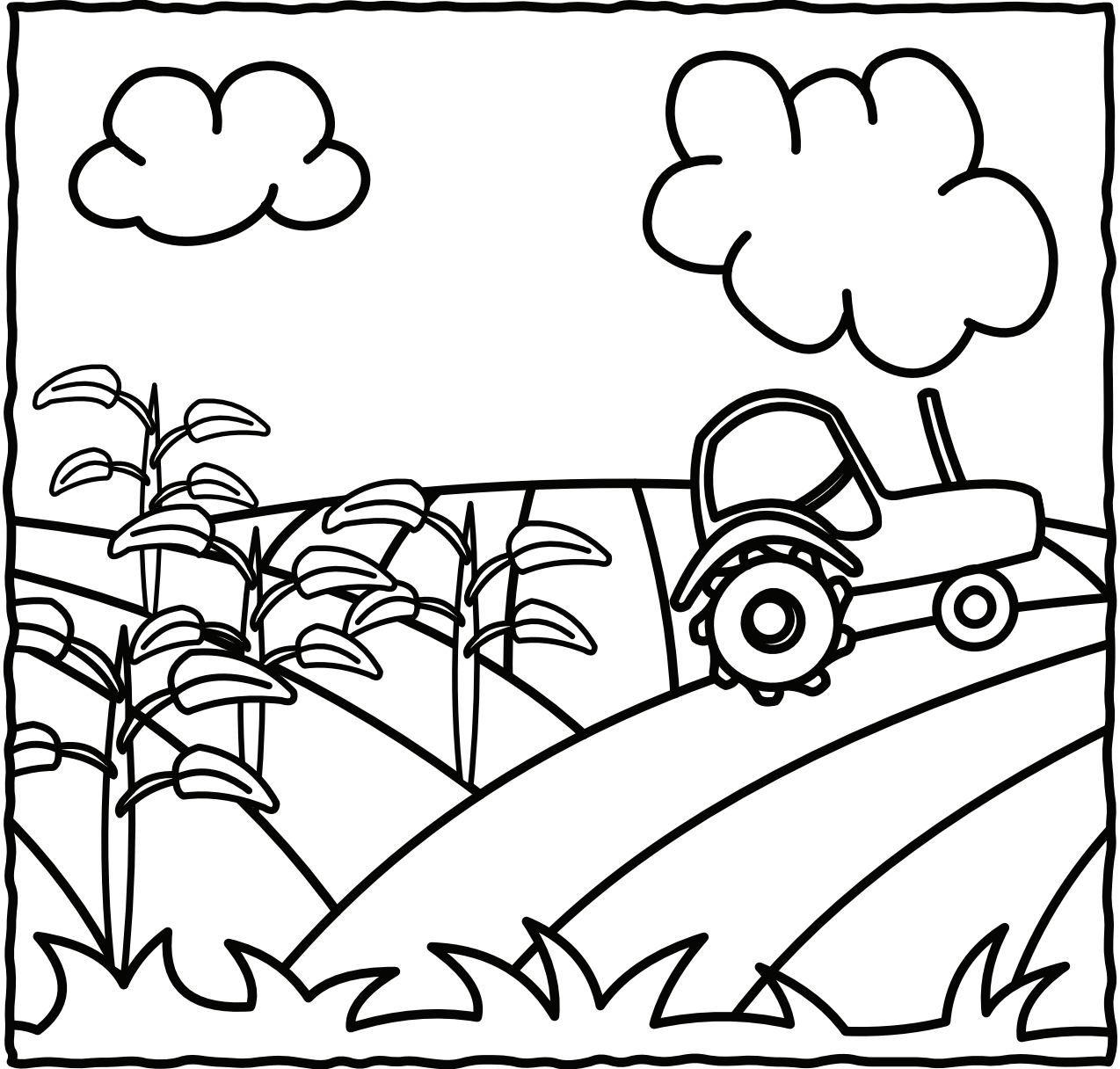
Find and circle the renewable resources listed in the back of the truck.

Did you know you can have food and fuel? More than 98% of U.S. ethanol is made from grains, such as corn and sorghum. This process creates both fuel and livestock feed. One-third of the grain used to make ethanol is returned back to the market in the form of livestock feed.

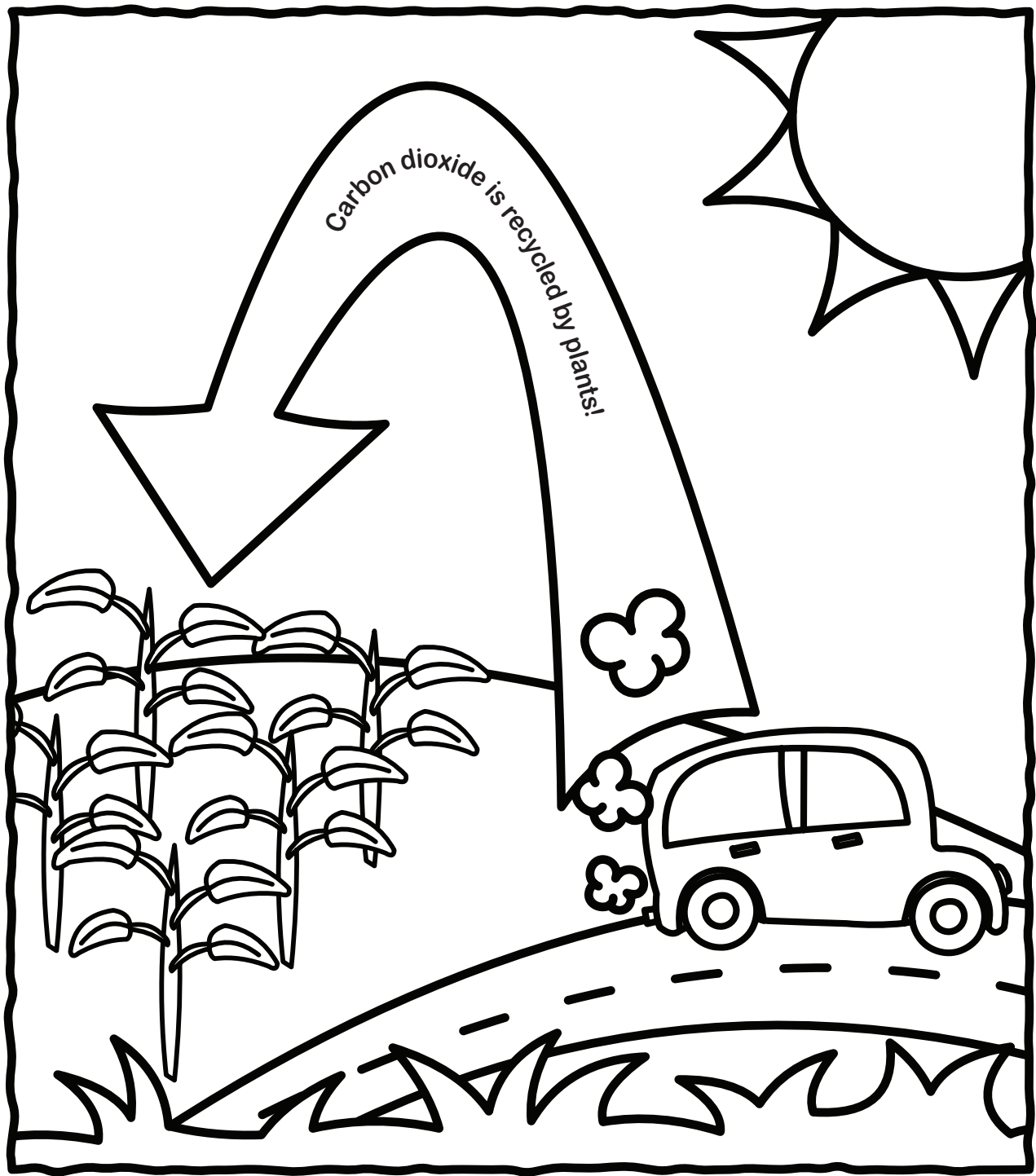


Help return the truck of feed to the livestock by finding your way through the maze.

# How is ethanol good for the environment?



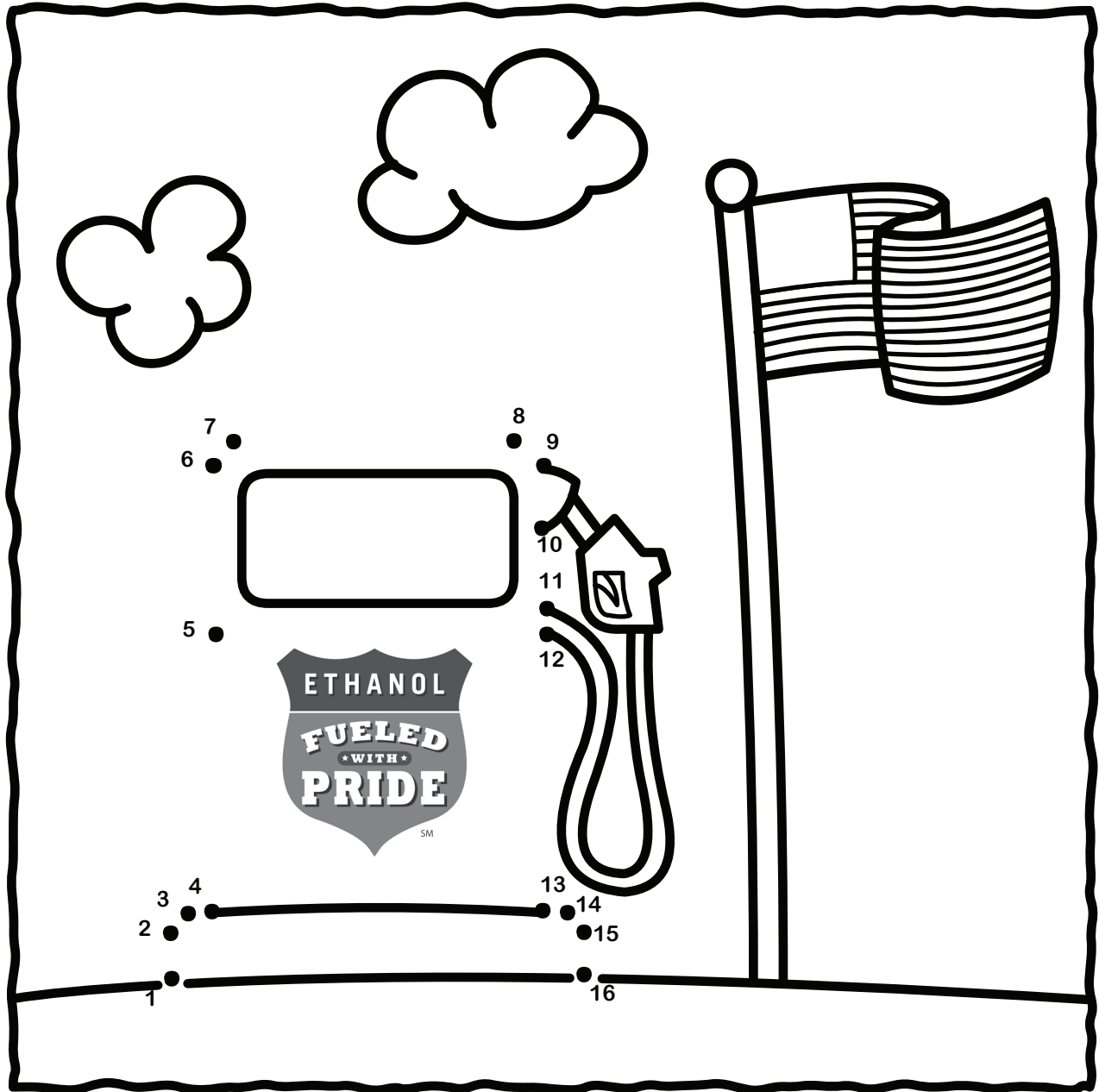
Unlike oil used to make gasoline, the plants used to make ethanol are a renewable resource, which means they can be replaced. When plants are used to create ethanol, new ones are planted in their place!



Ethanol helps keep our air clean. Fuel blended with ethanol burns cleaner and gives off less pollutants than gasoline. Also, the plants used to make ethanol use up carbon dioxide when they grow, and thus helps reduce global warming.

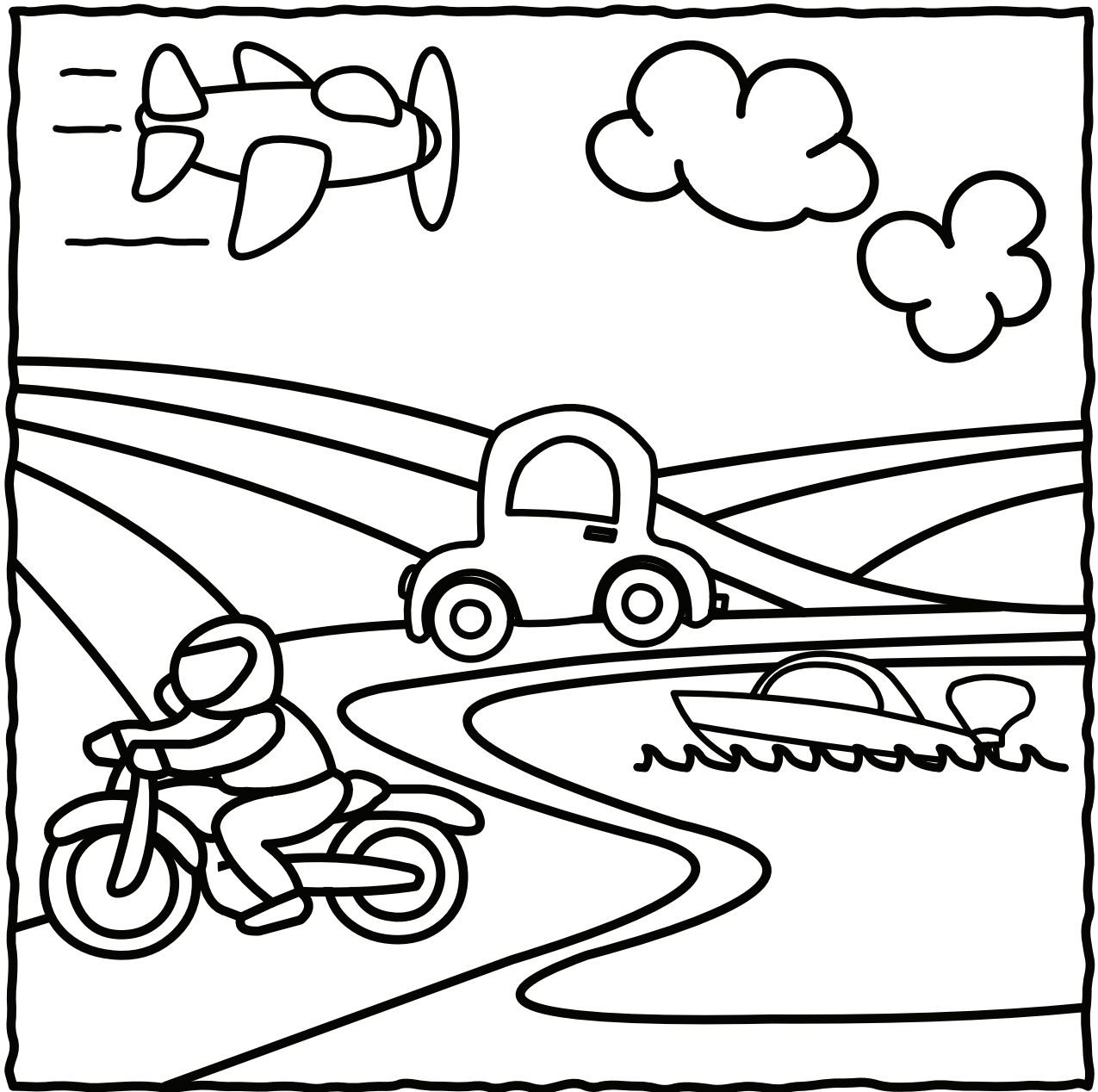
# How is ethanol used?

Almost all of the fuel sold in the U.S. is blended with ethanol. Using ethanol blends is better for the environment and helps our country become energy independent!



Connect the dots to finish the picture.





Ethanol can be used in many types of engines. Cars, trucks, SUVs, motorcycles, snowmobiles, lawn mowers, ATVs, boats, and even some airplanes can run on ethanol!

How many things can you find in the picture that can run on ethanol?

# Ethanol Fun Facts!

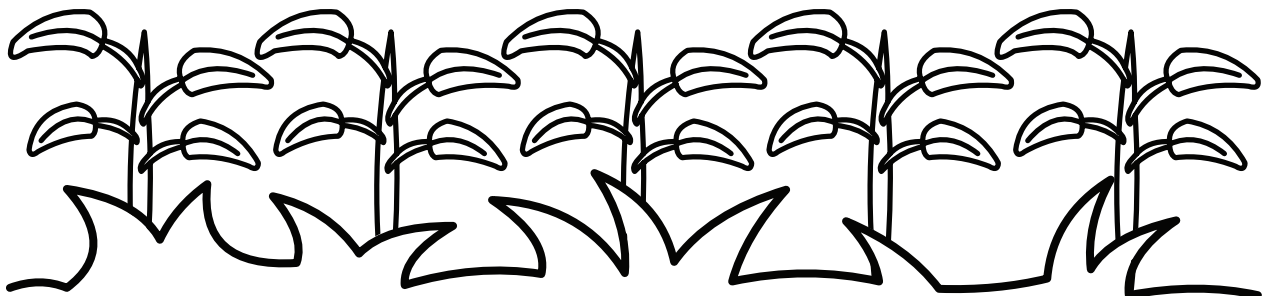
Did you know E10 is a blend of 10% ethanol and 90% gasoline? E10 can be used in nearly all vehicles!

Did you know E85 is a blend of 85% ethanol and 15% gasoline? E85 is a renewable fuel designed for use in flex-fuel vehicles only!

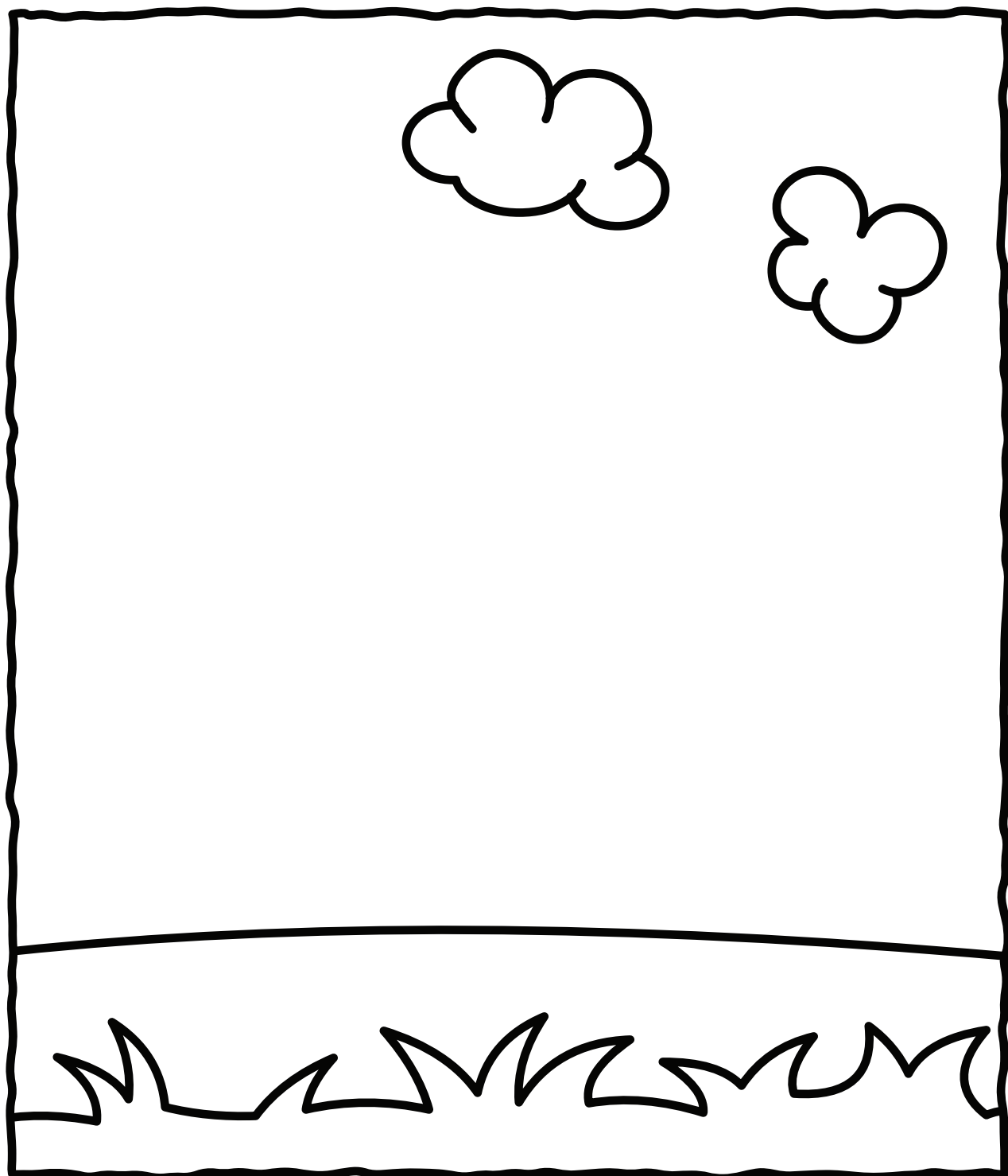
Did you know, the production of ethanol helps support more than 400,000 jobs? Using ethanol creates jobs right here in the U.S.!

Did you know the use of ethanol in 2010 reduced greenhouse gas emissions from vehicles by 16.5 million metric tons, which is equal to removing 2.7 million vehicles from the road? This helps keep the air we breathe cleaner!

Did you know one bushel of corn equals 2.8 gallons of ethanol, 17 pounds of livestock feed and 17 pounds of carbon dioxide. Proof that we can have food and fuel!



Flex-fuel vehicles are designed to run on E85, but can run on regular gasoline or any ethanol blend in between! Design your own flex-fuel vehicle in the space below.



Using the chart below, decode the last fun fact by matching the number to the letter.

1	2	3	4	5	6	7	8	9
A	B	C	D	E	F	G	H	I

10	11	12	13	14	15	16	17	18
J	K	L	M	N	O	P	Q	R

19	20	21	22	23	24	25	26
S	T	U	V	W	X	Y	Z

Did you know ethanol has been used in automobiles since Henry Ford designed his 1908 Model T to operate on pure ethanol?

9 20 23 1 19 20 8 5

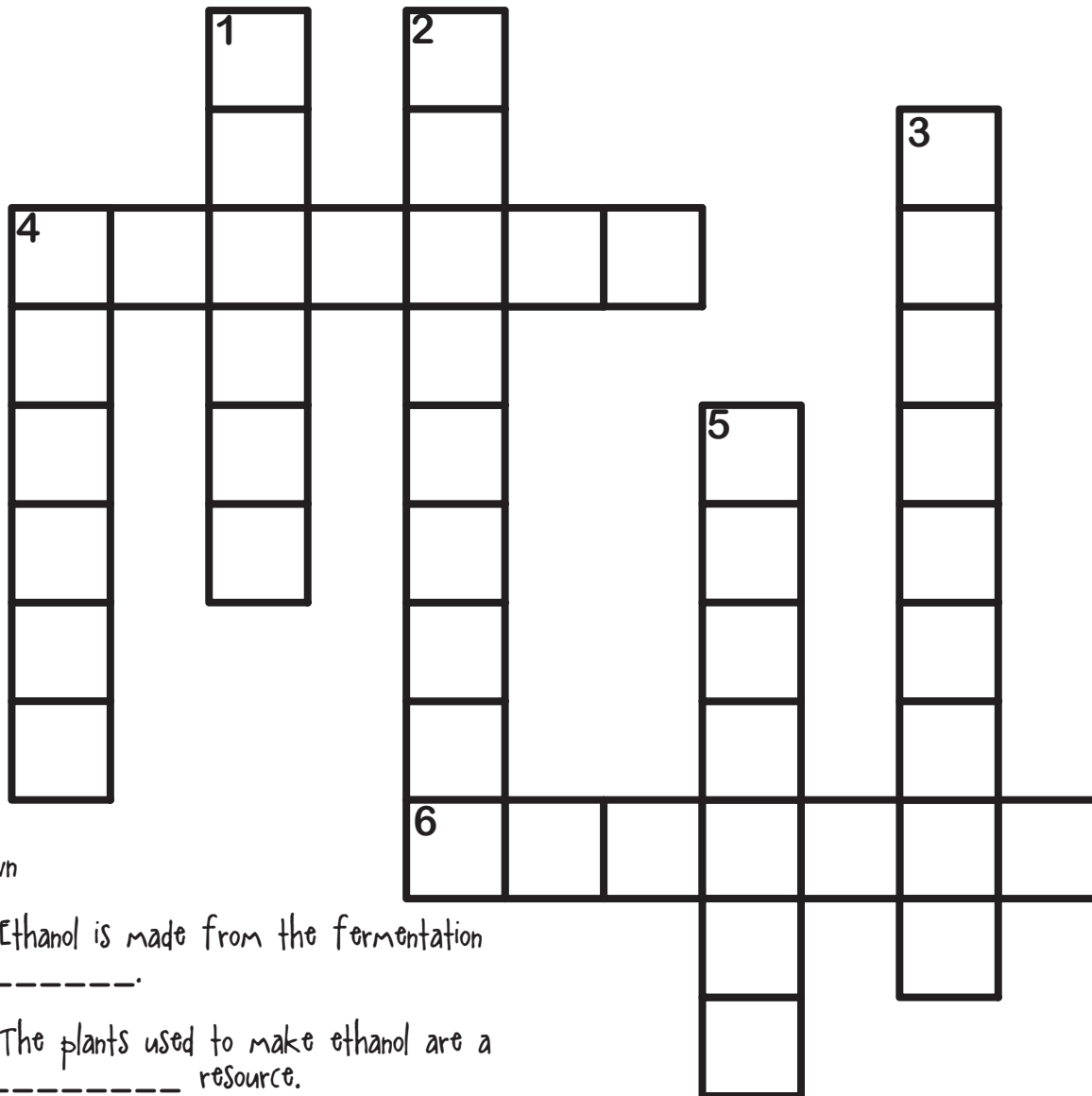
2 5 7 9 14 14 9 14 7 15 6

20 8 5 6 12 5 24 6 21 5 12

22 5 8 9 3 12 5 !

# How much did you learn?

Fill in the crossword puzzle below to see how much you learned about ethanol.



Down

1. Ethanol is made from the fermentation of \_\_\_\_\_.
2. The plants used to make ethanol are a \_\_\_\_\_ resource.
3. Ethanol is blended with gasoline to create less \_\_\_\_\_.
4. Ethanol helps our country become \_\_\_\_\_ independent.
5. Ethanol can be made from corn, grass, wood waste and even \_\_\_\_\_.

Across

4. Ethanol can be used in many types of \_\_\_\_\_.
6. \_\_\_\_\_ is a clean burning renewable fuel.

[www.ChooseEthanol.com](http://www.ChooseEthanol.com)



425 Third Street, SW Suite 1150  
Washington, DC 20024

Copyright © 2011 Renewable Fuels Association. All Rights Reserved