

## ELINOR WONDERS WHY

### EW121B Butterfly Drinks

By: Jorge Cham and Daniel Whiteson

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

POLISH DRAFT: October 15, 2019

RECORD DRAFT: October 25, 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 and then flips through some pages.

7 OLIVE 7

Wow, there are so many amazing kinds of insects.

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>.

8                                 ARI                                 8

I wish I had two stomachs! Then I  
could eat lunch TWICE!

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

9 OLIVE 9  
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.

10 ELINOR 10  
That's a lot of eyes!

Olive flips to another page.

11 OLIVE 11  
 <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.

12                                 ARI                                 12  
That's awesome, Olive. Which insect  
are you going to pick for your  
costume?

13 OLIVE 13  
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.

14 ARI 14  
I think Olive is bugging out. Get  
it? BUGGING OUT.

15 ELINOR 15  
 <GIGGLES> I got it, Ari.

They all <SFX: LAUGH>.

16 ELINOR (CONT'D) 16  
Well, I know what *my* insect costume  
is going to be.

17 OLIVE 17  
Oooh tell us, Elinor!

18 ELINOR 18  
I'm going to be... a butterfly!

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

19 ELINOR (CONT'D) 19  
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.

20 ARI 20  
I've always wondered about  
butterflies.

21 OLIVE 21  
Wondered what, Ari?

22 ARI 22  
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.

23 ARI (CONT'D) 23  
Oh, what's THAT one called?

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

24 OLIVE 24  
That one's called... a dragonfly.

25 ARI 25  
A DRAGON-fly? Like a DRAGON? That  
flies?! That is SO cool!

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

Olive <SFX: LAUGHS> and joins Elinor and Ari, holding her book up as they all flit and run around to <SFX: LAUGHTER>.

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

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

30 MR. RABBIT 30  
Hi Elinor.

31 ELINOR 31  
I can't talk right now, Dad, I'm  
super busy!

Elinor sets her things down on the table.

32 ELINOR (CONT'D) 32  
I'm making a butterfly costume for  
insect day!

33 MR. RABBIT 33  
Oh. Can I help?

34 ELINOR 34  
Mmm, ok! You can be my assistant if  
you want.

35 MR. RABBIT 35  
(chuckling)  
You're the boss.

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

36

ELINOR

36

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

37

MR. ~~R~~ABBIT

37

How very scientific of you. Where do we start?

Elinor grabs a crayon and a notepad.

38

ELINOR

38

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

39

MR. ~~RABBIT~~

39

(smiling)

Excellent plan! Sure I can't help?

40

ELINOR

40

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.

41

EDINOR (CONT'D)

41

Butterflies have a body, and a head  
with two antennae... and four  
butterfly wings...

She turns to her dad.

42

ELINOR (CONT'D)

42

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.

43

ELINOR (CONT'D)

43

And it has one, two... Um... How many legs do butterflies have? Is it two? Or four...?

44

MR. ~~R~~RABBIT

44

That's a good question, Elinor.

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

45 MR. ~~RABBIT~~ (CONT'D) 45  
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.

46 ELINOR 46  
<GASP> Let's go outside and look at the butterflies! Great idea, dad.

47 MR. ~~RABBIT~~ 47  
I'm glad I could be helpful.

48 ELINOR 48  
<GIGGLES> C'mon! We need more observations!

They grab a magnifying glass from the counter and head out into the backyard, notepad in hand.

5. EXT ELINOR'S HOUSE -- DAY

49 ELINOR 49  
Look, there's a butterfly!

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

50 ELINOR (CONT'D) 50  
Let's take a closer look.

They comically tip toe over to the butterfly.

51 ELINOR (CONT'D) 51  
It's so amazing! I love butterflies.

Elinor's Dad holds the magnifying glass, and they look closely at the legs.

52 ELINOR (CONT'D) 52  
It has one, two, three, four, five... six legs! Butterflies have six legs.

She draws six legs in her butterfly sketch.

|    |                                                                                                           |    |
|----|-----------------------------------------------------------------------------------------------------------|----|
| 53 | ELINOR (CONT'D)                                                                                           | 53 |
|    | Wow! I thought I knew everything about butterflies, but they're even more interesting than I thought.     |    |
| 54 | MR. RABBIT                                                                                                | 54 |
|    | Good thing we checked.                                                                                    |    |
| 55 | ELINOR                                                                                                    | 55 |
|    | You're a good assistant, dad.                                                                             |    |
|    | They both <SFX: GIGGLE>. The butterfly takes off.                                                         |    |
| 56 | ELINOR (CONT'D)                                                                                           | 56 |
|    | Wow, there are so many butterflies today. I wonder what they're doing?                                    |    |
| 57 | MR. RABBIT                                                                                                | 57 |
|    | Well, the flowers are in bloom, so I think they're out drinking.                                          |    |
| 58 | ELINOR                                                                                                    | 58 |
|    | Butterflies get thirsty?                                                                                  |    |
| 59 | MR. RABBIT                                                                                                | 59 |
|    | And hungry! They drink their food from flowers.                                                           |    |
| 60 | ELINOR                                                                                                    | 60 |
|    | Oh, like bees?                                                                                            |    |
| 61 | MR. RABBIT                                                                                                | 61 |
|    | That's right. They drink the nectar, that's the watery juice that flowers have inside.                    |    |
| 62 | ELINOR                                                                                                    | 62 |
|    | Ohhh...                                                                                                   |    |
|    | Using the magnifying glass, they look closely at the flower.                                              |    |
| 63 | MR. RABBIT                                                                                                | 63 |
|    | 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. |    |
| 64 | ELINOR                                                                                                    | 64 |
|    | 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.

65 MR. RABBIT 65  
Ok, let's see it.

66 ELINOR 66  
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>.

67 MR. RABBIT 67  
It looks great.

At that moment, RANGER RABBIT walks into the kitchen.

68 RANGER RABBIT 68  
Oh my, there's a butterfly in our kitchen!

69 ELINOR 69  
(giggling)  
It's me, mom! I made a butterfly costume for school.

70 MR. RABBIT 70  
Ahem.

71 ELINOR 71  
I had some help.

72 RANGER RABBIT 72  
I think it's lovely.

73 ELINOR 73  
I wanted it to look just like a real butterfly, so we went outside to observe some.

Elinor shows off the features of her costume.

74

~~ELINOR~~ (CONT'D)

74

See, it has six legs... And look, I can move my wings! Did you know that butterflies have FOUR wings, not two? I think it helps them fly. Watch!

Elinor moves her arms and flaps her wings.

75

~~ELINOR~~ (CONT'D)

75

I can flyyyyyy...!

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

76

~~RANGER RABBIT~~

76

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.

77

~~MR. RABBIT~~

77

All this assistant work has made me thirsty. I imagine you must be thirsty too, Elinor.

He hands one glass to Ranger Rabbit.

78

~~RANGER RABBIT~~

78

Thank you dear.

Then 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>.

79

~~ELINOR~~

79

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

7 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.

80

~~RANGER RABBIT~~

Whoa, careful there, Elinor.

80

Ranger Rabbit grabs the glass before it tips over.

81

~~MR. RABBIT~~

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

81

82

~~ELINOR~~

Yeah... I know.

82

She takes her arms out and holds the glass up.

83

~~ELINOR (CONT'D)~~

... but I wanted to drink just like a real butterfly does.

83

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

84

~~ELINOR (CONT'D)~~

Hmmm, I wonder... How do the real butterflies drink from the flowers?

84

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

85

~~ELINOR (CONT'D)~~

I know that butterflies don't have hands. And I saw that the nectar was all the way inside the flower.

85

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].

86

~~ELINOR (CONT'D)~~

How do they get to the nectar to drink it?

86

87

~~RANGER RABBIT~~

Good question, Elinor. What do you think?

87

88

~~ELINOR~~

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

88

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

89

~~ELINOR~~ (CONT'D)

89

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).

90

~~ELINOR~~ (CONT'D)

90

Hmmm, that is SO INTERESTING.

91

~~MR. RABBIT~~

91

Remember the last time we had a  
question about butterflies, Elinor?  
What did we do?

92

~~ELINOR~~

92

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.

93

~~ELINOR~~ (CONT'D)

93

Um, can someone open the door for  
me?

Mr. Rabbit opens the door for her.

94

~~ELINOR~~ (CONT'D)

94

Thanks, Dad! Let's goooo..!

Mr. Rabbit follows her out, magnifying glass in hand.

95

~~MR. RABBIT~~

95

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.

96

~~ELINOR~~

96

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.

96A

97

~~EN~~NOR (CONT'D)

97

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

98

MR. ~~R~~ABBIT

98

Think thirsty thoughts.

Using the magnifying glass, 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](https://www.youtube.com/watch?v=03S73-3Tw_0) ]

99

ELYNOR

99

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.

100

~~ELINOR~~ (CONT'D)

100

Look, it's using it to drink! It's like a straw. That's how the butterfly drinks from the flower.

101

MR. RABBIT

101

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

102

ELINOR

102

Wow, that is so cool. Butterflies are even *more* 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.

103

ELINOR (CONT'D)

103

Butterfly! Butterfly!  
How do you drink from flowers?  
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!  
(MORE)

ELINOR (CONT'D)

Sucking up juice  
Is your special power!

As the song fades, Elinor has an idea.

104

ELINOR (CONT'D)

104

Dad, I think I know how to make my  
butterfly costume even better!  
C'mon!

8. INT CLASSROOM DAY - LATER ON

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.

105

ELINOR

105

Nice costume, Olive! But what are  
you?

106

OLIVE

106

I'm a special kind of beetle I read  
about in my book. It has a funny  
name that made it the perfect  
insect for me! You'll never guess  
what it's called.

107

ELINOR

107

What?

108

OLIVE

108

A bookworm!  
(giggles)  
Even though it's not a worm.

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 actually a dragon,  
but it's still super-duper 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?

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.

115                      MZ. MOLE                      115

Alright, everyone. Buzz on over and  
grab a drink. You must BEE thirsty!  
Haha!

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.

[illegible]

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.

Design description question: does she need to blow into the tube to make it unravel? If so then she can't suck inwards to drink? Do we just cheat it and allow gravity to unravel it once its in her mouth?

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 \*