

ELINOR WONDERS WHY

EP 128 Syrup Tree
By: Jorge Cham and Daniel Whiteson

Elinor's Question: Where does maple syrup come from?

Logline: The kids learn what tree sap is and help Farmer Bear make enough maple syrup for Pancake Day.

Curriculum Goals:

LS2b Understand that animals have different body parts that are used in different ways to meet their needs, and that plants have different parts that help them survive and grow. (b) Identify the basic parts of plants and their function. [The kids learn that trees use sap to move stuff around inside.]

ET1b Define a simple problem that can be solved through the design of a new or improved tool or technology [The kids design an improved delivery system]

ND3. (RTL Crosscutting concept 'Structure and Function'):
Understand that structures and materials in the natural world can be used or can inspire the engineering of structures with similar function in the designed world. [The kids use the branching-tree structure as inspiration for the branching-stream sap delivery system.]

SEP1d: Identify a problem that can be solved by the design a new or improved object or tool [Need a new pouring system for the syrup.]

SEP6 - designing solutions to a problem

MAINS: Elinor, Olive, Ari, Farmer Bear

LOCATIONS: Sugar Shack (interior and Exterior), Maple Grove

PROPS: Wagon, barrel, spiles, juice box with straw, almanac, kettle, ladle, syrup bottles, Syrup delivery system (made by Sally) pancakes

OUTLINE: Apr 2, 2019
FIRST DRAFT: May 6, 2019
SECOND DRAFT: June 3, 2019
POLISH DRAFT: June 24th

1. EXT FARMER BEAR'S FARM -- DAY

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It's a bright, late winter morning in Animal Town, and several families have gathered at Farmer Bear's farm for a community event called Pancake Day. We see kids running around and parents chatting (including the Rabbits and others). ELINOR, ARI and OLIVE are walking around and talking excitedly about the day.

1	ARI	1
	Awesome! Pancake Day is finally here.	

2 OLIVE 2 *

Yeah, Ari. I love it. Mrs. Gorilla
makes the best pancakes.

We see MRS. GORILLA off to one side with an outdoor griddle, mixing ingredients in a bowl with some kids helping her.

3 ELINOR 3
Mmm, I can't wait to eat a big
stack of them.

They all lick their lips and pat their bellies as they share a joint thought bubble of a SHORT stack dripping with syrup.

4 ELINOR (CONT'D) 4
I'm going to eat THIS many
pancakes.

She uses her paws to show the distance between her belly and neck. The thought bubble stack grows to that size.

5 OLIVE (FRIENDLY COMPETITIVE) 5 *

Yeah, Elinor? Well, I'm going to *

eat even MORE.

She gestures with her trunk as high as it can go. The thought bubble stack grows.

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6                                ARI                                6
Well, Olive, I'm going to eat the
BIGGEST stack ever!
*
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He flies up to show a ridiculously high stack, and the thought stack gets super tall and falls over. They all <GIGGLE>.

The kids continue walking, and we see several animals helping set up the tables and bring out plates.

7	ELINOR	7	
	It's great that everyone is helping out for Pancake Day.		
We pan over to see SALLY BEAVER and MRS. BEAVER cranking out wood furniture amazingly quickly.			
8	ARI	8	
	There's Sally Beaver and her mom making tables and chairs for everyone.		
9	OLIVE	9	
	They are SO good at that.		
10	ELINOR	10	
	It's amazing!		
Olive looks around.			
11	OLIVE	11	
	Let's go ask Farmer Bear when its time to eat some pancakes!		* *
The kids <SFX: YEAH WALLA> and look around for a beat.			*
12	ARI	12	
	Where IS Farmer Bear?		* *
13	ELINOR	13	
	I don't know. Let's go ask my mom.		
The kids walk over to Ranger Rabbit, who's chatting with some other animals.			*
14	ELINOR (CONT'D)	14	
	Hi, Mom! Have you seen Farmer Bear?		*
Ranger Rabbit looks around thoughtfully.			
15	RANGER RABBIT	15	
	Oh, hi, Elinor. Farmer Bear? She's probably off making the syrup for the pancakes.		*
16	OLIVE	16	
	She's making the syrup?		
17	ARI	17	
	Whoa, you can make syrup?? I thought you just got it at the store!		

18 RANGER RABBIT 18
 <BENIGN CHUCKLE> Well, somebody has
 to make the syrup, Ari. Syrup comes
 from maple trees. Farmer Bear has a
 grove of them right over there. *

She points to a nearby grove of maple trees and the kids look
 over. Ranger Rabbit goes back to her conversation.

19 OLIVE 19
 Huh, I never thought about where
 syrup comes from.

20 ELINOR 20
 It comes from trees? That is SO
 interesting! *

Ari has an idea.

21 ARI 21
 Let's go check out the syrup trees.
 Maybe we'll find Farmer Bear there!

Elinor gets excited.

22 ELINOR 22
 Yeah, we need MORE observations!

2. EXT. MAPLE TREE GROVE - DAY

The kids run across the farm and enter the maple tree grove.
 Olive looks around a bit.

23 OLIVE 23
 I don't see Farmer Bear anywhere. *

Elinor is curiously studying a maple tree.

24 ELINOR 24
 Hmmm... My mom said that syrup
 comes from these trees, but how
 does that work? *
 *

Olive and Ari join in her curiosity.

25 OLIVE 25
 Good question... Maybe the syrup
 comes from a fruit on the tree? *
 *

26 ARI 26
 Yeah, like an apple or an orange. *

27 ELINOR 27
Maybe... but I don't see any fruit *
on these trees. *

The kids look at the trees around them, and none of them have any fruit.

28 ELINOR (CONT'D) 28
Maybe they make the syrup from the
leaves of the tree?

29 OLIVE 29
Hmmm, but it's winter and none of
the trees have any leaves. *

The trees are all leaf-less. Ari gets a thought. *

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30                                ARI                                30
    Maybe the syrup is ON the tree?
    There's only one way to find out...

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He walks over to the tree and... licks it.

31 OLIVE 31

Ari!

Ari processes the taste, smacking his lips. After a beat, he makes a face.

32 ARI 32
Nope, the tree doesn't taste like
syrup.

The kids <GIGGLE>. Ari rolls the taste in his mouth.

33 ARI (CONT'D) 33
 Hmm, now my mouth tastes like tree bark.

34 OLIVE 34
Do you want to go back and get some
water? *

35 ARI 35

Nope, I have just the thing. An *

emergency juice box!

He pulls a juice box out of his pocket and opens it so the straw is sticking out. He slurps noisily. <SFX: SLURPING>. We get a clear shot of juice flowing up the straw.

ARI (CONT'D) 36
Ahhh... that's better.

37 OLIVE 37
<GIGGLES> Ari, you're always so
prepared.

38 ELINOR 38
(still looking at the
tree)
Hmm, so then where DOES the syrup
come from? *

At that moment, FARMER BEAR rolls up with a wagon and a big
pot.

39 FARMER BEAR 39
Oh, hello kids!

40 ELINOR 40
Hi, Farmer Bear!

41 OLIVE 41
We were looking for you!

42 FARMER BEAR 42
Oh? How come?

43 OLIVE 43
We heard you were making syrup, and
we wanted to see how you did it.

44 ARI 44
And, do you need help tasting it?
I'm an EXPERT syrup taster. *

Ari licks his lips. Farmer Bear smiles.

45 FARMER BEAR 45
Well, first we have to MAKE the
syrup, Ari. And that's why I'm here
in this tree grove.

46 ELINOR 46
Yeah, my mom said that syrup comes
from these trees, but we can't
figure out how. We don't see any
fruits or leaves. *

47 OLIVE 47
And the trees don't taste like
syrup. Ari tried it.

48 ARI 48
It doesn't taste like syrup *at all*.

Farmer Bear <CHUCKLES>.

49	FARMER BEAR	49
	Well, that's because the syrup doesn't come from anything ON the trees. It comes from what's INSIDE the trees.	

The kids go <OHHHH>.

50	FARMER BEAR (CONT'D)	50
	Come with me, I'll show you.	

The kids follow Farmer Bear as she pulls the wagon deeper into the tree grove.

3. EXT. DEEPER IN THE MAPLE GROVE - DAY

The kids and Farmer Bear stop at a point deeper into the grove. Many of the trees are tapped and their sap is dripping into buckets.

51	ARI	51
	What's that watery stuff coming out of the trees?	

52	OLIVE	52	*
	I didn't know trees had juice inside.		*
			*

53	FARMER BEAR	53	*
	That liquid is called tree sap. We use the tree sap from these trees to make maple syrup. Watch.		*
			*

The kids are astounded. Farmer Bear takes a spile and a mallet and taps it into a nearby maple tree that doesn't have any buckets. As the kids look closer at it, Farmer Bear grabs a bucket from her wagon and props it under the spile. After a few beats, clear tree sap starts dripping down.

54	ELINOR	54	*
	Wow... so that liquid is inside the tree all the time?		*
			*

55	ARI	55	*
	Just like the juice in my juice box. Ooh, I like juice! I've had apple juice, and orange juice and grape juice--		*
			*

Ari takes a sip of his juice box.

56	FARMER BEAR	56	
	Thank you, Ari. But tree sap is a		*
	little different from those juices		*
	because it comes from INSIDE the		*
	tree, not from any fruit like		*
	oranges, apples or grapes.		
	Olive looks closer at the spile.		*
57	OLIVE	57	
	Does that hurt the tree?		
58	FARMER BEAR	58	
	Not if you make just a little hole.		*
59	ELINOR	59	
	Farmer Bear, why do trees have tree		
	sap inside?		
60	FARMER BEAR	60	
	Good question, Elinor. Trees use		*
	tree sap to spread water and sugar		*
	inside the plant. It's how the tree		*
	gets what it needs to stay healthy.		
	Here, I think I have a picture in		*
	my tree book.		
	Farmer Bear rummages a bit in her wagon and pulls out a book		*
	with a little tree on the cover. She opens it up and shows		
	the kids a page with a simple x-ray visual of the INSIDE of		
	the tree, with sap moving and going to all of the branches.		
61	FARMER BEAR (CONT'D)	61	
	See? The tree sap spreads to all		*
	the different parts of the tree. It		*
	travels inside of tiny little tubes		*
	in the trunk and branches.		*
62	ARI	62	
	Whoa...		
	Ari takes another sip of his juice box.		*
63	ELINOR	63	
	Oh! The tubes look like the straw		*
	in Ari's juice box!		*
	They all look appreciatively at Ari's juice box.		
64	ARI	64	
	Wow, look! I'm a tree! <SLUURRP>		
	The kids <GIGGLE>. Farmer Bear closes the tree book.		*

65 FARMER BEAR 65
That's right. Trees are more than
just the leaves and fruit on the *
outside. There's a lot happening *
inside of them, too. Now, who wants *
to help me gather all this tree *
sap?

66 ELINOR 66
Me!

67 ARI 67
Yeah!

Over a quick montage, the kids help Farmer Bear bring the sap buckets to the wagon and pour the tree juice into the pot. Soon, they are all done, and Ari empties the last bucket into the pot. He eyes the last few droplets.

68 ARI (CONT'D) 68
Can I try the tree sap, Farmer Bear?

69 FARMER BEAR 69
Sure, go ahead, Ari.

Ari puts a drop on his finger and tastes it.

70 ARI 70
It tastes like water. With maybe a
TINY bit of syrup flavor. *

Olive and Elinor try it too.

71 ELINOR 71
But Farmer Bear, if the tree sap is *
watery and not sweet, how do you *
make yummy syrup out of it? *

72 FARMER BEAR 72
Well, it's time to head to the
Sugar Shack to find out! *

The kids follow Farmer Bear as she pulls the wagon back towards the farm.

4. INT BACK OF FARMER BEAR'S BARN - DAY

Farmer Bear leads them to a small, open structure at the back of the barn. Inside are two big kettles. One of the kettles is empty and stands over fresh logs. The other one looks like it cooked for a while, and the logs are now burned out. *

73 FARMER BEAR 73
Welcome to my Sugar Shack! This is
where we turn the tree sap into
syrup. *

She pours the newly collected sap into the empty kettle and
lights a fire. NOTE: Farmer Bear is the only one who can be
near the fire. *

74 FARMER BEAR (CONT'D) 74
We cook it for a long time, and
that makes it thicker and thicker,
and sweeter and sweeter, until--

75 ELINOR 75
It turns into delicious syrup!

76 FARMER BEAR 76
That's right. This one cooked for a
long time, but now it's been
sitting and cooling off since this
morning. *

Farmer Bear points to the kettle with the ready syrup.

77 ARI 77
Is it ready yet? Should I taste it?
You know, just to check? *

Farmer Bear takes out a ladle and scoops some up. She brings
it up to inspect it, and we see up close that it is thick and
golden colored.

78 FARMER BEAR 78
I think it's ready!

79 ARI 79
Woohoo!

They all taste a little using individual spoons Farmer Bear
gives them. Everyone nods happily. *

80 ELINOR 80
It's ready!

81 OLIVE 81
It's sooooo good!

82 ARI 82
Hmm, I'm not TOTALLY sure. Can I
try some more? *

The kids <GIGGLE> as Ari tries some more. Farmer Bear grabs a
bottle from a nearby table full of empty bottles.

83 FARMER BEAR 83
 Ok! Now it's time to fill up the
 bottles so everyone can have syrup
 with their pancakes!

Farmer Bear slowly and very carefully starts pouring some
 syrup from the ladle into the bottle. The kids look at the
 big table of empty bottles.

84 ELINOR 84
 Do we need to fill up ALL the
 bottles?

85 FARMER BEAR 85
 Oh yes. That way everyone will have
 their own bottle of syrup. *

The kids look at each other a little worried. At that moment,
 Ranger Rabbit comes into the Shack.

86 RANGER RABBIT 86
 Oh, hi kids. Hi, Farmer Bear.

87 FARMER BEAR 87
 Hello, Ranger Rabbit.

88 ELINOR 88
 Hi mom! We are helping make the
 syrup!

Ranger Rabbit eyes the long line of empty bottles.

89 RANGER RABBIT 89
 That's wonderful, Elinor. Uh,
 Farmer Bear? Mrs. Gorilla has just
 about finished making the pancakes,
 and she wants everyone to eat them
 while they are hot.

90 FARMER BEAR 90
 Oh, um... But we haven't finished
 pouring the syrup into the bottles.

91 OLIVE 91
 Uh oh. It's going to take a long
 time.

92 FARMER BEAR 92
 Maybe we should eat the pancakes
 without syrup this year?

The kids look shocked and exclaim in unison:

93	OLIVE/ARI/ELINOR PANCAKES WITHOUT SYRUP?	93	
94	ELINOR That's like having toast without butter.	94	*
95	OLIVE Or a sandwich without lettuce!	95	
96	ARI Or a pickle without peanut butter!	96	
Everyone looks at Ari, who shrugs.			
97	ARI (CONT'D) I like pickles with peanut butter.	97	
98	RANGER RABBIT Let's focus on the syrup. Can we help you get it into bottles?	98	
99	FARMER BEAR I don't know. I only have one ladle.	99	*
100	ELINOR Hmmm... How can we get the syrup into the bottles faster?	100	* * *
The group thinks for a moment. Suddenly, Elinor has a thought. In a THOUGHT BUBBLE, she remembers the x-ray view of the tree from before, and how the tree sap spreads out to all of the branches on the tree.			* * *
101	ELINOR (CONT'D) Wait! I think I have an idea! I'll be right back!	101	* *
She runs off and after a few moments comes back with Sally Beaver and her mom. They huddle to confer.			
102	ELINOR (CONT'D) Ok, here's what I'm thinking.	102	
Elinor draws on a sheet of paper as she talks.			*
103	ELINOR (CONT'D) Trees use little tubes to spread tree sap to all the different parts of the tree, right?	103	* * * *

Ari and Olive nod. Elinor shows everyone what she drew: a doodle of the kettle at the bottom, and some bottles spread around the page.

104 ELINOR (CONT'D) 104
Well, what if we build something
that spreads the syrup to the
bottles like this?

Elinor connects the kettle and the bottles with a network of branching channels, just like the tree. She draws arrows showing how the syrup would flow from the kettle to the bottles.

105 FARMER BEAR 105
That's a great idea, Elinor! That
will help us fill lots of bottles
all at once. Let's try it!

Sally and her mom nod and they quickly whip up Elinor's idea: a delivery system consisting of U-shaped channels that branch out from a central channel. From the top, it looks just like the x-ray of the tree.

106 ARI 106
Wow, awesome!

107 ELINOR 107
Thank you, Sally and Mrs. Beaver.
Now let's spread the syrup!

MUSIC MONTAGE: The kids sing as they put the bottles in place at the ends of the branching channels and Farmer Bear pours syrup into the base of the new system.

108 ELINOR/OLIVE/ARI 108
Syrup! Syrup!
Syrup from the trees!
Let's fill the bottles
To share with you and me!

Inside a tree
Tree sap moves about
Let's learn from this
To spread the syrup out

Pour it in the top
And watch it move down
Just like a tree
It all spreads around

Syrup! Syrup!
Syrup from the trees!
(MORE)

ELINOR/OLIVE/ARI (CONT'D)

Let's fill the bottles
To share with you and meeee!

*
*

At the end of the song, they have filled all the bottles!

5. EXT FARMER BEAR'S FARM - DAY

Farmer Bear pulls a wagon filled with syrup bottles around to where everyone is seated. We see Mrs. Gorilla serving the pancakes.

109

FARMER BEAR

109

Who is ready for syrup?

A forest of hands go up, <CHEERING>. The kids bring syrup bottles out to each table. Soon, everyone is eating happily: Gee Raffe is cutting up her pancakes, but her head is off screen (it's unclear how she will eat them!). Silas finishes his pancakes in almost no time. Mz. Mole smells the pancakes and looks excited about eating them.

*
*
*
*

Finally, Ari and Elinor sit down to steaming piles of pancakes next to Olive, Farmer Bear and Ranger Rabbit.

*
*

110

OLIVE

110

Mmm, it's SO good.

*

111

ARI

111

I'm SO ready to eat these pancakes.

*

112

ELINOR

112

Ari, wait! Don't forget the syrup!

Elinor hands a bottle of syrup to Ari.

113

ARI

113

Aww, thanks, Elinor. You're so...
SWEET!

*

They all <LAUGH> as the camera pulls up and we...

END

*

*
*