

MIX & MATCH GAME MOCK UP

SEPT. 16, 2017

Screen Layout

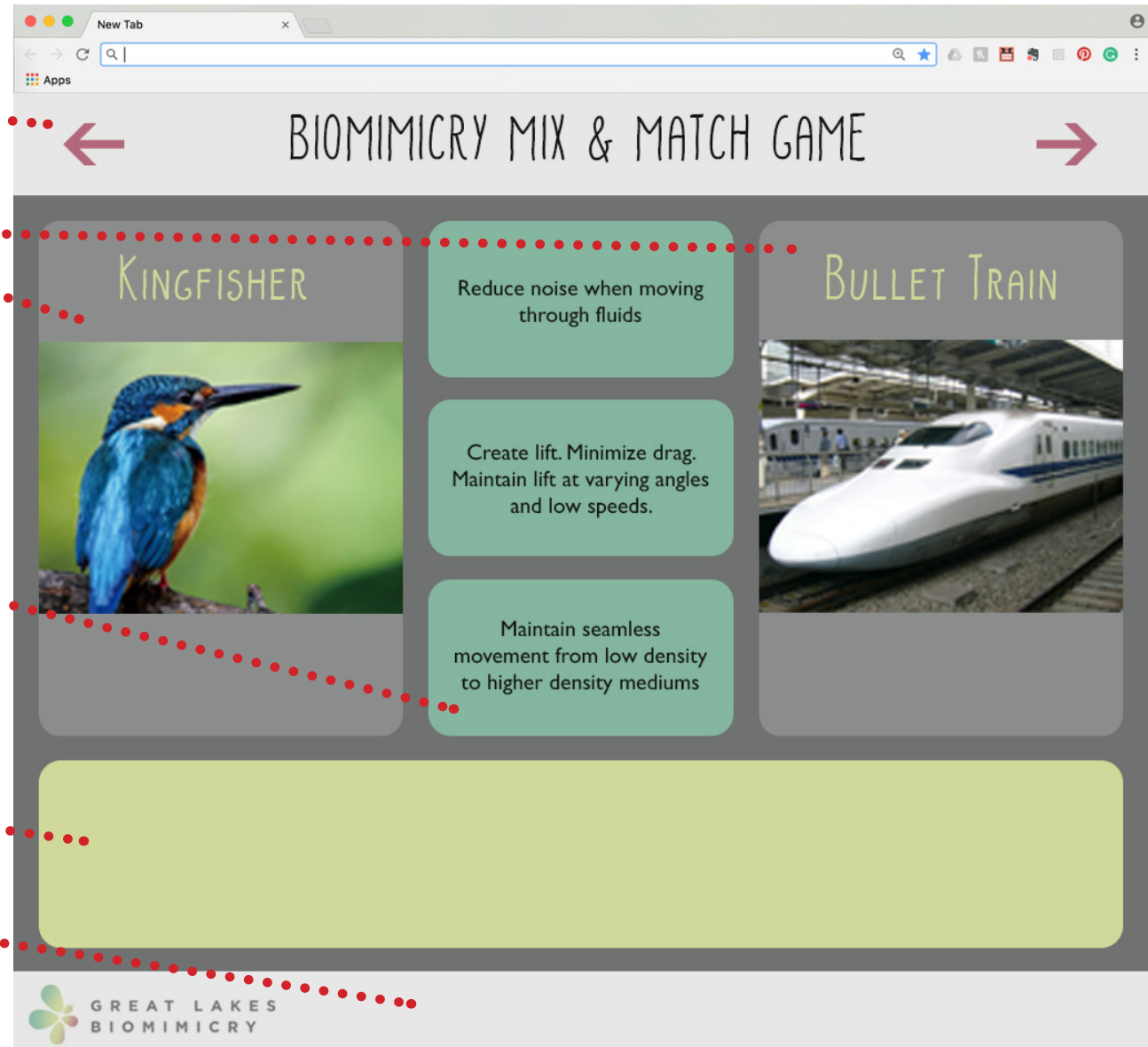
click arrow to go
to previous or next
set of cards

card
click to flip over
and find more
information

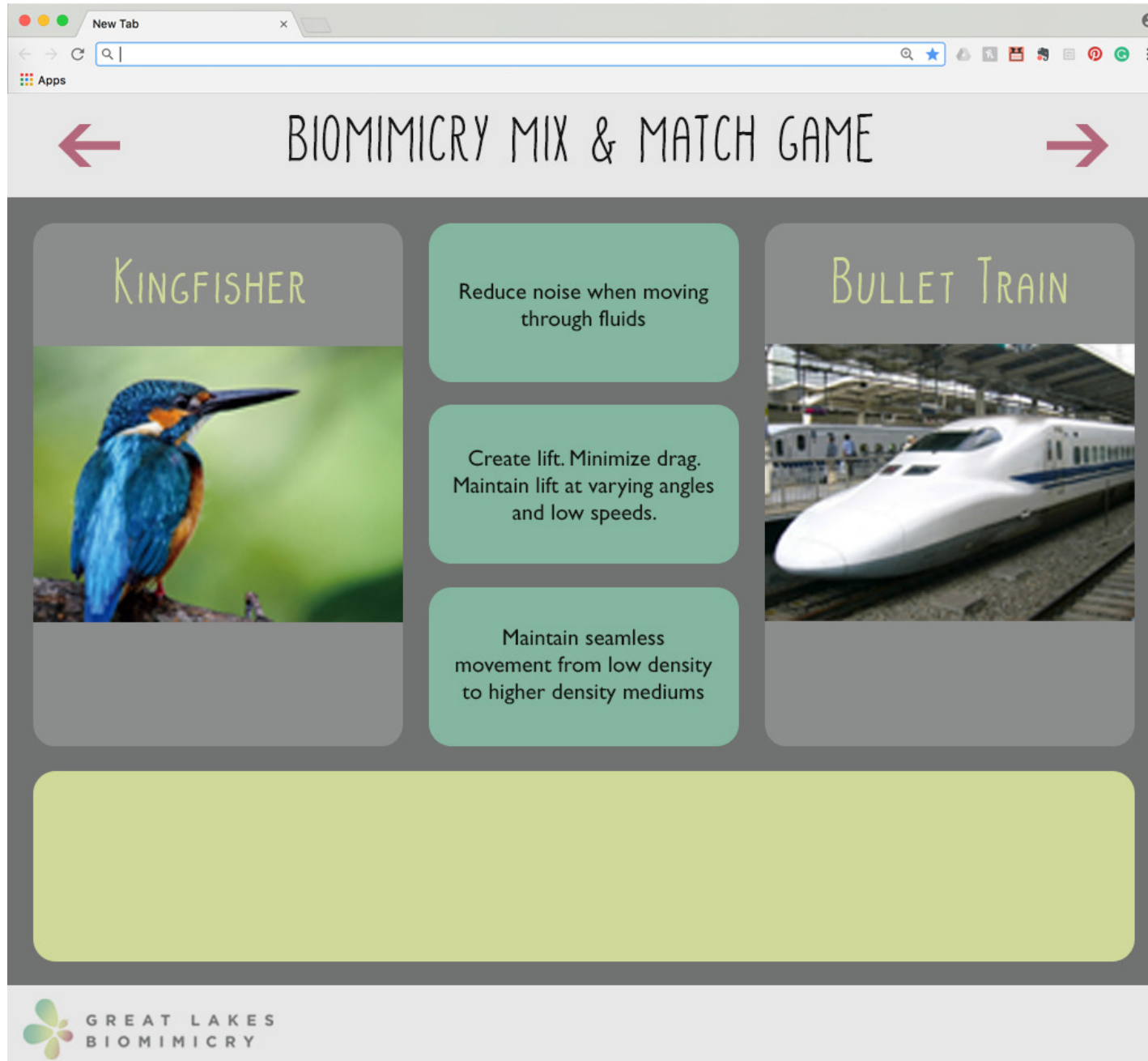
3 possible answers to
choose from

answer key -
will fill in once the correct
answer is selected

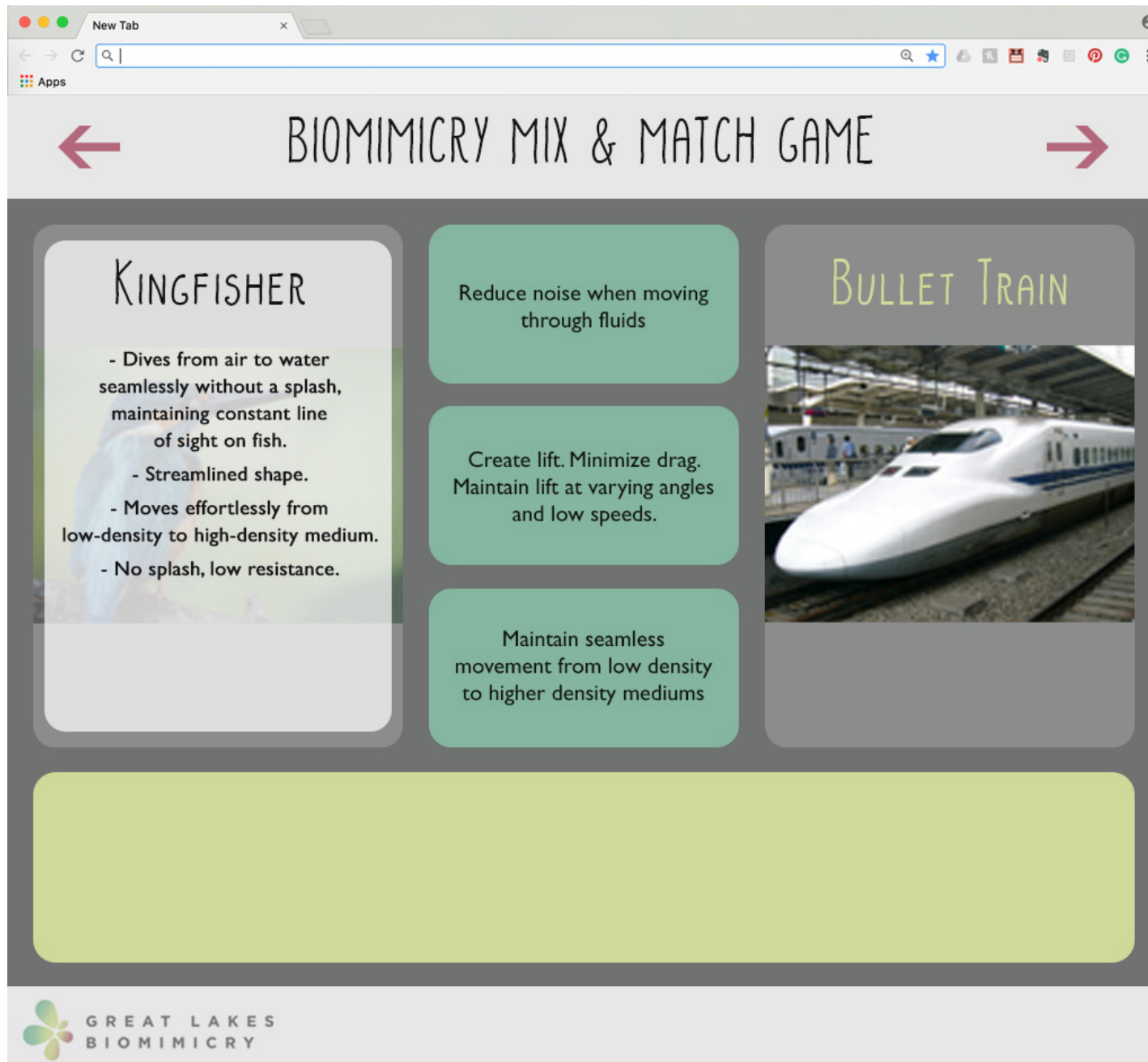
area for links to websites
or more information



Start of Game - front of both cards and three answers options




Game - Clicked on Kingfisher to see more information on the back



Game - Clicked on Bullet Train to see more information on the back

← BIOMIMICRY MIX & MATCH GAME →

KINGFISHER



Reduce noise when moving through fluids

Create lift. Minimize drag. Maintain lift at varying angles and low speeds.

Maintain seamless movement from low density to higher density mediums

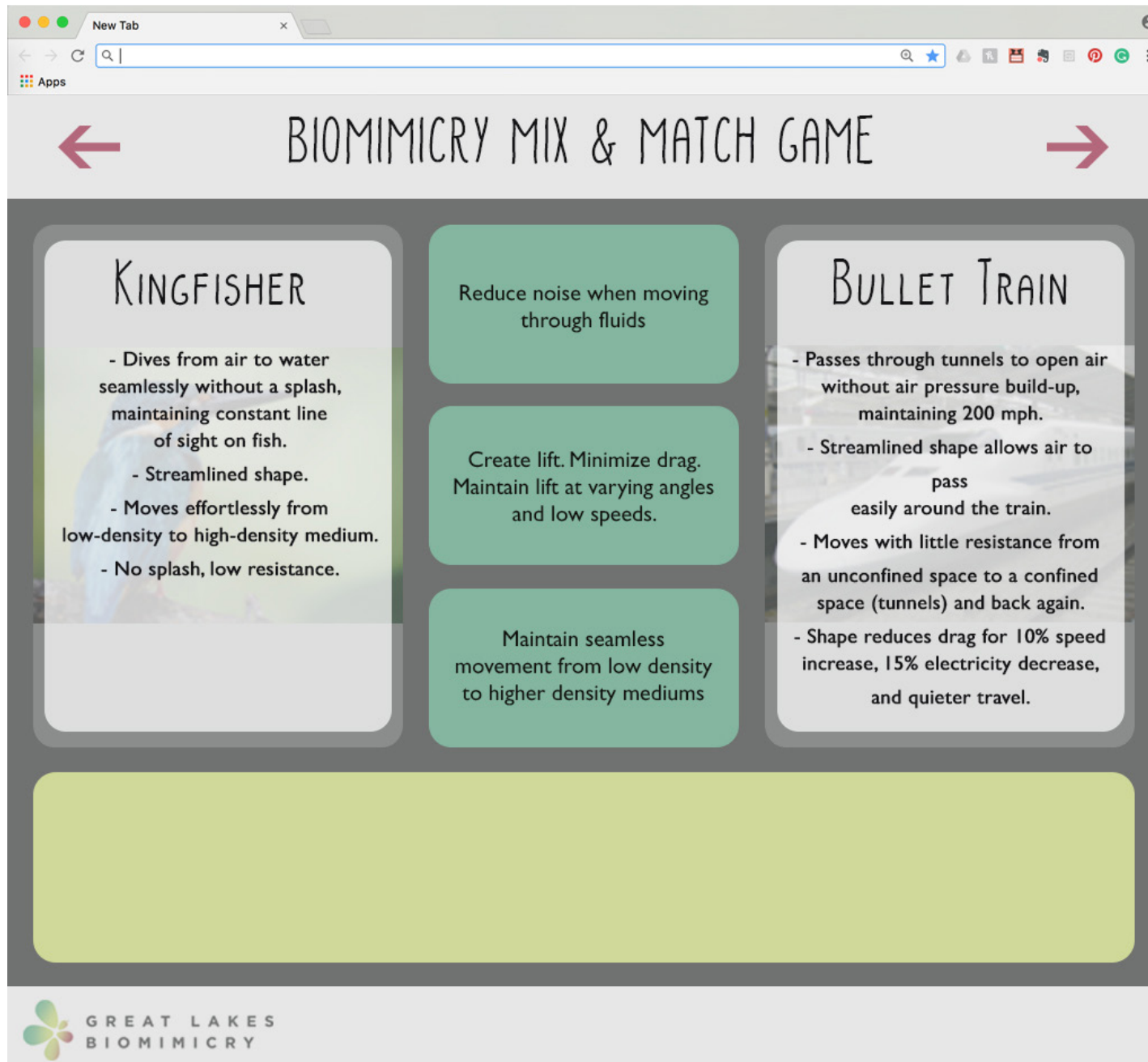
BULLET TRAIN

- Passes through tunnels to open air without air pressure build-up, maintaining 200 mph.
- Streamlined shape allows air to pass easily around the train.
- Moves with little resistance from an unconfined space to a confined space (tunnels) and back again.
- Shape reduces drag for 10% speed increase, 15% electricity decrease, and quieter travel.

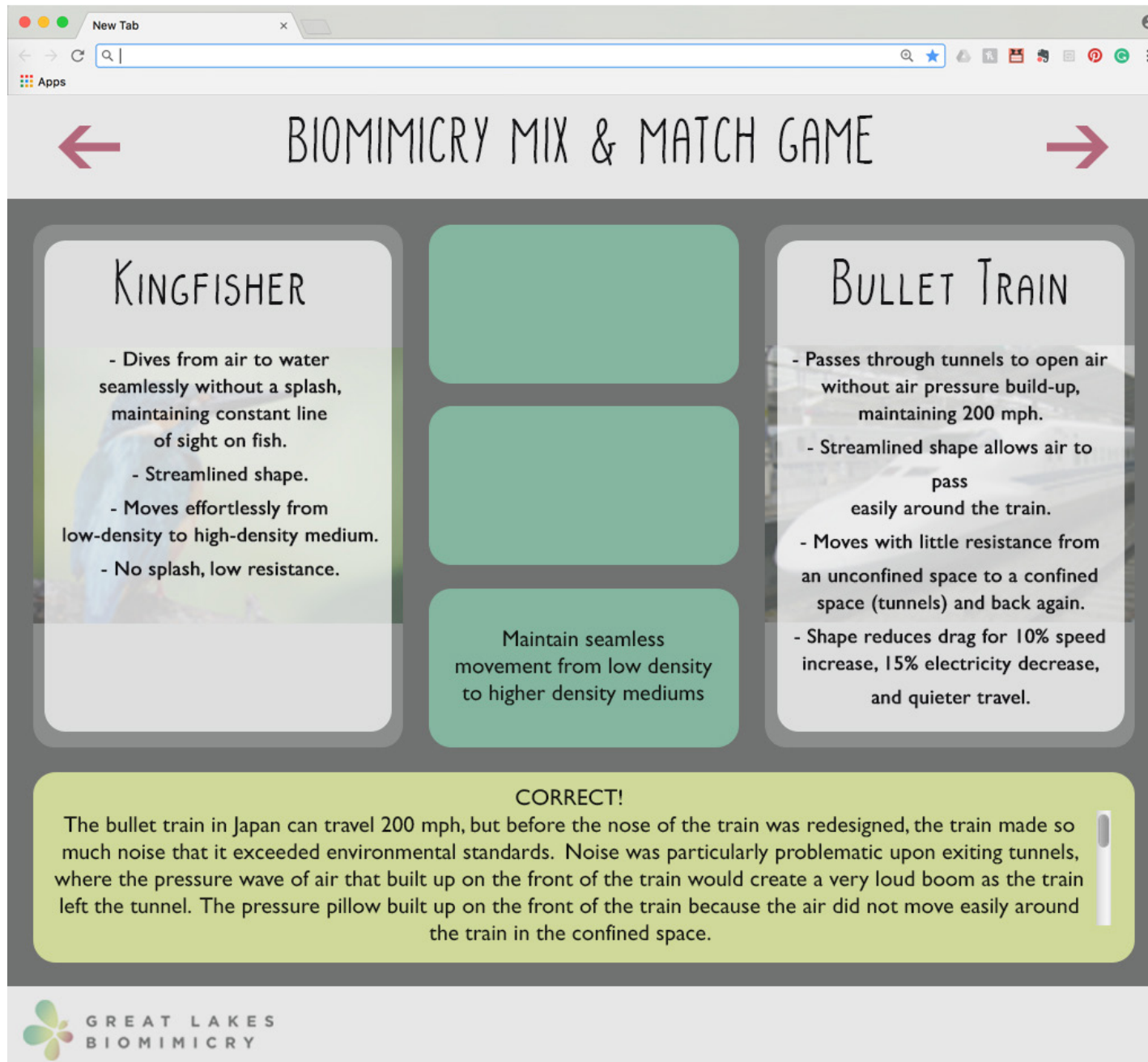
GREAT LAKES BIOMIMICRY



Game - Clicked on both to see information on back of card



Correct Answer - Selected correct answer and answer key fills in with more information



← BIOMIMICRY MIX & MATCH GAME →

KINGFISHER

- Dives from air to water seamlessly without a splash, maintaining constant line of sight on fish.
- Streamlined shape.
- Moves effortlessly from low-density to high-density medium.
- No splash, low resistance.

BULLET TRAIN

- Passes through tunnels to open air without air pressure build-up, maintaining 200 mph.
- Streamlined shape allows air to pass easily around the train.
- Moves with little resistance from an unconfined space to a confined space (tunnels) and back again.
- Shape reduces drag for 10% speed increase, 15% electricity decrease, and quieter travel.

Maintain seamless movement from low density to higher density mediums

CORRECT!

The bullet train in Japan can travel 200 mph, but before the nose of the train was redesigned, the train made so much noise that it exceeded environmental standards. Noise was particularly problematic upon exiting tunnels, where the pressure wave of air that built up on the front of the train would create a very loud boom as the train left the tunnel. The pressure pillow built up on the front of the train because the air did not move easily around the train in the confined space.

GREAT LAKES BIOMIMICRY



Correct Answer - Selected correct answer and answer key fills - another view

New Tab

← → ↻ 🔍 ★

Apps

BIOMIMICRY MIX & MATCH GAME

KINGFISHER



BULLET TRAIN



Maintain seamless movement from low density to higher density mediums

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GREAT LAKES
BIOMIMICRY

