Ages 9–12 60–90 minutes · 1–4 players, or a class in teams

The Harvest Supper

The seed library's box is locked, and everyone takes seeds home from it at the harvest supper. Crack the seed librarian's puzzles and open it before the food gets cold.

The players are the Fernbrook Seed Library's newest junior seed keepers. They scale up a corn muffin recipe, plan a Three Sisters planting map, work out who brought what to the supper table, read a seed-tray code and fill the seed drawers. Each puzzle earns a letter, but the letters come out scrambled: a last riddle, readable only with all five letters and the Seed Square, tells them the word that opens the lock. It works before any meal: a family dinner, a Friendsgiving or a class party. Plan on 60 to 90 minutes.

Skills: multiplying fractions · scaling a recipe · logic puzzles · deductive logic · codes and ciphers · word patterns · reading a table · following multi-step directions · teamwork

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What you need

- Pencils with erasers. A ruler or a strip of paper helps with the Seed Square on page 8.
- Optional: a timer, and a small box or envelope with a few real seeds in it, to hand over at the end.

Before you play (5 minutes)

1. Print at 100% scale ("actual size"), Letter or A4, single-sided. Black and white is fine.
2. Keep pages 11 and 12 (hints and answers) away from the players. Fold page 12 in half, words inside, and tape it shut.
3. Cut the six hint strips apart (page 11) and fold each like a fan, so only the puzzle's name shows.
4. On page 9, fold the bottom back along the dashed line and tape it shut, so the ending is hidden behind the page.

How to play

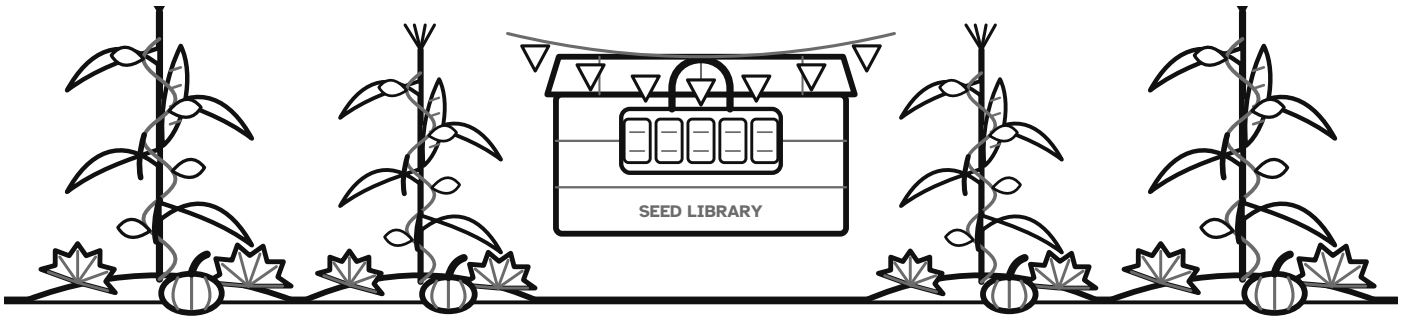
1. Players read Marisol's letter (page 2) out loud, then solve Puzzles 1 to 5. Any order works, but Puzzle 2 tells them something Puzzle 4 needs. Each puzzle gives one clue letter for the tracker on page 2.
2. Stuck? Hand over that puzzle's hint strip. Players unfold one hint at a time. Grown-ups don't need to help beyond the strips.
3. For a challenge, set a 90-minute timer. If time runs out, keep going. Supper can wait a few minutes.

If a player can't easily see the pictures or uses a screen reader, print page 13 too, or read it aloud.

In a classroom

Teams of 3–4, each with its own copy of pages 2–11 (page 12 is just for you). Plan two periods: Puzzles 1–3, then the rest. The Three Sisters facts on page 4 are real, and make a good start for a lesson on how Indigenous farmers plant.

Free for home and school use. Please don't post it publicly or sell it.



The Harvest Supper

To our new junior seed keepers,

Welcome to the Fernbrook Seed Library. We work like a book library, only with seeds. In spring, people borrow seeds and grow them. In autumn, they save seeds from their best plants and bring some back, so there's plenty for next year.

Every year we finish with a harvest supper, and everyone at the table takes home seeds from the library's big wooden box. This year I've locked the box with a word lock. It's a tradition: the newest seed keepers have to open it.

I've left you five puzzles from around the library. Each one gives you a letter, but they won't come in order. My last riddle tells you what word to make, and only someone with all five letters can read it.

The muffins are in the oven. Better hurry.

Marisol Vega, Seed Librarian

CLUE TRACKER

Puzzle 1	Puzzle 2	Puzzle 3	Puzzle 4	Puzzle 5
☐	☐	☐	☐	☐



Muffins for Thirty

Marisol's corn muffin card is stuck to the fridge. The card makes 12 muffins, but 30 people are coming to supper, and everyone gets one muffin.

Squash and Corn Muffins

Makes 12 muffins



INGREDIENT	FOR 12	FOR 30	LETTER
Cornmeal	3/4 cup		
Flour	1/2 cup		
Mashed squash	2/3 cup		
Oil	1/3 cup		
Maple syrup	1/4 cup		
Milk	1/2 cup		
Eggs	2		

The measuring chart on the kitchen wall. Every amount has a letter.

1/2	**S**	5/8	**A**	2/3	**N**	3/4	**L**	5/6	**H**
1	**E**	1 1/6	**K**	1 1/4	**R**	1 1/3	**T**	1 1/2	**P**
1 2/3	**C**	1 5/6	**I**	1 7/8	**O**	2	**M**	2 1/4	**G**
2 1/2	**F**	4	**U**	4 1/2	**W**	5	**D**	6	**B**

Where's the supper? Out behind the library, in the:

Thirty muffins. Marisol says nobody has ever left one on the plate.

Clue letter: the only letter that comes up twice

The Planting Map

Marisol's map of next spring's garden shows where the corn goes. The bean plants aren't marked yet. Her rules are pinned beside it.

N	P	A	H		B	W	1
P	E	B	C	F	I		2
Y		A	R		A	G	1
	R	W	W	T	V	L	1
O	K	O		Y	A		2
U	C	N		U	Y	R	0
N	W	Y	M		S	N	2
1	1	1	3	0	2	1	

Marisol's rules

Every corn stalk gets exactly one bean plant of its own, in a square right beside it: above, below, left or right.

Bean plants never touch each other, not even at a corner.

The numbers say how many bean plants go in each row and column.



The Three Sisters

Haudenosaunee farmers, and many other Indigenous peoples, plant corn, beans and squash together, and still do today. The corn is the pole the beans climb. The beans help put nitrogen, a plant food, into the soil. The squash's big leaves shade the ground, keep it damp and keep weeds down.

Read the letters in the bean squares like a book. They spell what Marisol calls old seeds that families pass down.

Clue letter: the word's first letter

Who Brought What?

> *Four seed keepers each brought one dish to the supper, and each wrote one thing they're thankful for on a card. The cards blew off the table, and the labels came off the dishes. Marisol remembers a few things.*

1. Whoever is thankful for the rain brought something made with corn.
2. Joaquín is thankful for good friends.
3. The apple crumble came from whoever is thankful for the library.
4. Ravi didn't bring the cornbread, and he isn't thankful for the library.
5. Joaquín didn't bring the green beans.
6. Mei isn't thankful for the rain.

	DISH				THANKFUL FOR			
	Squash soup	**Cornbread**	**Green beans**	**Apple crumble**	**The rain**	**Good friends**	**The library**	**A new puppy**
Amara								
Joaquín								
Mei								
Ravi								

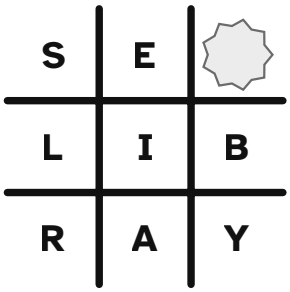
Who brought the cornbread? _____

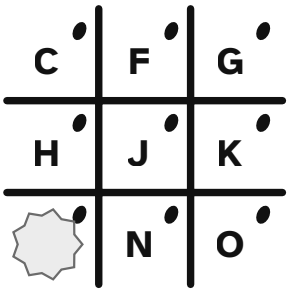
Squash soup, cornbread, green beans: the garden made most of this supper.

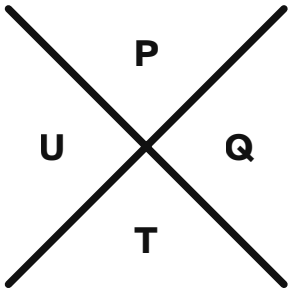
Clue letter: the first letter of their name ☐

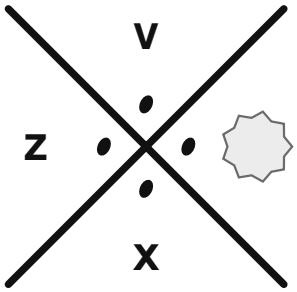
The Seed Tray Code

> *Marisol writes her notes in a code made from her seed trays. Each letter is drawn as the shape of its spot in a tray, with a seed if the tray has seeds. Mice have nibbled three letters off her key.*

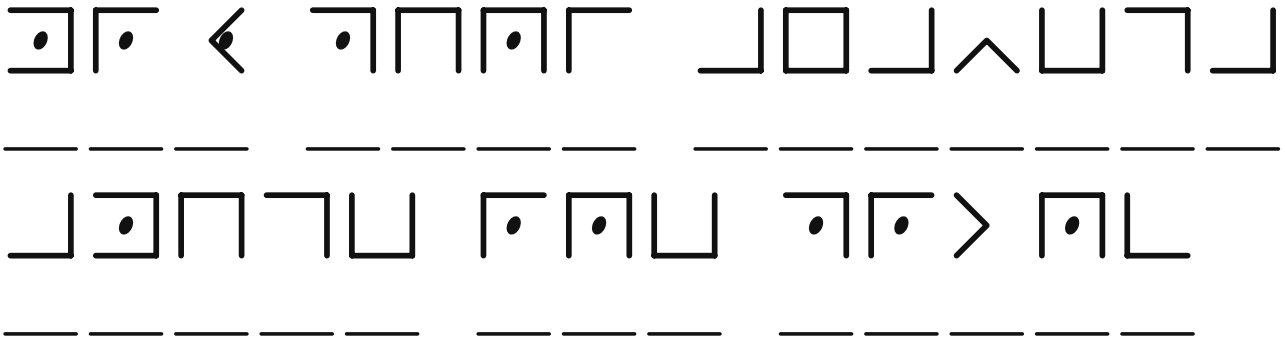








Marisol's note. Decode it, then answer it.



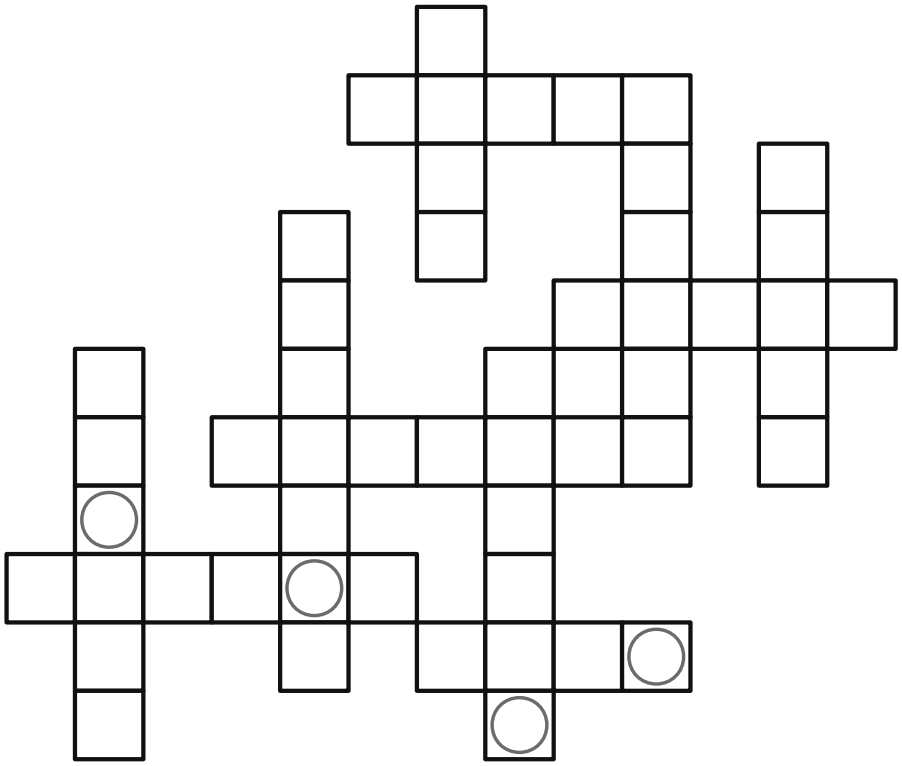
Your answer: _____

Marisol keeps a jar of each sister's seeds. Next spring they go in the ground together.

Clue letter: the last letter of your answer ☐

The Seed Drawers

> *The seed cabinet has a little drawer for every letter. Somebody pulled all the labels off to dust it. Put them back.*



Each label fits one way, across or down, one letter to a square. Use every label once.

4 LETTERS

CORN · LEEK

5 LETTERS

BASIL · BEANS · ONION

6 LETTERS

CARROT · GARLIC · POTATO · SQUASH

7 LETTERS

PUMPKIN · SPINACH

Read the circled squares like a book. _____

Every drawer is full. The library really does have a seed for everything.

Clue letter: the letter you read twice ☐

The Seed Square

Taped inside the lid of the seed box, where you can see it through the gap. Marisol made it from the names of three sisters.

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

The Lock

Marisol's last riddle is in code. Your five clue letters are its key.

1. On the thin lines, write your clue letters in puzzle order (Puzzle 1's letter first), over and over: 1, 2, 3, 4, 5, 1, 2, 3, and so on. Keep going across the gaps between words.
2. For each code letter, find the Seed Square row that has the letter under it at its left end. Go along that row to the code letter.
3. Go straight up to the top of that column and write that letter on the thick line.

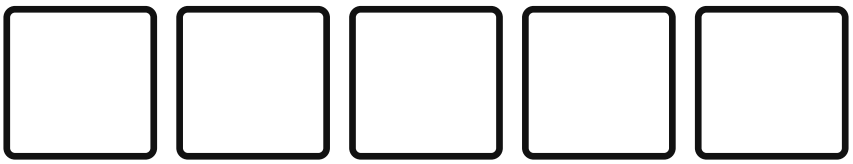
K M D I M K Z D J J A O

_ _ _ _ _ _ _ _ _ _ _ _

P J C U Z N P G L M Y

_ _ _ _ _ _ _ _ _ _ _

What am I? Put your five clue letters in a new order to answer the riddle. That's the word that opens the lock.



The ending is folded behind this line. Unfold it only when you've solved the riddle.

You've solved it! The lock clicks and the lid lifts. Inside are rows of paper seed envelopes, each one labeled by hand: pumpkin, spinach, basil, sunflower. Right in the middle is a bigger envelope marked *Three Sisters*, with corn, bean and squash seeds in it, ready to plant in one mound next spring.



On top is a note: "*Take one envelope each, and one Three Sisters packet for your table. Plant them, share what grows, and save a few seeds from your best plants. Bring some back next autumn, and the library keeps growing. Your Seed Keeper cards are on the next page. Marisol*"

Now go and eat. The muffins are ready.

Junior Seed Keepers

One card for each seed keeper. Cut on the dashed lines.

Junior Seed Keeper

FERNBROOK SEED LIBRARY

Name: _____

Harvest supper, year: _____

I plant, share and save seeds.

Signed: Marisol Vega



Junior Seed Keeper

FERNBROOK SEED LIBRARY

Name: _____

Harvest supper, year: _____

I plant, share and save seeds.

Signed: Marisol Vega



Junior Seed Keeper

FERNBROOK SEED LIBRARY

Name: _____

Harvest supper, year: _____

I plant, share and save seeds.

Signed: Marisol Vega



Junior Seed Keeper

FERNBROOK SEED LIBRARY

Name: _____

Harvest supper, year: _____

I plant, share and save seeds.

Signed: Marisol Vega



Junior Seed Keeper

FERNBROOK SEED LIBRARY

Name: _____

Harvest supper, year: _____

I plant, share and save seeds.

Signed: Marisol Vega



Junior Seed Keeper

FERNBROOK SEED LIBRARY

Name: _____

Harvest supper, year: _____

I plant, share and save seeds.

Signed: Marisol Vega



Hint Strips

Cut the strips apart on the dashed lines. Fold each one like a fan along the dotted lines, so only the puzzle's name shows. Players unfold one hint at a time, and only when they're stuck.

Puzzle 1 **Muffins for Thirty**	**HINT 1** 30 muffins is how many times 12? It isn't a whole number. Every amount gets multiplied by that same number.	**HINT 2** 30 ÷ 12 = $2\frac{1}{2}$, or $\frac{5}{2}$. Cornmeal: $\frac{3}{4} \times \frac{5}{2} = \frac{15}{8} = 1\frac{7}{8}$, which is O on the chart.	**HINT 3** Write each answer as a whole number and a fraction to find it on the chart. Oil: $\frac{5}{6}$. Eggs: 5. The letters spell a place where fruit trees grow.
Puzzle 2 **The Planting Map**	**HINT 1** Row 6 and column 5 have a 0, so no beans go there. Put a small x in every square you know is empty.	**HINT 2** The corn in row 6 can't use row 6, and there's corn above it, so its bean goes right below it. Beans never touch, so x out all eight squares around each bean you place.	**HINT 3** Row 7's two beans are in columns 4 and 6. Each corn stalk in column 5 must take a square to its left or right. There are nine beans in all.
Puzzle 3 **Who Brought What?**	**HINT 1** Clue 1: the rain and something made with corn go together. Only one dish is made with corn.	**HINT 2** The person thankful for the rain brought the cornbread. Joaquín is thankful for friends, Mei isn't thankful for the rain. Could Ravi be thankful for the rain?	**HINT 3** Ravi didn't bring the cornbread, so it isn't Ravi. That leaves Amara or Joaquín, and Joaquín is thankful for friends. Check the rest of the grid works.
Puzzle 4 **The Seed Tray Code**	**HINT 1** Each shape is the walls around one spot in a tray. A spot in the corner of a square tray has two walls; the middle spot has four. A seed in the shape means a tray with seeds.	**HINT 2** The first word is three letters: H, O, then a nibbled letter. Leave gaps for nibbled spots and fill them in from the words around them.	**HINT 3** The note asks HOW MANY SISTERS SHARE ONE MOUND. Puzzle 2 has the answer. Write the number as a word.
Puzzle 5 **The Seed Drawers**	**HINT 1** Start with the longest spaces. Only two labels have 7 letters, and only one way round makes them agree where the two 7-letter spaces cross.	**HINT 2** SPINACH goes across and PUMPKIN goes down. Then try the 6-letter labels in the spaces that cross them.	**HINT 3** GARLIC goes across, near the bottom left. POTATO goes down through its A, and CARROT goes down through SPINACH's A. The circles spell a word that means a light shade of a color.
The last step **The Lock**	**HINT 1** Under the first five code letters, write your clue letters from Puzzles 1, 2, 3, 4 and 5. Then start again.	**HINT 2** The first code letter, K, has your Puzzle 1 letter under it. Find the row that starts with that letter on the left, slide along to K, and look up to the top.	**HINT 3** If the first word isn't SEEDS, check the order of your clue letters, and that you looked up the row by its left-hand letter.

Answers. Fold this page in half, words inside, and tape it shut before you play.

Puzzle 1	Multiply by 5/2: cornmeal 1 7/8 (O), flour 1 1/4 (R), squash 1 2/3 (C), oil 5/6 (H), maple syrup 5/8 (A), milk 1 1/4 (R), eggs 5 (D). ORCHARD. R comes up twice, so the clue letter is **R**. (Doubling or tripling the recipe spells nonsense.)
Puzzle 2	Beans, by row (row 1 at the top, columns from the left): row 1 column 4; row 2 columns 2 and 6; row 3 column 4; row 4 column 7; row 5 columns 1 and 3; row 7 columns 4 and 6. They read HEIRLOOMS. Clue letter **H**.
Puzzle 3	**Amara**: cornbread, the rain. Joaquín: squash soup, good friends. Mei: apple crumble, the library. Ravi: green beans, a new puppy. Clue letter **A**.
Puzzle 4	HOW MANY SISTERS SHARE ONE MOUND? **THREE** (corn, beans and squash). Nibbled: W, M and D. Clue letter **E**.
Puzzle 5	Across: BEANS, BASIL, SPINACH, GARLIC, CORN. Down: LEEK, SQUASH, ONION, PUMPKIN, POTATO, CARROT. The circles read TINT. Clue letter **T**.
The riddle	Letters in puzzle order: R, H, A, E, T, used as the key over and over. The riddle reads SEEDS SLEEP IN ME ALL WINTER.
The lock	**EARTH**. (HEART uses the same letters, which is why the riddle is needed.)

Grown-ups get a kit too

More kits for this age and our escape-room kit for teens and adults, *The Clockmaker's Study*, are on the same page you got this one from. Kinundrum makes personalized puzzle countdowns for families and group chats.

Credits

Story: our own. Fernbrook, its seed library, Marisol Vega and the four seed keepers are made up. The Three Sisters are real: corn, beans and squash, planted together by the Haudenosaunee and many other Indigenous peoples, then and now.

Illustrations: original art made for this kit. Fonts: Atkinson Hyperlegible (Braille Institute of America), SIL Open Font License 1.1; Fredoka (Milena Brandão and Hafontia), SIL Open Font License 1.1; Noto Sans Symbols 2 (The Noto Project Authors), SIL Open Font License 1.1.

Another way to play

Text versions of the picture puzzles, for a player who can't easily see them or uses a screen reader. Read them aloud or hand this page over. The answers and hint strips are the same; write answers on the puzzle's own page. Puzzles 1 and 3 and the Seed Square on page 8 are already text.

Puzzle 2 · The Planting Map

The map row by row from the top, left to right. "corn" is a corn stalk; every other square has the small letter shown. The number after each row is its bean plants, and the bottom line gives each column's.

N	**P**	**A**	**H**	**corn**	**B**	**W**	1
P	**E**	**B**	**C**	**F**	**I**	**corn**	2
Y	**corn**	**A**	**R**	**corn**	**A**	**G**	1
corn	**R**	**W**	**W**	**T**	**V**	**L**	1
O	**K**	**O**	**corn**	**Y**	**A**	**corn**	2
U	**C**	**N**	**corn**	**U**	**Y**	**R**	0
N	**W**	**Y**	**M**	**corn**	**S**	**N**	2
1	1	1	3	0	2	1	

Puzzle 4 · The Seed Tray Code

The key. Tray 1 is a square tray of nine spots with no seeds, row by row: S, E, nibbled / L, I, B / R, A, Y. Tray 2 is a square tray with a seed in each spot: C, F, G / H, J, K / nibbled, N, O. Tray 3 is an X-shaped tray of four spots with no seeds: top P, right Q, bottom T, left U. Tray 4 is an X-shaped tray with seeds: top V, right nibbled, bottom X, left Z.

The note. A square-tray letter is drawn as the walls around its spot; an X-tray letter is a V, given here by the side it opens to. "Seed" means the shape has a seed in it. Shapes are split by slashes.

- Word 1: top, right, bottom, seed / top, left, seed / V open at the right, seed
- Word 2: top, right, seed / top, right, left / top, right, left, seed / top, left
- Word 3: right, bottom / top, right, bottom, left / right, bottom / V open at the bottom / right, bottom, left / top, right / right, bottom
- Word 4: right, bottom / top, right, bottom, seed / top, right, left / top, right / right, bottom, left
- Word 5: top, left, seed / top, right, left, seed / right, bottom, left
- Word 6: top, right, seed / top, left, seed / V open at the left / top, right, left, seed / bottom, left

Puzzle 5 · The Seed Drawers

The cabinet fits a grid 11 squares tall and 13 wide; row 1 is the top and column 1 the left. Each space gives its first square and its length. Graph paper helps.

- Across: 2, row 2 column 6, 5 squares. 6, row 5 column 9, 5. 9, row 7 column 4, 7. 10, row 9 column 1, 6. 11, row 10 column 7, 4.
- Down: 1, row 1 column 7, 4 squares. 3, row 2 column 10, 6. 4, row 3 column 12, 5. 5, row 4 column 5, 7. 7, row 6 column 2, 6. 8, row 6 column 8, 6.
- Where they cross: 1 Down's 2nd square is 2 Across's 2nd. 2 Across's 5th is 3 Down's 1st. 3 Down's 4th is 6 Across's 2nd. 3 Down's 6th is 9 Across's 7th. 6 Across's 4th is 4 Down's 3rd. 5 Down's 4th is 9 Across's 2nd. 9 Across's 5th is 8 Down's 2nd. 10 Across's 2nd is 7 Down's 4th. 5 Down's 6th is 10 Across's 5th. 8 Down's 5th is 11 Across's 2nd.
- The circled squares: row 8 column 2, row 9 column 5, row 10 column 10 and row 11 column 8.