

ELINOR WONDERS WHY

EWV142 Butterfly Drinks

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Elinor's Question: How do butterflies drink from flowers?

Logline: Elinor loves her butterfly suit, but how is she supposed to drink when her arms are now wings?

Curriculum Goals: • LS2. 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:

- a. Identify body parts of animals and their function [They learn how butterflies have long straw-like mouths]
- LS3. Understand that all animals need food in order to live and grow, that they get their food from plants or from other animals, and that plants need water and light to live and grow:

- a. Observe ways that animals and plants get what they need to live and grow [Butterflies drink from flowers using their straw-like mouths]

- 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. [Straws are like an butterfly (or elephant) proboscis]

- SEP1. Asking questions (science) and defining problems (engineering)

b. Ask more complex questions about observable phenomena

c. Ask and/or identify cause and effect questions that can be answered by an investigation

d. Identify a problem that can be solved by the design a new or improved object or tool (engineering) (Elinor asks questions about the butterfly, including how it drinks from flowers, and then she develops a drinking straw "proboscis" for her butterfly costume).

FIRST DRAFT: September 16, 2019
SECOND DRAFT: September 27, 2019

1. INT ELINOR'S SCHOOL -- DAY

It's a beautiful day in Animal Town. At school, MZ. MOLE is addressing the class just before letting them out at the end of their school day on a Friday.

1	MZ. MOLE	1
	OK class, that's it for today. Oh, and don't forget, Monday is INSECT DAY! Everyone needs to come dressed as their favorite insect.	

The class reacts enthusiastically with <SFX:
YEAH!/COOL!/AWESOME! WALLA>.

2	CAMILLA	2
	I love insects!	

3	KOA	3
	Yeah, they're so totally chill...	

4	MZ. MOLE	4
	Haha, yes they are. Alright, you little rug bugs, off you go!	

The kids get up and bustle out excitedly.

2. EXT ELINOR'S SCHOOL -- DAY

Students are filing out of the school with <SFX: BYE MZ.
MOLE!/SEE YOU LATER WALLA>, and we follow ELINOR, ARI and
OLIVE as they head home. Olive is holding an INSECT BOOK,
reading as she walks.

5	ELINOR	5
	I can't wait for insect day. What kind of insect are you going to be, Ari?	

6	ARI	6
	I don't know. I haven't picked one. All I know is that it's gotta be super-duper cool.	

Olive looks up from the book.

7	OLIVE	7
	Wow, there are so many amazing kinds of insects.	

She flips through the pages of the book.

8 OLIVE (CONT'D) 8
Listen to this! Did you know that
ants have TWO STOMACHS?

She points with her trunk at a diagram in her book of an ant
and its two stomachs. Elinor and Ari <SFX: WHOA/COOL>.

9 ARI 9
I wish *I* had two stomachs! Then I
could eat lunch TWICE!

Elinor <SFX: GIGGLES>. Olive flips to another page.

10 OLIVE 10
And did you know that caterpillars
have TWELVE EYES?! *

She points again, this time to a drawing of a caterpillar's
head. <SFX: WHOA WALLA>

Elinor blinks a few times while Ari makes goggles with his
hands around his eyes.

11 ELINOR 11
That's a lot of eyes! *

Olive flips to another page.

12 OLIVE 12
<GASP!> And look! Did you know that
ladybugs hide their wings under
their shells by FOLDING them? *

She points to a diagram of a ladybug and its wings.

13 ARI 13
That's awesome, Olive. Which one
are you going to pick for your
costume?

14 OLIVE 14
I don't know! They are so many. I'm
gonna have to read this whole book
just to learn about all of them! *

Ari turns to Elinor.

15 ARI 15
I think Olive is bugging out. Get
it? BUGGING OUT.

16 ELINOR 16
<GIGGLES> I got it, Ari.

They all <SFX: LAUGH>.

17 ELINOR (CONT'D) 17
Well, I know what *my* insect costume
is going to be.

18	OLIVE	18
	Oooh tell us, Elinor!	*

[illegible]

Elinor does a little loop around, spreading her arms and flitting like a butterfly.

20 ELINOR (CONT'D) 20
I just think they are SO
interesting. I love their big wings
and all their colors and spots.

As Elinor flits about, Ari has a thought.

21 ARI 21
I always wondered about
butterflies.

22 OLIVE 22
Wondered what, Ari?

23	ARI	23
	Why is it called a "butter fly".	
	Does it fly... like butter?	

THOUGHT BUBBLE of a stick of butter with wings.

The kids <SFX: GIGGLE>. At that moment, Ari notices something in Olive's book.

24 ELINOR 24
Oh, what's THAT one called?

On the book, we see a drawing of a dragonfly.

OLIVE
That one's called... a dragonfly.

26	ARI	26	
	A DRAGON-fly? Like a DRAGON? That		*
	flies?! That is SO cool!		*

Ari gets excited and starts running and stomping around, flapping his arms.

27	ARI (CONT'D)	27	
	I'm going to be a DRAGONfly! And breathe fire and look for treasure!		
	RAAAARR!		
28	OLIVE	28	
	I LOVE it - RAAARR!		
29	ARI	29	
	RAAARR! Are you going to be a Dragonfly too, Olive?		*
30	OLIVE	30	
	No, I just like going RAAARR!		
	Olive <SFX: LAUGHS> and joins Elinor and Ari, holding her book up as they all flit and run around to <SFX: LAUGHTER>.		*

3. EXT ELINOR'S HOUSE -- DAY

Later that day (or later that weekend), we open on an establishing shot of Elinor's house.

4. INT ELINOR'S KITCHEN -- DAY

Elinor comes into her kitchen carrying an armload of craft supplies. Her dad is finishing up something.

31	MR. RABBIT	31	
	Hi Elinor, what are you doing?		
32	ELINOR	32	
	I can't talk right now, Dad, I'm super busy!		* *
	Elinor sets her things down on the table.		
33	ELINOR (CONT'D)	33	
	I'm making a butterfly costume for insect day!		
34	MR. RABBIT	34	
	Oh. Can I help?		
35	ELINOR	35	
	Mmm, ok! You can be my assistant if you want.		
36	MR. RABBIT	36	
	(chuckling)		
	You're the boss.		

Mr. Rabbit sits down next to Elinor as she lays out her supplies.

37 ELINOR 37
Mz. Mole said it has to be
something special, so I want my
costume to be *just* like a real
butterfly.

38 MR. RABBIT 38
How very scientific of you. Where
do we start?

Elinor grabs a crayon and a notepad.

39 ELINOR 39
We're gonna draw the costume, and
then we're going to make it.

40 MR. RABBIT 40
(smiling)
Excellent plan! Do you need any *
help? *

41 ELINOR 41
That's ok, dad. I know what a
butterfly looks like.

Elinor sits at the table and draws a sketch while Mr. Rabbit looks on. She draws as she narrates.

42 ELINOR (CONT'D) 42
Butterflies have a body, and a
head... and four butterfly wings...

She turns to her dad.

43	ELINOR (CONT'D)	43
	Some kids think a butterfly has two	
	big wings, but actually, it has	
	four.	

She draws four lobes for the butterfly wings. Then she starts to draw the legs, but stops.

44 ELINOR (CONT'D) 44
And it has one, two... Um... How
many legs do butterflies have? Is
it two? Or four...?

MR. RABBIT

That's a good question, Elinor.

Mr. Rabbit looks out the window and spots some butterflies fluttering outside.

46 MR. RABBIT (CONT'D) 46
I see some butterflies outside. You
know, sometimes the best way to
know something is to see or hear it
for yourself.

Elinor looks out the window and sees the butterflies.

47 ELINOR 47
<GASP> Let's go outside and look at
the butterflies! Great idea, dad.

48 MR. RABBIT 48
Well, I'm glad I could be helpful.

49 ELINOR 49
<GIGGLES> C'mon! We need more
observations!

They head out into the backyard, notepad in hand.

5. EXT ELINOR'S HOUSE -- DAY

50 ELINOR 50
Look, there's a butterfly!

They spot a butterfly flying and then landing on something (not a flower).

51 ELINOR (CONT'D) 51
Let's take a closer look.

They comically tip toe over to the butterfly.

52 ELINOR (CONT'D) 52
It's so amazing! I love
butterflies.

Elinor looks closely at the legs.

53 ELINOR (CONT'D) 53
It has one, two, three, four,
five... six legs! Butterflies have
six legs.

She draws six legs in her butterfly sketch.

54 ELINOR (CONT'D) 54
Wow! I thought I knew everything
about butterflies, but they're even
more interesting than I thought.

55 MR. RABBIT 55
Good thing we checked.

56 ELINOR 56
You're a good assistant, dad.

They both <SFX: GIGGLE>. The butterfly takes off.

57 ELINOR (CONT'D) 57
Wow, there are so many butterflies
today. I wonder what they're doing?

58 MR. RABBIT 58
Well, the flowers are in bloom, so
I think they're out drinking.

59 ELINOR 59
Butterflies get thirsty?

60 MR. RABBIT 60
And hungry! They drink their lunch
from flowers.

61 ELINOR 61
Oh, like bees?

62 MR. RABBIT 62
That's right. They drink the
nectar, that's the watery juice
that flowers have inside.

63 ELINOR 63
Ohhh...

64 MR. RABBIT 64
See, this flower has its nectar all
the way inside.

On a CU, we catch a glimpse of some nectar droplets near the
bottom of the flower, where the petals meet.

65 ELINOR 65
Wow. Butterflies are the best!
Let's go back and make the costume.

6. INT KITCHEN -- DAY

Back inside, they get to work. We have a little montage of them working on the costume: cutting out the wings, decorating them, making the shirt, attaching the legs, etc.

A cross-fade later, Mr. Rabbit stands in the kitchen, facing towards the living room.

66	MR. RABBIT	66
	Ok, let's see it.	

67	ELINOR	67
	Ta da! We did it!	

Elinor hops into view. She's wearing an adorable kid-made butterfly costume. The wings are made out of painted cardboard, and Elinor has her hands attached to the upper wings via some wrist straps. Two small strings connects the upper and lower wings. She runs around the kitchen flapping her wings <SFX: GIGGLES/WALLA>.

68	MR. RABBIT	68
	It looks great.	

At that moment, RANGER RABBIT walks into the kitchen.

69	RANGER RABBIT	69
	Oh my, there's a butterfly in our kitchen!	

70	ELINOR	70
	(giggling)	
	It's me, mom! I made a butterfly costume for school.	

71	MR. RABBIT	71
	Ahem.	

72	ELINOR	72
	I had some help.	

73	RANGER RABBIT	73
	Well, I think it's lovely.	

74	ELINOR	74
	I wanted it to look <i>just</i> like a real butterfly, so we went outside to observe some.	

Elinor shows off the features of her costume.

75 ELINOR (CONT'D) 75
See, it has six legs... And look, I
can move my wings! Did you know
that butterflies have FOUR wings,
not two?

Elinor moves her arms and flaps her wings.

76 RANGER RABBIT 76
Indeed they do. I think it helps
them fly.

77 ELINOR 77
That's me. I can flyyyyyy..!

Over collective <SFX: GIGGLES AND LAUGHTER>, Elinor runs
around the kitchen flapping her wings.

78 RANGER RABBIT 78
Careful you don't fly away!

Mr. Rabbit goes over to the fridge and pours a couple of
glasses of lemonade for all of them.

79 MR. RABBIT 79
Well, all this assistant work has
made me thirsty. I imagine you must
be thirsty too, Elinor.

He hands one glass to Ranger Rabbit and puts down a glass for
Elinor on the table, then goes to grab his. The parents take
a glass and sip appreciatively <SFX: SIPPING/SLURP>.

80 ELINOR 80
Yes. Just like a real butterfly,
I'm thirsty too.

Elinor hops on top of one of the chairs and reaches for the
glass, but her arms are stuck in the straps. (The wings don't
bend forward enough for her to grab the glass, much less
bring it up to her mouth). She tries several times <SFX:
SMALL GRUNTS>.

She seems momentarily confounded, smiles awkwardly at her
parents, then tries another approach. She bends down and
tries to sip directly from the glass. She aspirates over the
glass, but unfortunately the lemonade is too far down. <SFX:
HMMM>. Unfazed, she shifts positions and comically leans over
and tries to lap the lemonade up with her tongue, tipping the
glass over with her mouth.

81 RANGER RABBIT 81
Whoa, careful there, Elinor.

Ranger Rabbit grabs the glass before it tips over.

82 MR. RABBIT 82
 You know, you can always take your
 arms out of the wings.

83 ELINOR 83
 Yeah... I know.

She takes her arms out and holds the glass up.

84 ELINOR (CONT'D) 84
 ... but I wanted to drink just like
 a *real* butterfly does.

A BEAT, as Elinor studies the glass and curiosity builds up
inside of her.

85 ELINOR (CONT'D) 85
 Hmmm, I wonder... How do the real
 butterflies drink from the flowers?

She sets the glass down again and looks at the lemonade from
the side.

86 ELINOR (CONT'D) 86
 I know that butterflies don't have
 hands. And I saw that the nectar
 was all the way inside the flower.

We see a thought bubble with a butterfly standing over a cut
away view of a flower showing droplets of nectar inside
[<https://bit.ly/30Enqit>].

87 ELINOR (CONT'D) 87
 How do they get to the nectar?

88 RANGER RABBIT 88
 Good question, Elinor. What do you
 think?

89 ELINOR 89
 Maybe they tip the flower like a
 cup using their feet?

We see a thought bubble of a butterfly on its back holding a
flower with its feet, looking silly.

90 ELINOR (CONT'D) 90
 Or maybe they squeeze the nectar
 out with their wings?

We see a thought bubble of a butterfly trying to squeeze a
flower (to no avail).

91 ELINOR (CONT'D) 91
Hmmm, that is SO INTERESTING.

92 MR. RABBIT 92
Remember the last time we had a *
question about butterflies, Elinor? *
What did we do? *

93 ELINOR 93
We went outside to look at them.
Great idea, Dad! We need MORE
OBSERVATIONS!

Elinor puts her hands through the wing straps and flits
around once before heading out. She stops at the door.

94 ELINOR (CONT'D) 94
Um, can someone open the door for
me?

Mr. Rabbit opens the door for her.

95 ELINOR (CONT'D) 95
Thanks, Dad! Let's goooo..!

Mr. Rabbit follows her out.

96 MR. RABBIT 96
Right behind you, boss.

7. EXT YARD -- DAY

Elinor (still wearing the costume, but now with her arms
free) and her father come out back. There are butterflies
flitting around the yard.

97 ELINOR 97
There's one! Let's go watch it
drink from a flower.

They follow it around as it flits about. After a moment, the
butterfly lands and Elinor and her dad stealthily and
comically duck behind the bush.

98 ELINOR (CONT'D) 98
(comically loud whisper) I think
it's going to have a drink!

99 MR. RABBIT 99
Think thirsty thoughts.

They watch as the butterfly UNROLLS something from its head and pokes that into the flower. [ref: https://www.youtube.com/watch?v=03S73-3Tw_0]

100 ELINOR 100

Wow! Did you see that? It unrolled something from its mouth.

On a Science ECU moment, we see the butterfly drinking as it slurps up the nectar.

101 ELINOR (CONT'D) 101
Look, it's using it to drink! It's
like a straw. That's how the
butterfly drinks from the flower.

102 MR. RABBIT 102

Yes, that straw is called a
proboscis. It's a part of their
mouth.

103	ELINOR	103	
	Wow, that is so clever. Butterflies		*
	are even <i>more</i> interesting than I		
	thought!		

We hear the first beats of a ditty as the butterfly takes off, followed by Elinor. As she follows the butterfly around, she sings.

104 ELINOR (CONT'D) 104

Butterflies can't
Hold a cup
And they have no lips
To drink nectar up

But butterflies have
A special mouth
Long and thin
To suck nectar out

Butterfly! Butterfly!
How do you drink from flowers?
Butterfly! Butterfly!
Sucking up juice
Is your special power

As the song fades, Elinor has an idea.

105	ELINOR (CONT'D)	105
	Dad, I think I know how to make my	
	butterfly costume even better!	
	C'mon!	

8. INT CLASSROOM DAY

It's Insect Day! The kids in class are milling about wearing their insect costumes. Elinor comes in wearing her butterfly costume as before, and spots Olive, who is holding the insect book and wearing what looks like a worm costume.

106 ELINOR 106
Nice costume, Olive!

107 OLIVE 107

Thanks, Elinor! I read this whole
book about insects, and at the end
I knew exactly what I wanted to be.
A bookworm!

She shows off her long body behind her.

108 OLIVE (CONT'D) 108
Actually, bookworms aren't really
worms, they're baby beetles! But
they like books almost as much as I
do.

Elinor <SFX: GIGGLES>. At that moment, Ari joins them, holding three small cups.

109 ARI 109
Elinor! Nice butterfly costume.

110 OLIVE 110
Yeah, you look *just* like a real
butterfly!

111 ELINOR 111
Thanks! I like your costume too,
Ari.

112	ARI	112
	Thanks, it's a dragonfly, which I learned is not <i>actually</i> a dragon, but it's still super- <i>duper</i> cool. It's one of the best fliers in nature.	

Ari sets the cups down on one of the kid tables and flutters up, zigging and zagging like a dragonfly. Elinor and Olive <SFX: WHOA/GIGGLE>.

113 OLIVE 113
What's in the cups, Ari?

114 ARI 114
Oh, Mz. Mole brought some honey
water for everyone.

We look over and see Ms. Mole, wearing a funny bee costume, handing out little cups.

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115             MZ. MOLE                                     115
                Alright, everyone. Buzz on over and
                grab a drink. You must BEE thirsty!
                Haha!
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116 OLIVE 116
Aww, that's so... sweet.

The kids <SFX: GIGGLE>. Ari and Olive grab their drinks and start drinking, then notice Elinor can't grab her drink.

117	ARI	117	
	Oh. Do you need help Elinor?		*

118 ELINOR 118

That's ok, Ari. I learned that
butterflies are not just colorful,
they're also really clever! Look *

how they drink!

She undoes her hands and reaches into a pocket to pull a rolled-up tube with an elastic strap. She places the tube on her mouth, pulls the strap over her head, and lets it go. The tube unravels into a long straw. With her hands back in the wing straps, she dips the tube into her drink from semi-far away and drinks away <SFX: GLUG GLUG>.

119	OLIVE	119
	Wow, that is so clever.	*

120 ARI 120
I didn't know butterflies could do
that.

Elinor finishes her drink and lets the tube hang from the strap.

121 ELINOR 121
See, being a butterfly doesn't BUG
me at all.

<SFX: LAUGHTER> as the kids fly and run around. We cut to
outside to see a worm (baby beetle) and a dragonfly on tall
grass. A butterfly flies in, and we...

IRIS OUT *