

ELINOR WONDERS WHY

EP 109A Speed Racer

By: Adam Ruben

Elinor's Question: Why is Camilla's racecar so much faster than Elinor's wagon?

Logline: When Elinor wants her wagon to move faster, she changes its shape with some inspiration from aerodynamic animals.

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. (Elinor and her friends learn that animals' shapes help them move fast.)

ND3. 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. (Elinor and her friends build a car based on animals' shapes.)

SEP1d. Identify a problem that can be solved by the design of a new or improved object or tool. (Elinor and her friends identify that, to make the wagon as fast as Camilla's car, they need to improve its design.)

SEP3b. Compare and contrast objects and events by describing similarities and differences in detail. (Elinor and her friends consider the similarities [wheels] and differences [shape] between her wagon and Camilla's car.)

SEP3e. Design and build a solution to a simple problem. (Elinor and her friends design and build a faster car.)

SEP4c. Record observations to describe patterns and/or relationships in the natural and designed world(s) in order to answer scientific questions and solve problems. (Elinor and her friends notice the animals' shapes.)

SEP6b. Look for and describe patterns and relationships in natural phenomena. (Elinor and her friends notice that fast animals' shapes are similar.)

ET1. Begin to understand that asking questions, making observations, and gathering information are helpful in thinking about problems, and that it is important to clearly understand the problem before beginning to design a solution. (Elinor and her friends mistakenly believe that changing the car's decoration will make it faster.)

ET1c. Begin to understand that engineering is a collaborative process during which ideas can be exchanged and shared with others while defining a problem and working to design, test and revise a solution. (Elinor and her friends each have theories about why Camilla's car is faster.)

ET2b. Use a variety of low-tech tools including writing, drawing and painting utensils, scissors, magnifiers, balance scales, ramps, pulleys, hammers, screwdrivers, sieves, tubing, binoculars, whisks, measuring cups. (Elinor and her friends use scissors and paint to modify their car.)

Main Characters: Elinor, Olive, Ari, Mr. Rabbit

Secondary Characters: Camilla Dromedary

Backgrounds - Elinor's yard, hill near Elinor's house, forest near Elinor's house

Props - red wagon with taped-on cardboard box, paints, kid-sized racecar, bird, fish, scissors, tape, birdhouse, wood bits, Olive's notebook, Olive's backpack, crayon, pen

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SECOND DRAFT: March 11, 2019

POLISH DRAFT: April 11, 2019

RECORD DRAFT: April 17th, 2019

Open on a sunny afternoon in ELINOR's yard, where MR. RABBIT is building a tall birdhouse nearby. Elinor, OLIVE, and ARI are excitedly putting the finishing touches on a real roadster! It's actually a cardboard box taped to the top of a pull wagon, but the kids are chattering and laughing as they decorate and tape the box, thrilled at the prospect of riding in a self-built car.

1 ELINOR 1
(casually singing to
herself as she works)
We're building a car, we're
building a car.

ARI
 (also singing)
 We're gonna go far! In our caaaaar!

6 ARI 6
And those are some cool
decorations, Olive.

8 MR. RABBIT 8
That looks great, kids! What are
you going to call your new car?
(MORE)

MR. RABBIT (CONT'D)
The Rabbit Racer? The Batmobile?
The Elephant in the VROOOOOOOOOM?

9 ELINOR 9
(aside, to Olive and Ari)
My dad likes silly jokes.

10 ARI 10
 (nodding knowingly)
My dad does that, too.

11 OLIVE 11
Do you think it'll go fast, Mr.
Rabbit?

12 ELINOR 12

Yeah, I want it to go super fast! I
want to feel the wind in my ears!
SHOOOM!

Elinor quickly straps on her helmet and runs around the yard.

13 MR. RABBIT 13
There's only one way to find out.
Are you going to take it for a
ride?

14 ARI 14

Yup! We're going to ride it down
the little hill near here.

15 MR. RABBIT 15
Okay. Have fun, kids!

Olive puts on her backpack and starts to push the wagon away.

16 OLIVE 16
 (to Mr. Rabbit)
Don't worry, Mr. Rabbit, we'll be
extra careful!

17 OLIVE (CONT'D) 17
(to Ari and Elinor)
Dads also like being extra careful.

Ari and Elinor nod, and the kids exit, pushing the car, excited to go try it out.

2. EXT. HILL - A FEW MINUTES LATER

Elinor, Olive, and Ari push the car up the hill. It's a beautiful day, and we see the wind rustle a few leaves and a flock of birds fly by (maybe swallows, who are really good fliers, or robins, or sparrows which are already designed). One of the birds swoops down and zooms near the kids, which Elinor notices.

18 ELINOR 18
Whoa! That bird is so fast! I can't
wait to see how fast we can go.

It's not a steep hill at all - much longer than it is tall. It's the sort of hill that gives a smooth ride to excite a kindergartener, but nowhere near dangerous enough to make a parent worry. The path leading down the hillside is wide enough for at least two cars the size of Elinor's wagon.

Elinor, Olive, and Ari give the final few <GRUNTS> of pushing the wagon to the hilltop.

19 ARI 19
Phew! That was hard work.

20 ELINOR 20
Okay, we're ready for our first
test.

She climbs into the car.

21 OLIVE 21
Don't forget to buckle your helmet!

Elinor buckles her helmet.

22 ARI 22

Ready?

[illegible]

24 OLIVE 24

Set?

25 ELINOR 25

Set!

Olive and Ari position themselves behind the wagon.

26 OLIVE/ARI 26
Three! Two! One! GO!

They give the wagon a little push, and it starts to roll down the hill. It's rolling down fairly slowly - still fun for Elinor, but clearly not as fast as possible.

ANGLE ON: Elinor's face peeking out over the box, with her ears through little holes in her helmet. Her ears flap in the wind, and she closes her eyes in delight.

27 ELINOR 27
Whooooooooo!

It's a prolonged "whee" for a long, slow ride, but it gets interrupted. We suddenly ZOOM OUT to see, coasting down the path next to Elinor, CAMILLA DROMEDARY. She's driving a store-bought kid's racecar the same general size as Elinor's and with identical wheels, but the chassis looks like a real roadster, painted yellow with a racing stripe. Camilla wears a helmet that matches her car.

Camilla honks her car's horn <SFX: Honk honk!> to signal as she passes.

28 CAMILLA 28
Coming through!

Camilla's car zips past Elinor's, and Elinor looks over in astonishment.

29 ELINOR 29
(impressed)
Whoa!

ANGLE ON: The bottom of the hill.

The look of amazement stays on Elinor's face as her car coasts to a stop - next to Camilla's, which has already been at the bottom of the hill for a few seconds.

Elinor hops out of her wagon immediately.

30 ELINOR (CONT'D) 30
Hi, Camilla!

Camilla removes her helmet.

31 CAMILLA 31
Hi, Elinor! Hold on - I have to
turn off my headlights.

She reaches down and turns off the headlights <SFX: click!>. The headlights flip over and cover themselves.

32 ELINOR 32
Your car is amazing!

33 CAMILLA 33
Thanks! It's brand new. I got it
for my birthday. I call it the
Camilla Convertible!

34 ELINOR 34
(impressed)
Cool...

Ari and Olive enter, having scampered down the hill after
Elinor's car. Camilla opens the door of her car and gets out.

35 ARI 35
Your car is so fast, Camilla!

36 OLIVE 36
I LOVE the yellow color. And look:
It has a racing stripe.

37 ARI 37
And a cup holder!

Elinor, Ari, and Olive peer in wonder at the cup holder.

CU: The cup holder with the kids' faces peering down over it.

38 ELINOR, OLIVE, ARI 38
Ooooooh.

39 CAMILLA 39
Your car is nice, too, Elinor.

40 ELINOR 40
Thanks, Camilla, we made it
ourselves - but it's not going as
fast as yours. I wonder... how can
we make OUR car go faster?

Elinor frowns.

ANGLE ON: Elinor kneels and examines the wheels of both cars.

41 ELINOR (CONT'D) 41
Hmm. Both of our cars have the same
wheels.

ANGLE ON: Elinor stands up again. She looks back at the hill
they just descended.

42 ELINOR (CONT'D) 42
And we both went down the same
hill.

She looks back at her friends again.

43 ELINOR (CONT'D) 43
I wonder why Camilla's car is
faster than ours.

Ari looks at both cars back and forth and has an idea.

44 ARI 44

I know! Maybe if we paint our car
yellow and draw a stripe on it like
Camilla's, our car will go faster!

ELINOR

45

That's a **great** idea!

46 OLIVE 46
Let's take it back to your house
and make some changes.

Elinor, Ari, and Olive start to exit with the car.

47 ARI 47
Bye, Camilla!

Camilla waves, then takes out a rag, exhales on her hood, then uses the rag to clean it.

CROSSFADE TO:

3. EXT. ELINOR'S YARD - A FEW MINUTES LATER

Elinor, Olive, and Ari stand around Elinor's wagon with their hands on their hips. Mr. Rabbit is still building the birdhouse in the background.

ELINOR

Okay, let's paint the car yellow.

49 OLIVE 49
And add a stripe!

SHORT MONTAGE: The kids repaint the car. When they're finished, it's the exact same color scheme as Camilla's - yellow with a racing stripe, although a bit less polished.

There!

ELINOR

Mr. Rabbit wipes his hands and joins them.

51 MR. RABBIT 51
Very nice! But why did you repaint
your car?

52 OLIVE 52
Camilla has a fast car, and it's
yellow.

53 ELINOR 53
With a racing stripe, just like
this!

54 ARI 54

We thought if we made our car the
same color as hers, our car might
go faster too.

55 MR. RABBIT 55
Oh. Okay!

Elinor straps on her helmet.

56 ELINOR 56
And now to test it. Bye, Dad!

The kids pull their car out of the yard and off-screen.

4. EXT. FOREST - CONTINUOUS

The kids are pulling their car on the way to the hill. As they cross a short bridge over a small creek, Ari peeks over the side of the bridge and sees some fish hanging out.

[illegible]

The fish appear to look at Ari, then turn around and zip away, swimming really fast.

58 ARI (CONT'D) 58
 Whoa, those are some fast fish!

He scampers to rejoin the others.

5. EXT. HILL - A FEW MINUTES LATER

The kids push the car up to the top of the hill again, and Elinor sits in the car again, helmet strapped on.

59 ELINOR 59
I have a good feeling about this!

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60             OLIVE
Our car looks so fast!
60
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61	ARI	61
	Ready?	
62	ELINOR	62
	Set!	
63	OLIVE, ARI	63
	GO!	

They give their car a gentle push, and it starts to roll down the hill.

ANGLE ON: Elinor once again driving her car downhill, ears flapping in the wind.

64	ELINOR	64
	Wheeeeeeeee!	

As before, we suddenly ZOOM OUT to see Camilla passing Elinor in her car. Camilla honks her car's horn <SFX: Honk honk!>.

Camilla's car zips past, and Elinor looks surprised and disappointed.

At the bottom of the hill, Camilla's car keeps going a little farther, while Elinor's rolls to a stop. She hops out as Ari and Olive catch up.

65	ARI	65
	Aw, it didn't go faster.	
66	OLIVE	66
	What happened?	
67	ELINOR	67
	Hmm.	

ANGLE ON: Elinor steps back and looks at the car.

68	ELINOR (CONT'D)	68
	Painting our car yellow with a racing stripe didn't make our car go faster.	
69	ARI	69
	I really thought that would help.	
70	OLIVE	70
	What else can we try?	

Elinor looks over at Camilla's car, then at their car.

71 ELINOR 71
I think we need more observations.
What else is different about our
cars?

72 ARI 72
It's got to be the cup holder,
right?

73 OLIVE 73
No - but I notice something!

Olive takes a pad of paper and a crayon from her satchel.

ANGLE ON: Overhead view of Olive drawing on paper. For each item they describe, Olive sketches a basic outline.

74 OLIVE (CONT'D) 74
Our car is boxy, like this.

She draws a rectangle with little wheels on it on the left side of the page.

75 OLIVE (CONT'D) 75
And Camilla's car is kind of shaped
like this.

She draws a straight line down the middle of the page. On the right side she doodles Camilla's car: curved, aerodynamic.

76 ARI 76
Oh! I see the difference.
Camilla's car has a different
shape.

77 ELINOR 77
You're right! We need to change the
SHAPE of our car. Come on, let's go
back to my yard!

CROSSFADE TO:

6. EXT. ELINOR'S YARD - A BIT LATER

Elinor, Olive, and Ari stand around the car in Elinor's yard. Olive has her drawing materials out.

78 OLIVE 78
Ok, let's change the shape of our
car.

79 ARI 79
Are we sure this is going to work?

87 MR. RABBIT (CONT'D) 87
 So things that are streamlined can
 move through the air faster, but
 boxy things get slowed down.

The animation stops and the thought bubble poofs away,
 leaving the original drawing.

ANGLE ON: The kids look at the notebook.

88 ELINOR 88
 Whoa, that is so interesting!
 (thinks, then)
 Let's do it! Let's make the SHAPE
 of our car streamlined!

SONG MONTAGE: Elinor, Ari, and Olive change the shape of
 their car. Mr. Rabbit helps with scissors, and as they sing,
 they trim the cardboard to be pointy in front, like a bird's
 head. Just for fun, they also paint the car to look like a
 bird's head.

89 ELINOR, ARI, OLIVE 89
 (singing)
 OLIVE: If a car is painted slick,
 ARI: But it's boxy like a brick,
 ELINOR: Then it just won't go that
 quick!
 OLIVE: So with scissors and some
 tape,
 ARI: We're gonna change its shape!
 ELINOR: 'Cuz we learned, and now we
 know
 ALL: That pointy shapes help you
 go!
 Pointy shapes help you go!

They share a laugh, then admire the car.

90 ELINOR 90
 Woo hoo! Now it's a lot pointier.
 It's like a bird car!

91 MR. RABBIT 91
 You could call it: The Chicken
 Coupe. (pause) That's another silly
 joke.

The kids <GIGGLE>. Elinor puts on her helmet again.

92 ELINOR 92
 Okay, let's go try it!

CROSSFADE TO:

7. EXT. HILL - A BIT LATER

At the top of the hill, this time Elinor and Camilla begin their race alongside each other. Ari stands behind Elinor's car, and Olive stands behind Camilla's.

93	ARI	93
	Ready?	
94	OLIVE	94
	Set?	
95	OLIVE/ARI	95
	GO!	

ANGLE ON: The two cars coasting down the hill, side by side.
<SFX: WHEEE! WALLA>

ANGLE ON: The two cars arrive at the bottom of the hill at the same time. Elinor and Camilla laugh and high-five.

96	CAMILLA	96
	You DID it, Elinor! Now the car you made is just as fast as mine!	
97	ELINOR	97
	Yep, all because of its pointy shape. It's STREAMLINED, like a bird! Or a fish!	

Elinor runs around, pretending to flap her wings. Olive and Ari run into the scene, and we ZOOM OUT as they all celebrate.

98	OLIVE, ARI	98
	(ad libbing)	
	That was awesome! / You were so fast! / My turn next! / etc.	

SEGMENT 2.**1. EXT PARK -- DAY**

Open on Senor Tapir, with his guitar, in the park of Animal Town, sitting on a tree stump at the edge of a pond. A group of kids sit at his feet, including Elinor, Ari and Olive.

99	SENROR TAPIR	99
	Let's sing a song about SPEED. Who knows what the word speed means?	

Elinor's hand shoots up. She doesn't wait to be called on.

We see the original shape of the bullet train's nose (which was long and round) change to the shape of the kingfisher's beak. The train goes through a tunnel and fast down the track. We see the shape of the train's nose compared to the shape of the kingfisher's beak. The train continues down the track, past trees, mountains, cities, houses, etc.

He got to choo--choo--choose the
shape of the train
And make the train better than
before,
So he use--use--used the shape of a
bird
The train went faster than before!
Once more!

(sung even faster)

He got to choo --choo--choose the
shape of the train
And make the train better than
before,
So he use--use--used the shape of a
bird
And the train went faster than
before!

NOTE TO COMPOSERS: If we are short on time, we can cut the last chorus.

3. EXT PARK -- DAY

104	SENOR TAPIR	104
	Whoah that song makes me want to go fast!	
105	ARI	105
	Let's all go fast! Follow me!	

Ari runs fast off screen, Senor Tapir tosses his guitar on the grass to follow, and all the kids run fast after him off screen. <SFX: KIDS CHEER WALLA>

FADE OUT, THE END.