

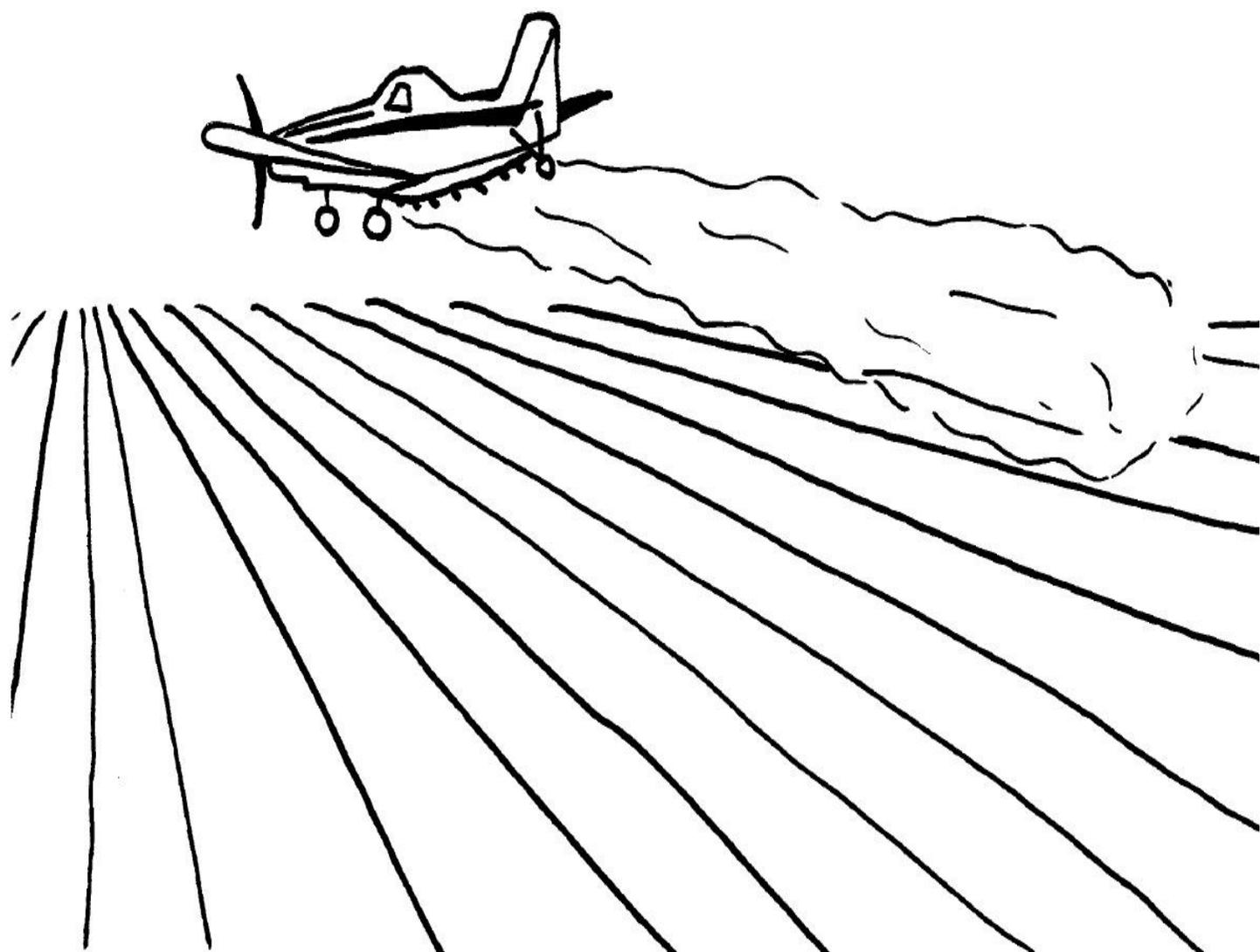
2020 Farm Connection Day

Fifth through Sixth Grade



**Farm Equipment
and Tractors
in Yolo County**

Aerial Application



Aerial Application

Use the Key to help you decode the sentence below.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
		22		3	5	18		2			14		24					4	7		10				

$\frac{19}{E}$ $\frac{3}{I}$ $\frac{26}{L}$ $\frac{14}{L}$ $\frac{2}{I}$ $\frac{22}{C}$ $\frac{7}{T}$ $\frac{2}{I}$ $\frac{15}{N}$ $\frac{22}{C}$ $\frac{19}{N}$ $\frac{23}{E}$ $\frac{3}{}$

$\frac{11}{S}$ $\frac{4}{E}$ $\frac{3}{}$ $\frac{17}{}$ $\frac{5}{F}$ $\frac{15}{}$ $\frac{26}{}$ $\frac{12}{N}$ $\frac{19}{}$ $\frac{24}{}$ $\frac{16}{}$ $\frac{7}{T}$ $\frac{21}{I}$ $\frac{2}{N}$ $\frac{24}{G}$ $\frac{18}{S}$ $\frac{4}{}$

$\frac{2}{I}$ $\frac{24}{N}$ $\frac{22}{C}$ $\frac{14}{L}$ $\frac{11}{}$ $\frac{17}{I}$ $\frac{2}{N}$ $\frac{24}{G}$ $\frac{18}{}$ $\frac{4}{S}$ $\frac{9}{}$ $\frac{26}{}$ $\frac{19}{}$ $\frac{16}{I}$ $\frac{2}{N}$ $\frac{24}{G}$ $\frac{18}{}$

$\frac{5}{F}$ $\frac{3}{E}$ $\frac{26}{T}$ $\frac{7}{I}$ $\frac{2}{L}$ $\frac{14}{I}$ $\frac{2}{E}$ $\frac{6}{}$ $\frac{3}{}$ $\frac{26}{}$ $\frac{19}{N}$ $\frac{24}{}$ $\frac{17}{}$ $\frac{3}{E}$ $\frac{10}{V}$ $\frac{3}{E}$ $\frac{24}{N}$

$\frac{9}{L}$ $\frac{14}{N}$ $\frac{19}{T}$ $\frac{24}{I}$ $\frac{7}{N}$ $\frac{2}{G}$ $\frac{24}{}$ $\frac{18}{}$ $\frac{26}{I}$ $\frac{2}{C}$ $\frac{22}{E}$ $\frac{3}{!}$

Aerial Applicators

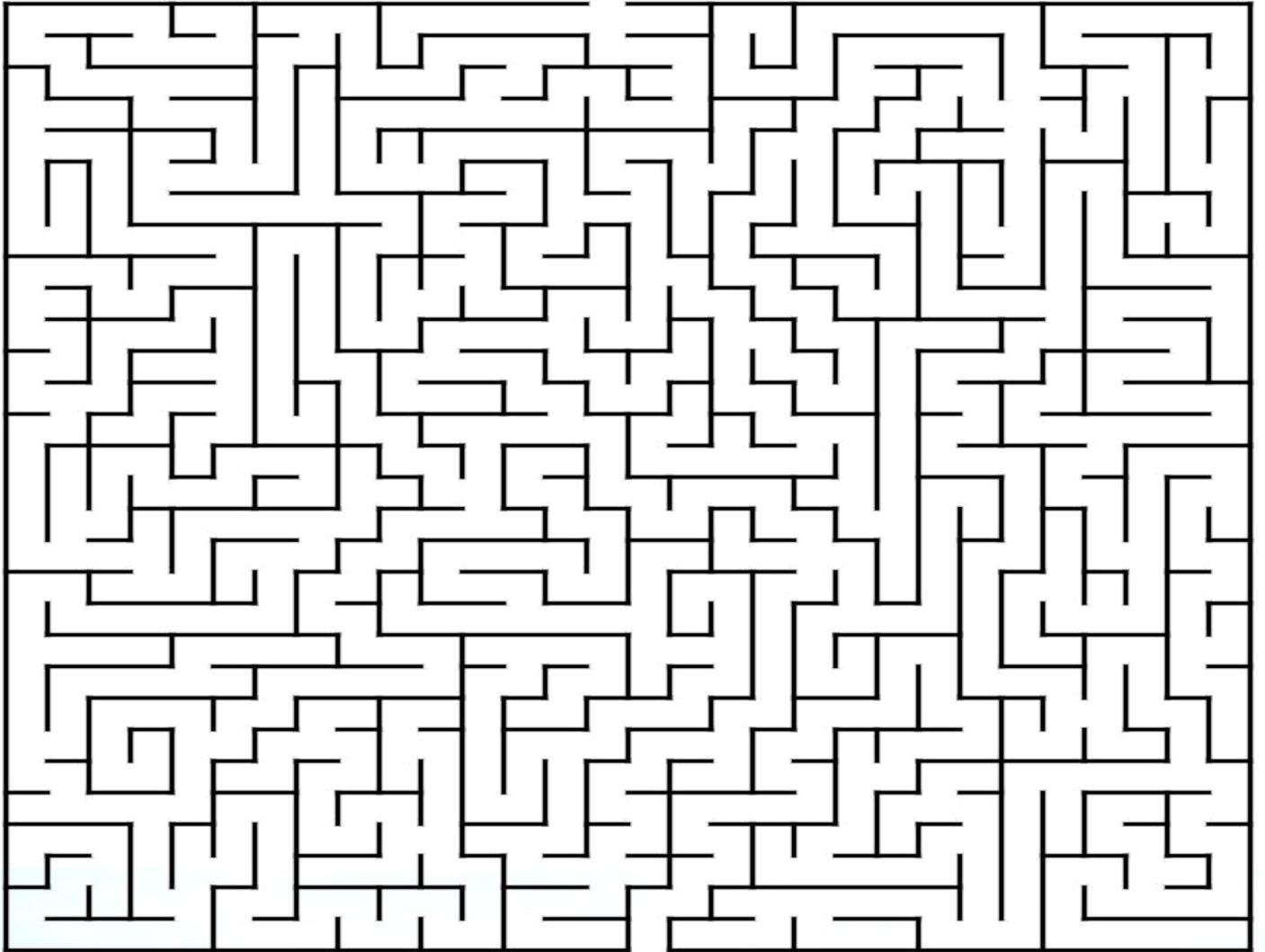
- Aerial Application allows pesticides to be applied quickly and in large sections.
- It does not cause soil compaction, preventing soil runoff and is conducive to higher crop yields because it is non-disruptive to the crop.
- 87% of the aircraft used are fixed-wing aircraft, but 13% a rotorcraft/helicopters.
- Because Aerial Applicators fly low enough to accurately dust the crops, they must be careful to watch out for power lines.
- Aerial Applicators are often called Crop Dusters.

Baler



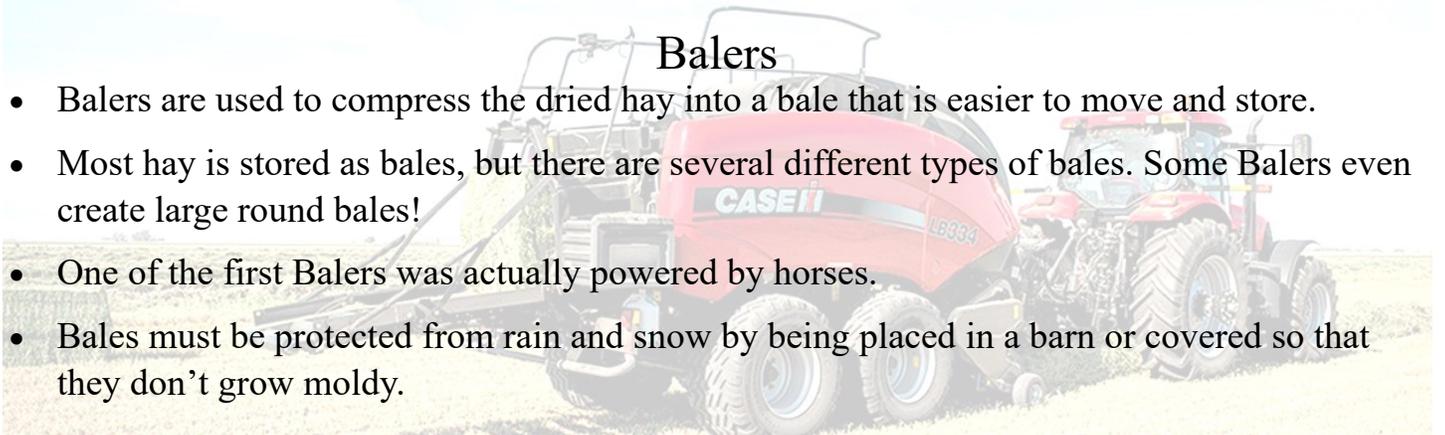
Balier

Find your way through the maze.



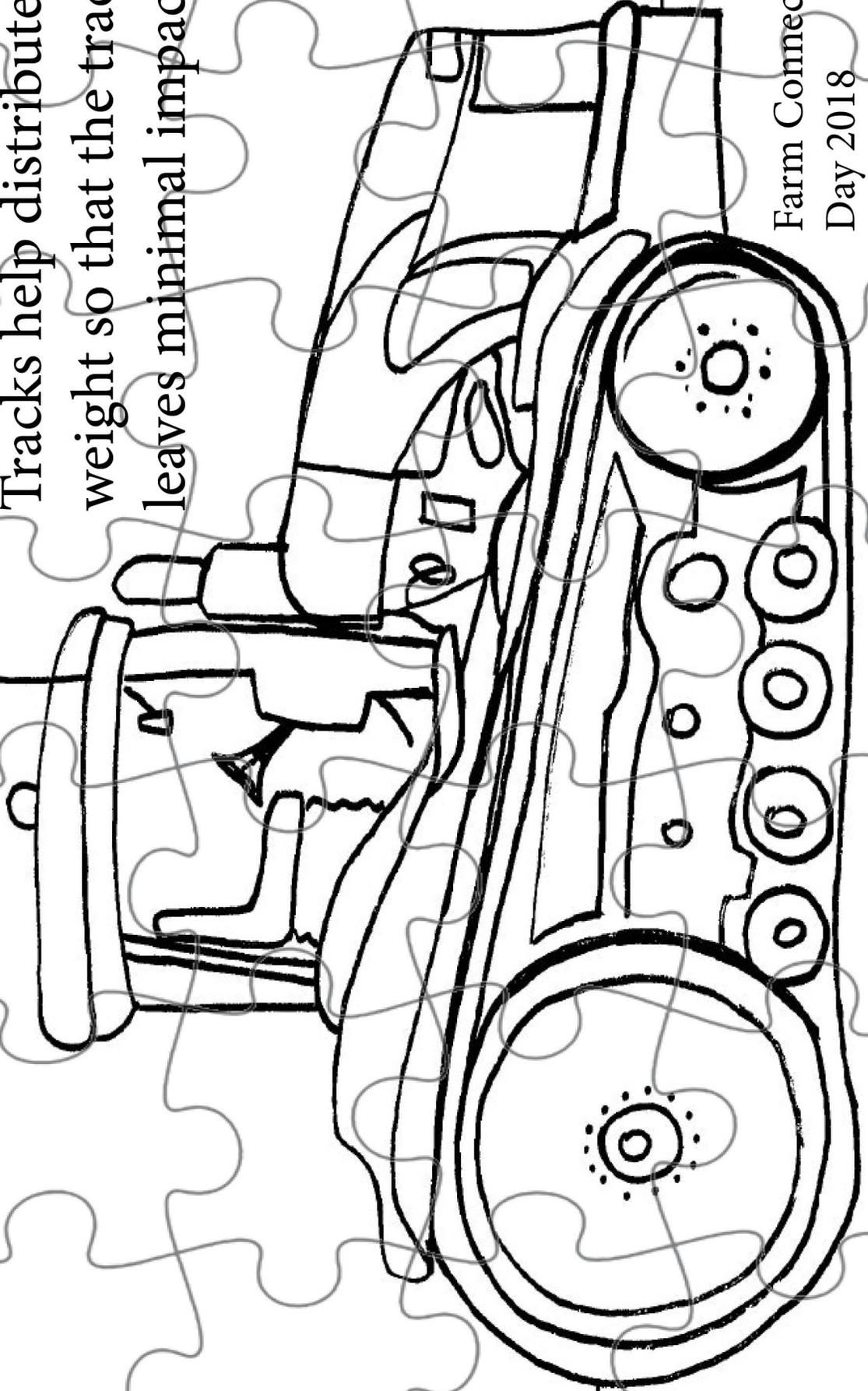
Balers

- Balers are used to compress the dried hay into a bale that is easier to move and store.
- Most hay is stored as bales, but there are several different types of bales. Some Balers even create large round bales!
- One of the first Balers was actually powered by horses.
- Bales must be protected from rain and snow by being placed in a barn or covered so that they don't grow moldy.



CHALLENGER

Tracks help distribute the weight so that the tractor leaves minimal impact!



Farm Connection
Day 2018

Challenger

Unscramble the clue words, then use the numbered circles to help you solve the mystery word!

1. ATCTMNEHATS

--	--	--	--	--	--	--	--	--	--	--

3 11

6. ABC

--	--	--	--

9

2. PORFEWUL

--	--	--	--	--	--	--	--	--	--

13 4

7. ENNIGE

--	--	--	--	--	--	--

7 5

3. TOIRCTAN

--	--	--	--	--	--	--	--

2 6

8. FRAM

--	--	--	--	--

17 15

4. ESAUHXT

--	--	--	--	--	--	--

10

9. TGLIALE

--	--	--	--	--	--	--	--

12 1

5. PPEAAROTIRN

--	--	--	--	--	--	--	--	--	--	--

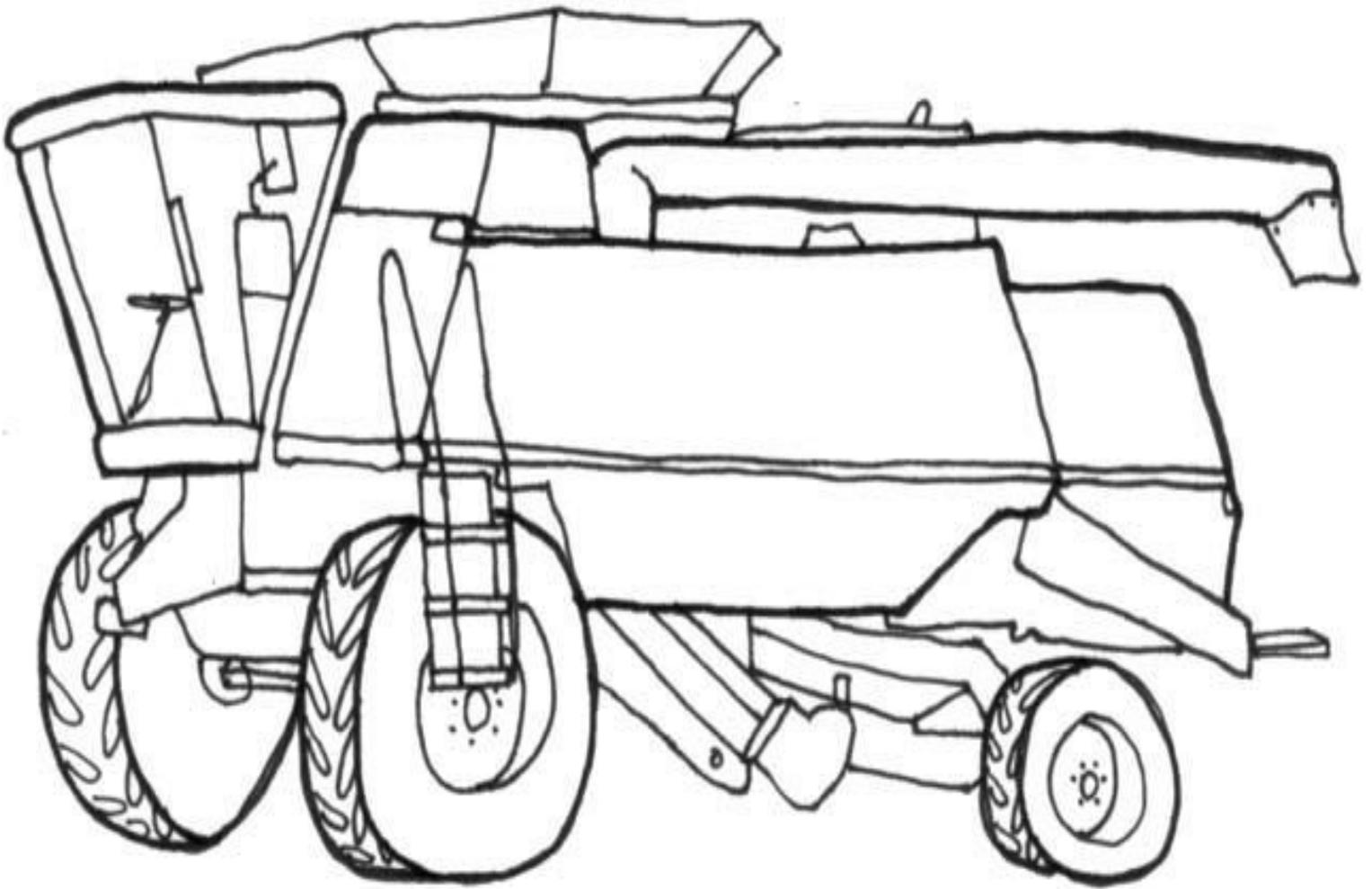
8 14 16

1- 2- 3- 1- 4- 4- 5- 6- 7- 5- 8- 2- 1- 6- 9- 5- 10- 11- 5- **D**
 12- 13- 14- 10- 4- 4- 15- 1- 6- **Y D** 16- 17- 17- 5- 8- 5- 6- 12-
 1 12 12 1 2 3 15 5 6 12 11

Challenger

- Challenger tractors are used to pull many different attachments because the tracks and suspension allow the tractor to move quickly and smoothly across rough ground.
- Tracks help to distribute the weight so that the tractor leaves minimal impact.
- Challenger tractors can be used for planting, cultivating, and ploughing, just to name a few!

Combine



Combine

Find the words from the Word Bank in the Puzzle!

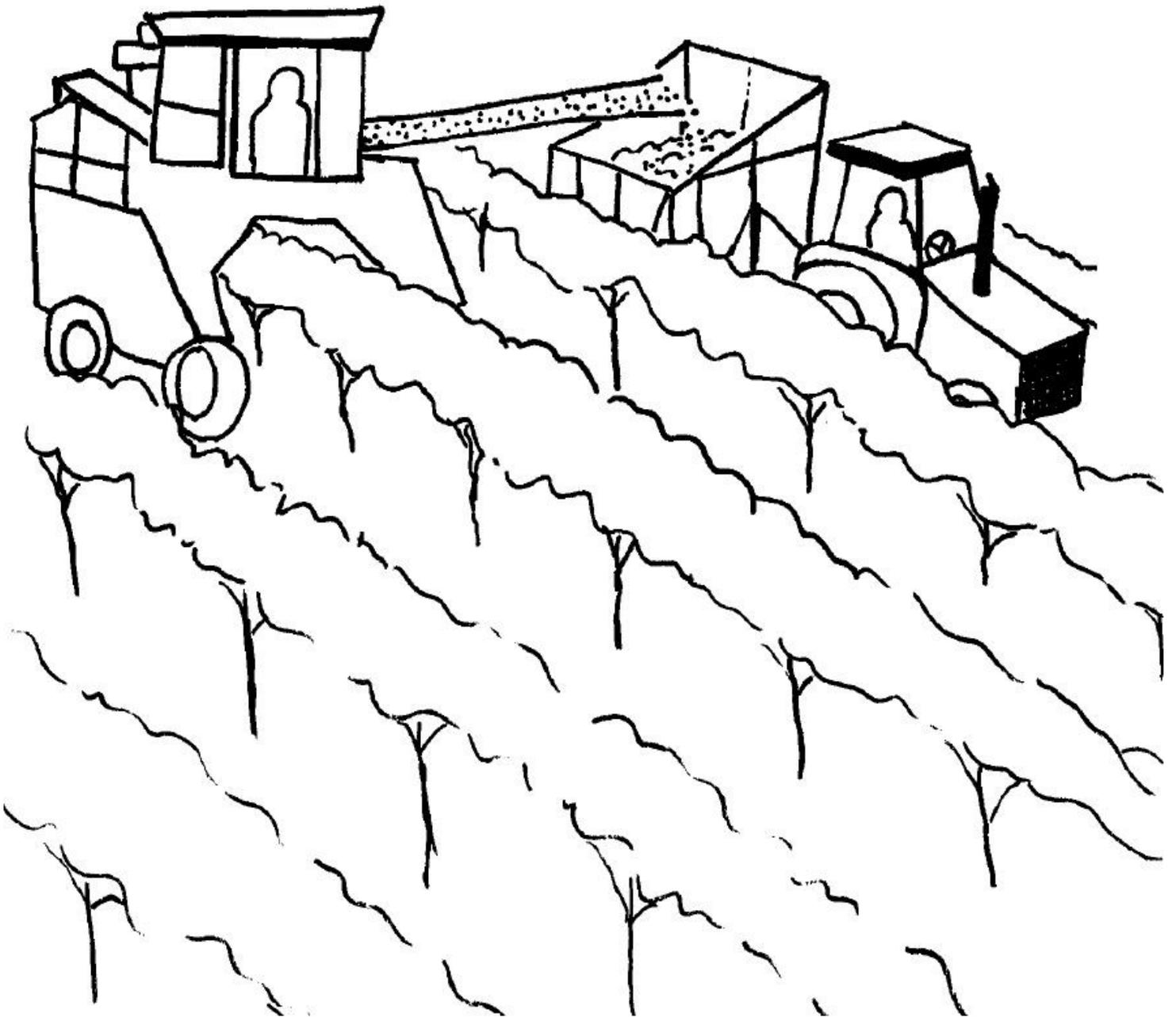
WORD BANK
SUNFLOWERS
WHEAT
SAFFLOWER
CUT
CORN
SEEDS
HEADER
EQUIPMENT
TRAILER
GRAIN
HARVEST
EFFICIENT
THRESHING
FIELD
GROWER

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

Combine Harvester

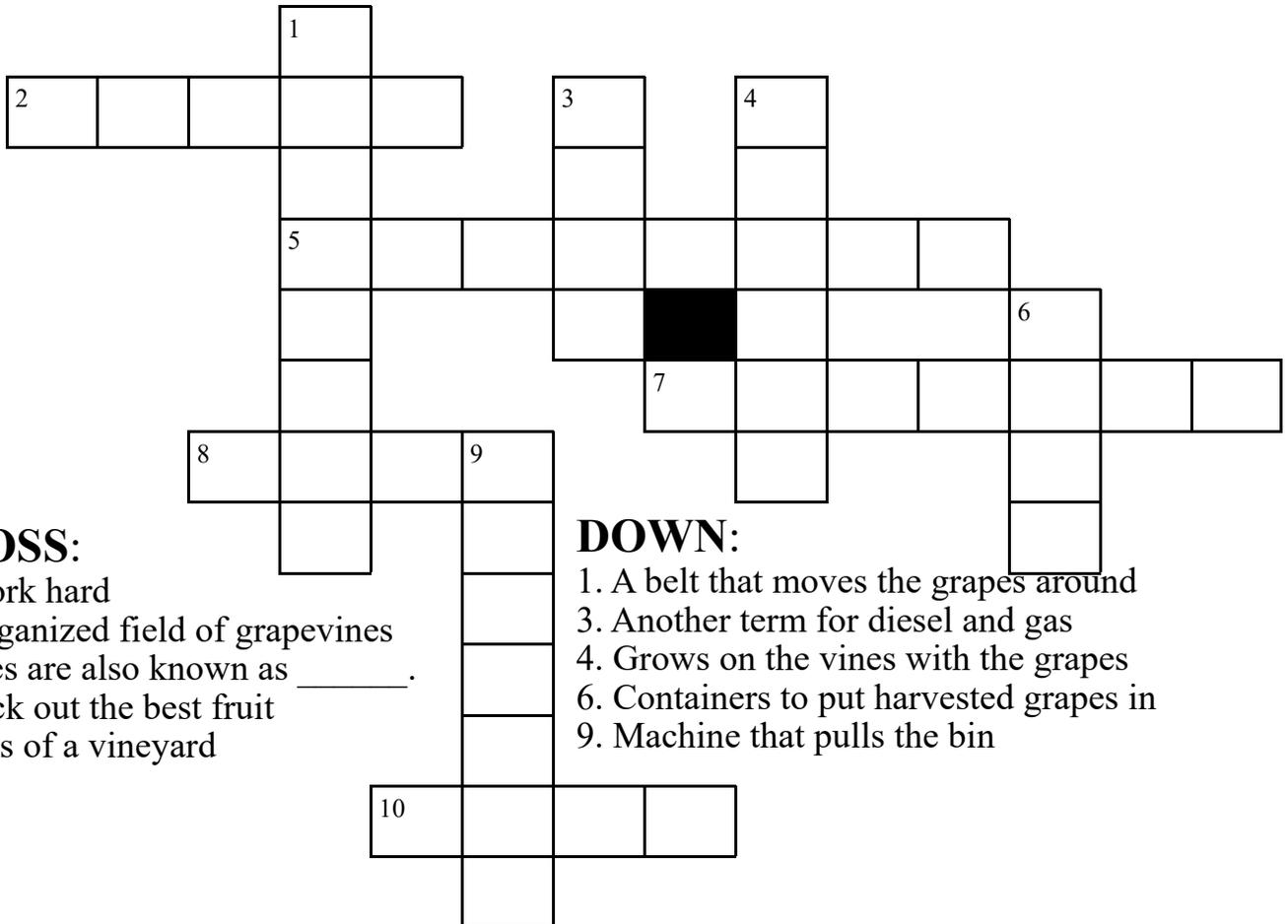
- Combine Harvesters are able to harvest and thresh crops all in one machine. This combination saves growers lots of precious time and gives the harvester its unique name
- Combine Harvesters are often thought of in relation to wheat harvest, but are actually capable of harvesting a wide variety of crops!
- Combine Harvesters can be fitted with a variety of attachments to make it possible to harvest crops like corn and sunflowers.

Grape Harvester



Grape Harvester

Use the clues to figure out which words belong in the puzzle!



ACROSS:

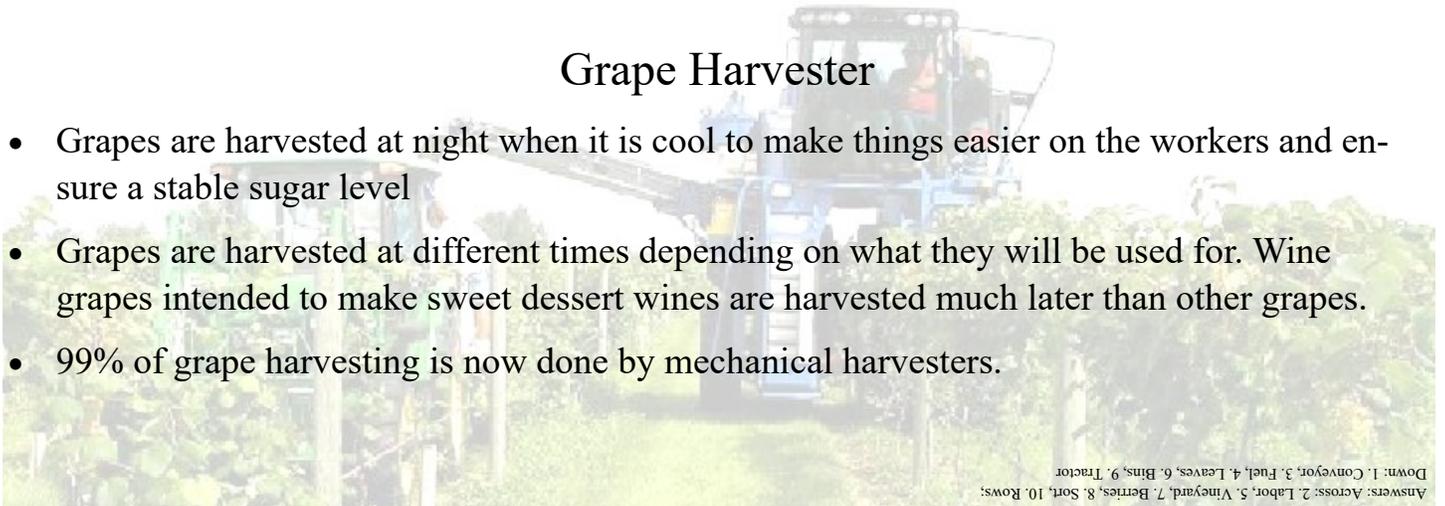
- 2. To work hard
- 5. An organized field of grapevines
- 7. Grapes are also known as _____.
- 8. To pick out the best fruit
- 10. Lines of a vineyard

DOWN:

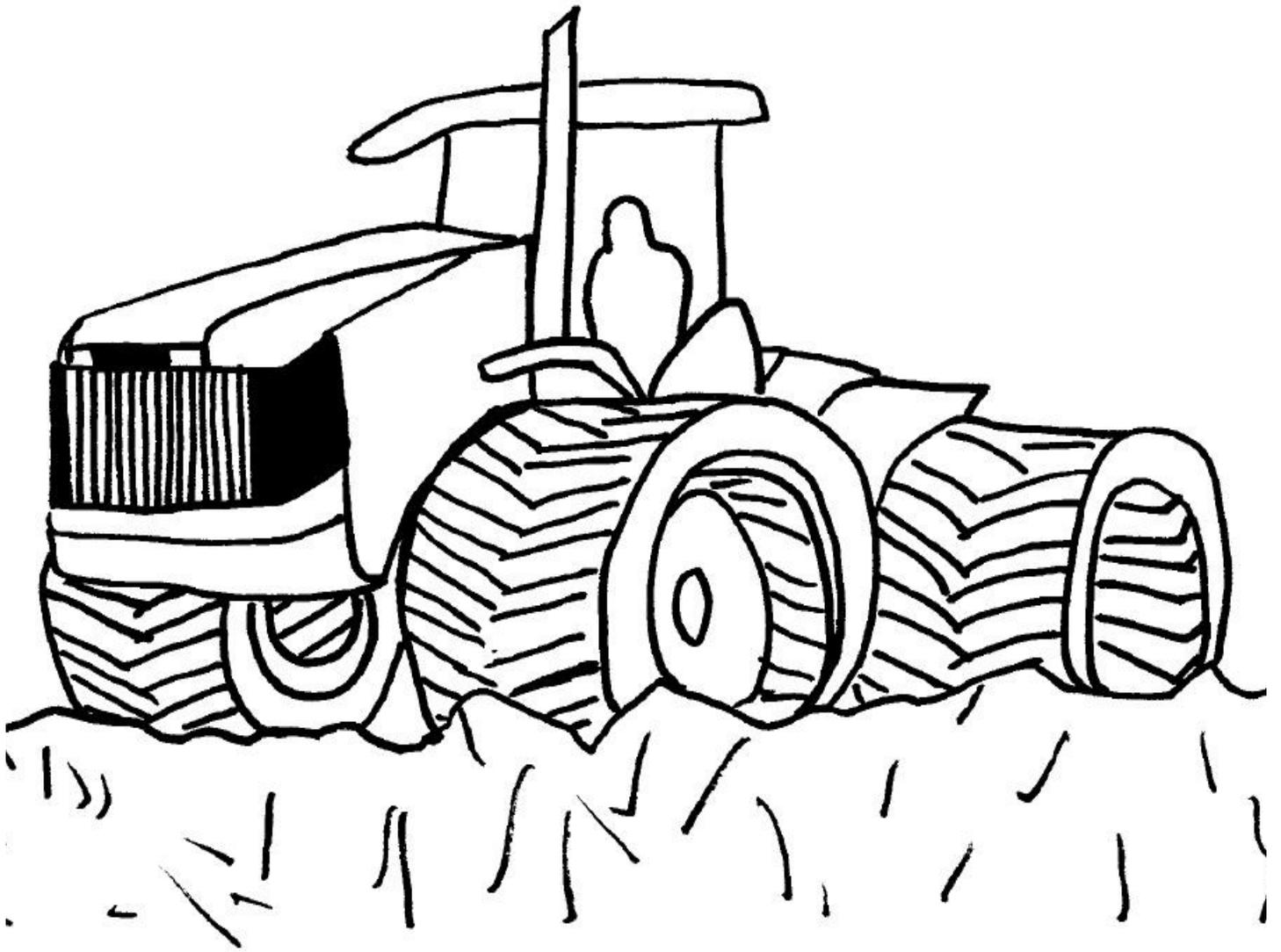
- 1. A belt that moves the grapes around
- 3. Another term for diesel and gas
- 4. Grows on the vines with the grapes
- 6. Containers to put harvested grapes in
- 9. Machine that pulls the bin

Grape Harvester

- Grapes are harvested at night when it is cool to make things easier on the workers and ensure a stable sugar level
- Grapes are harvested at different times depending on what they will be used for. Wine grapes intended to make sweet dessert wines are harvested much later than other grapes.
- 99% of grape harvesting is now done by mechanical harvesters.

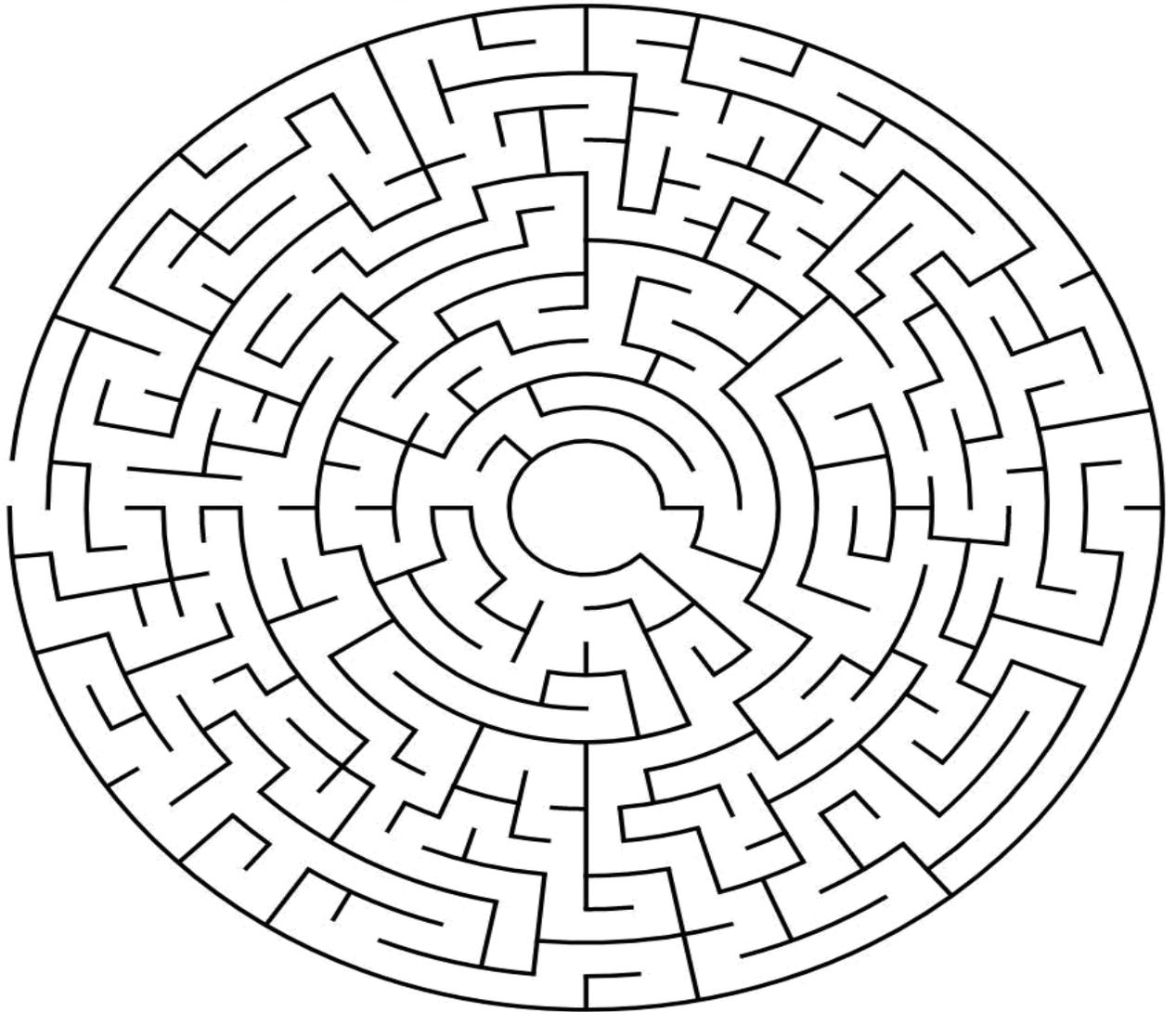


Rice Stomper



Rice Stomper

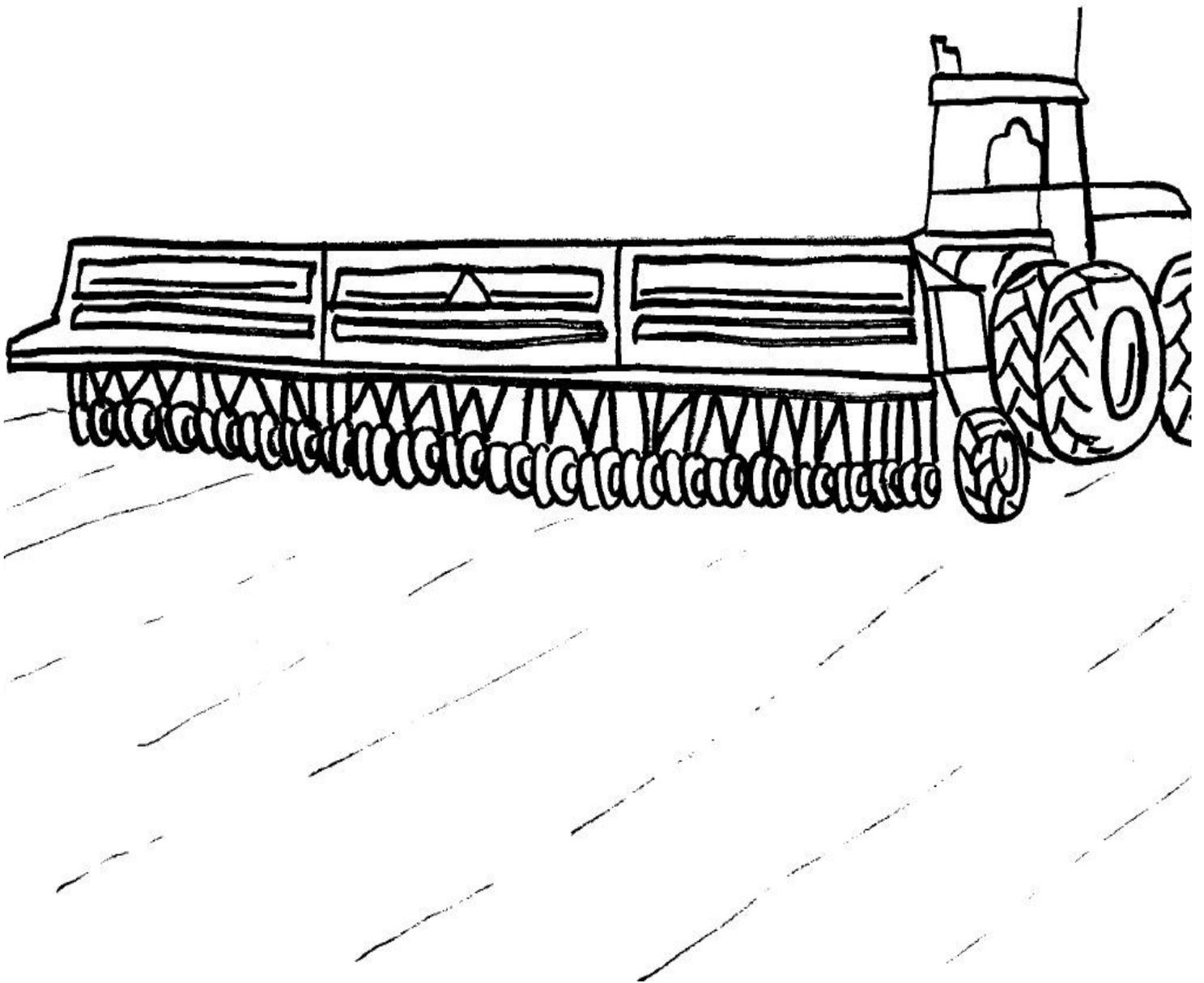
Use the Rice Stomper to get to the middle of the flooded field!



Rice Stomper

- Rice Stompers are used to push rice straw into the mud after harvest.
- Stomping the straw down helps it to decompose over winter so the field will be ready for planting the next year.
- Stomping also helps bring roots and organic matter to the water's surface
- Working the straw into the soil helps prevent algae when the fields are flooded for planting.

Seed Drill



Seed Drill

Unscramble the clue words, then use the numbered circles to help you solve the mystery word!

1. SEEDBD

--	--	--	--	--	--	--	--

3

6. SIOL

--	--	--	--	--	--

6

2. PNTIANLG

--	--	--	--	--	--	--	--	--	--

8 11

7. COPRS

--	--	--	--	--	--	--

15

3. PTOIISON

--	--	--	--	--	--	--	--	--	--

14 10

8. YILED

--	--	--	--	--	--

5

4. IOVMPRE

--	--	--	--	--	--	--

7 2

9. PLUOGH

--	--	--	--	--	--	--	--

9 12

5. FRRUOWS

--	--	--	--	--	--	--	--

13 1

10. BRUY

--	--	--	--

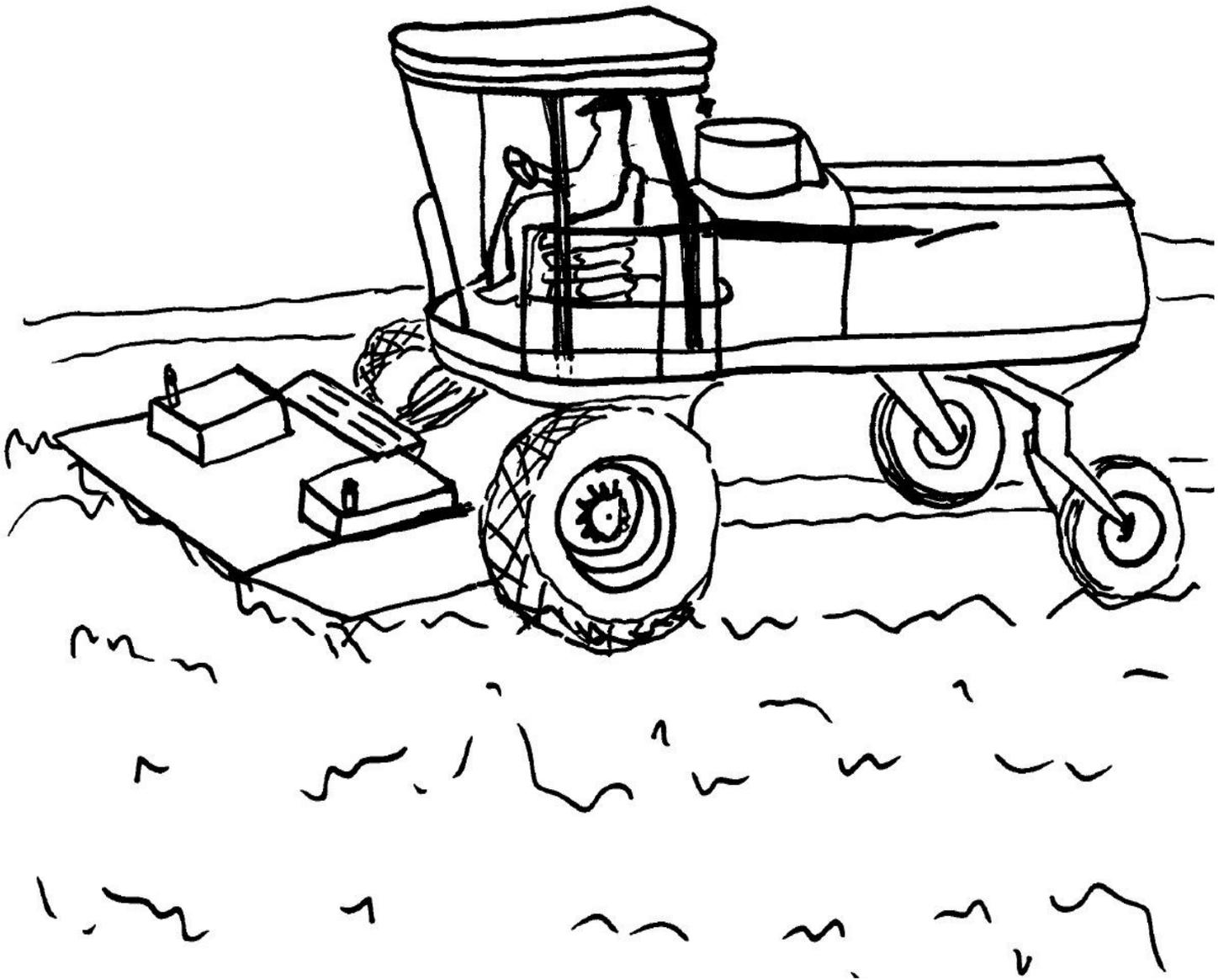
4

1	2	2	3	3	4	5	6	6	1	7	8	2	9	6	8	10	11	5	10	12
K																				
13	8	1	11	2	4	8	10	3	7	14	4	2	9	4	2	15	5	1	2	.

Seed Drill

- Seed drills plant seeds at equal distances and ensure that seeds are covered immediately by soil so they will not be eaten by birds.
- Seed drills can improve the ratio of seeds harvested per seed planted by as much as nine times.
- Each tube in the seed drill creates a hole of a specific depth, drops in one or more seeds and then covers them.
- The first seed drill, invented in 1701, was horse-drawn.

Swather



Swather

Use the Key to help you decode the sentence below.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	1	24	14	11				20									3	5	7			15			

_____ S W _____ T _____ E R I S _____ W _____ S _____
 23 5 15 23 7 2 11 3 20 5 12 13 4 15 13 23 5 23

W I _____ D R _____ W E R I _____ _____ T _____ E R _____ R T S
 15 20 13 14 3 4 15 11 3 20 13 4 7 2 11 3 18 23 3 7 5

_____ _____ T _____ E W _____ R _____ D B E C _____ S E I T
 4 17 7 2 11 15 4 3 22 14 1 11 24 23 21 5 11 20 7

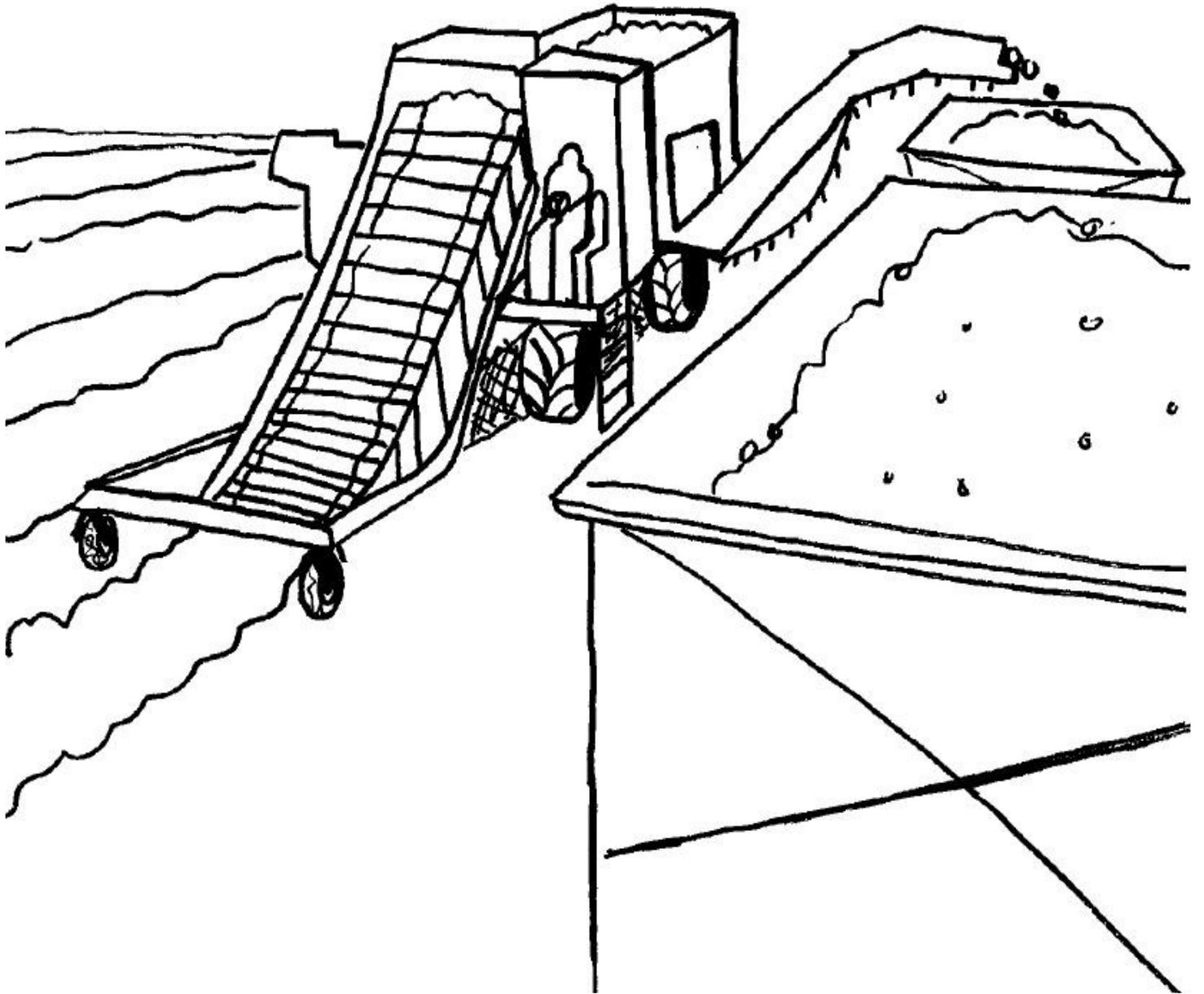
C R E _____ T E S R _____ W S _____ _____ R T _____ E W I _____ D
 24 3 11 23 7 11 5 3 4 15 5 17 4 3 7 2 11 15 20 13 14

T _____ D R _____ _____ T T _____ E C R _____ .
 7 4 14 3 8 4 21 7 7 2 11 24 3 4 18

Swather

- A swather creates windrows that allow the crop to dry out before it is ready to be baled.
- Self-propelled Swathers are better for cutting the crop than attachments because the blades are in the front of the machine and allows the crop to be cut before any tracks are left in it.
- Swathers are used primarily in the northern United States and Canada, but other places leave the crop standing until it is able to be harvested by a Combine.

Tomato Harvester



Tomato Harvester

Find the words from the Word Bank in the Puzzle!

WORD BANK

MACHINE

ROWS

TOMATOES

HARVESTER

FRUIT

TRAILER

SHAKING

BINS

VARIETY

SORTED

RIPE

CREW

CONVEYOR

LABOR

PLANTS

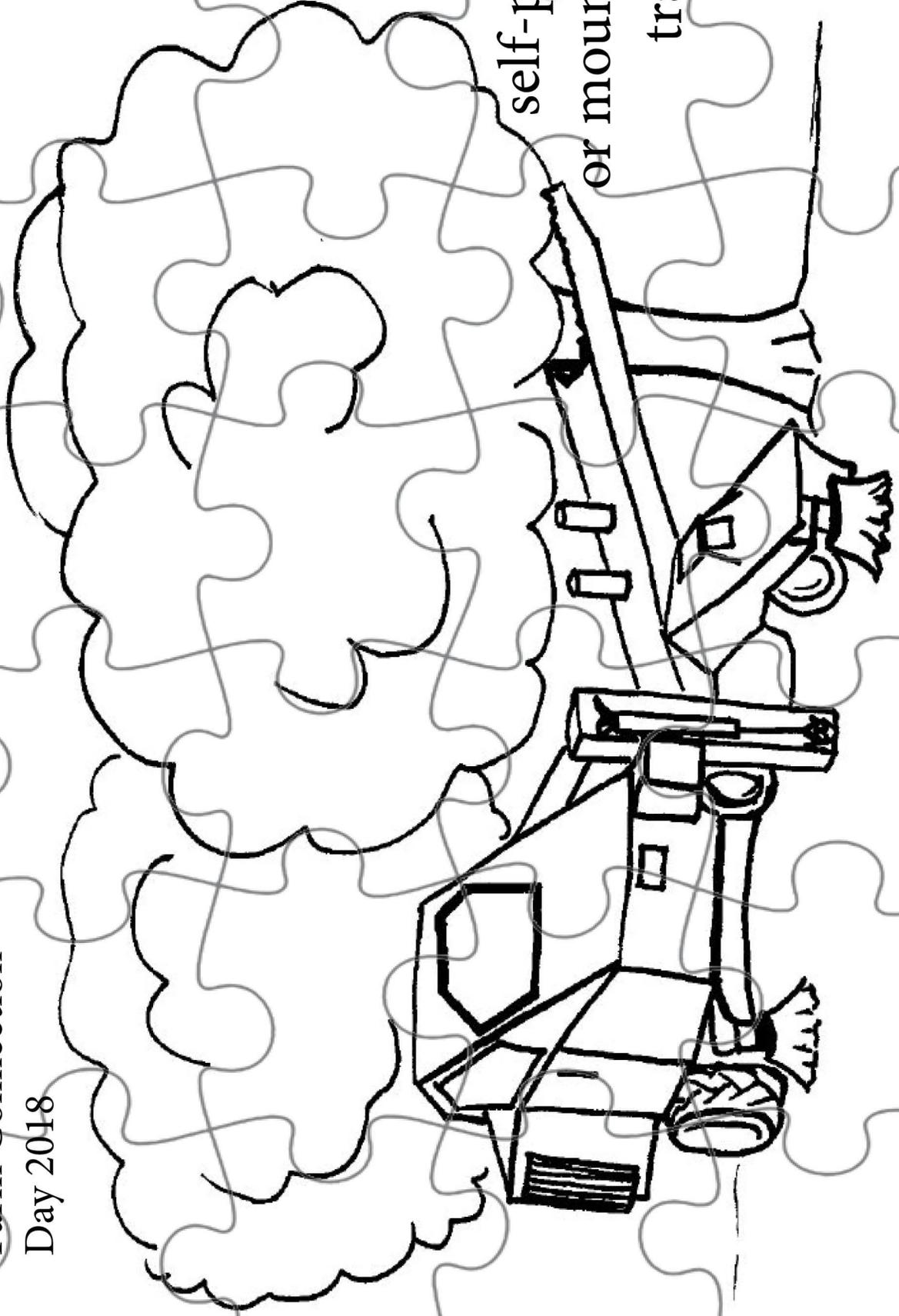
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U	B	Y	S	E	O	T	A	M	O	T	T	C	N	U	F	R	U	I	T
K	Q	Q	V	Q	E	P	G	S	E	Q	U	R	Q	K	R	I	M	T	T
I	P	H	F	K	F	Z	M	U	T	Q	B	G	Y	V	L	D	O	R	A
J	J	D	K	A	Y	E	S	Z	U	N	L	I	J	C	J	I	E	Z	B
E	R	N	J	A	O	R	P	W	P	U	A	M	N	M	Q	L	M	E	A
G	O	D	O	W	Y	T	E	I	R	A	V	L	Y	S	I	L	G	P	M
S	B	T	Y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

Tomato Harvesters

- Tomato harvesters cut the whole plant and move it up a conveyor belt where the machine shakes the fruit off the vines.
- Newer harvesters are calibrated to sort the ripe fruit out from the rest, but there used to be crews that would sort the fruit by hand.
- Sometimes a mouse or a snake gets taken through the machine with the tomatoes.
- Tomatoes, like grapes, are often harvested at night to avoid the heat of the day.

TREE SHAKER

Farm Connection
Day 2018



Tree shakers can be self-propelled or mounted on a tractor.

YOLO COUNTY



FARM BUREAU

**Yolo County Farm Bureau
69 West Kentucky Avenue**

P O Box 1556

Woodland, CA 95776

Phone: (530) 662-6316

Fax: (530) 662-8611

Website: www.yolofarmbureau.org