Introduction to The Rocky Shore

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Nahant, MA

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In New England, we have different types of beaches

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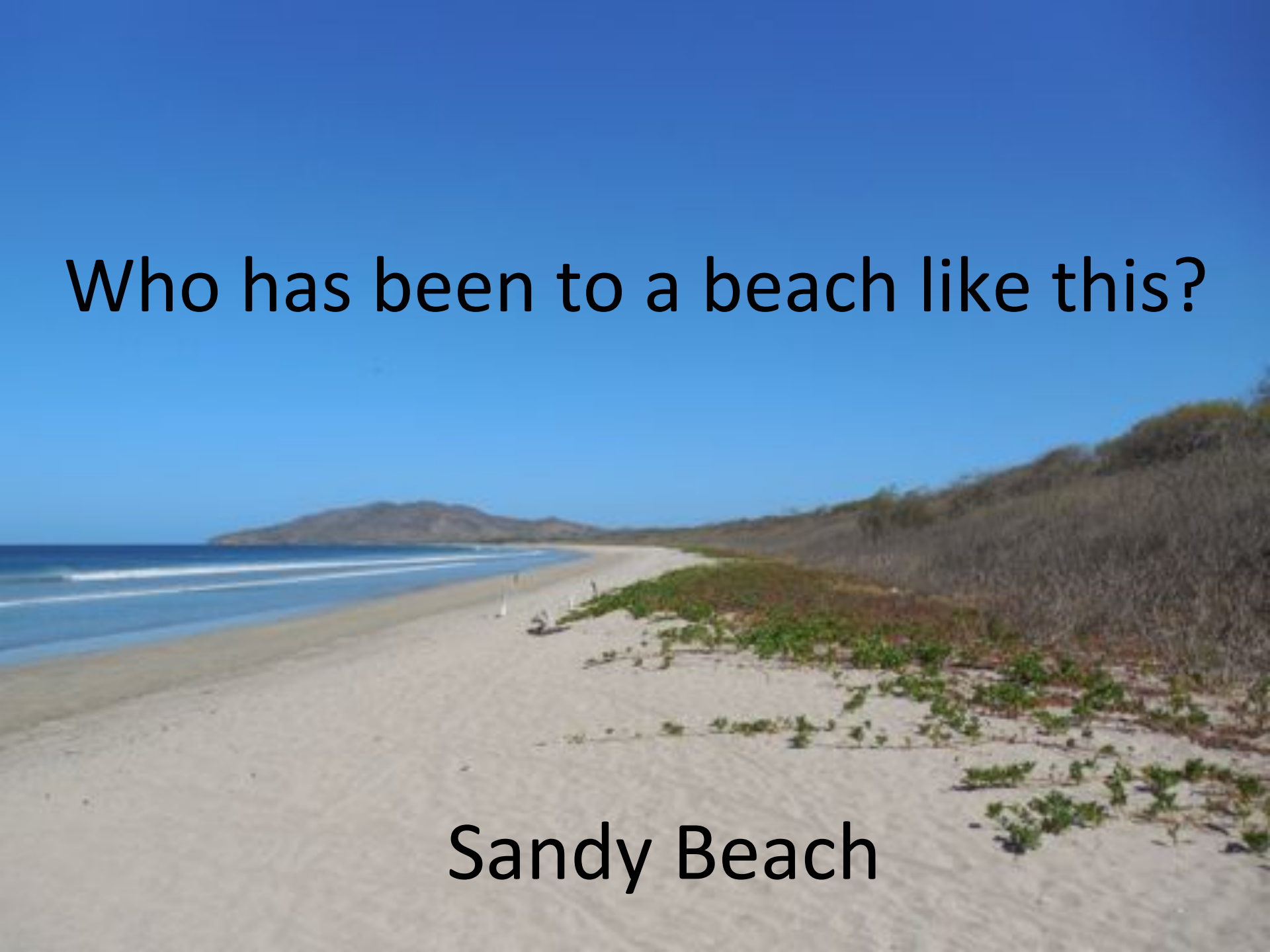
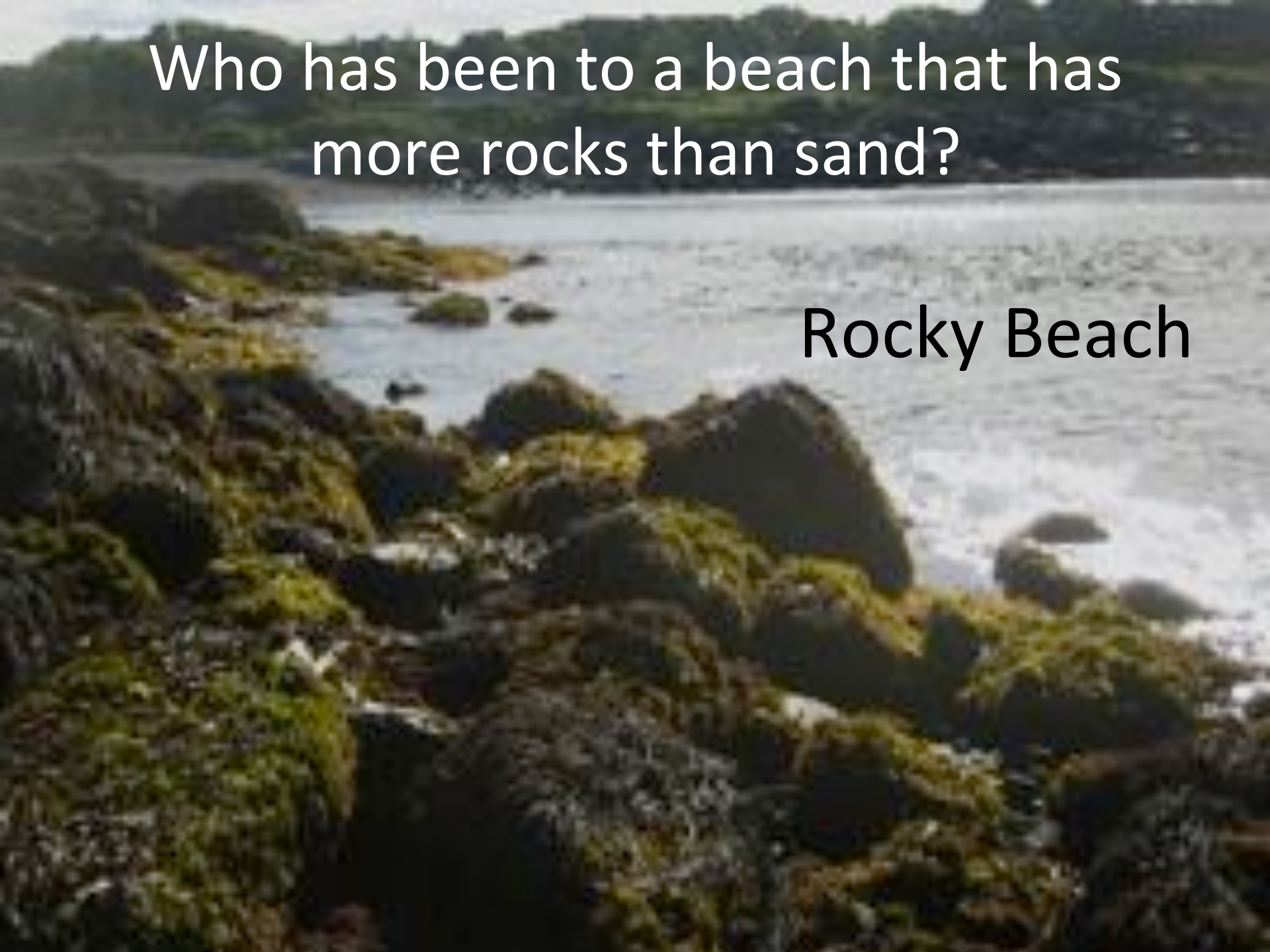
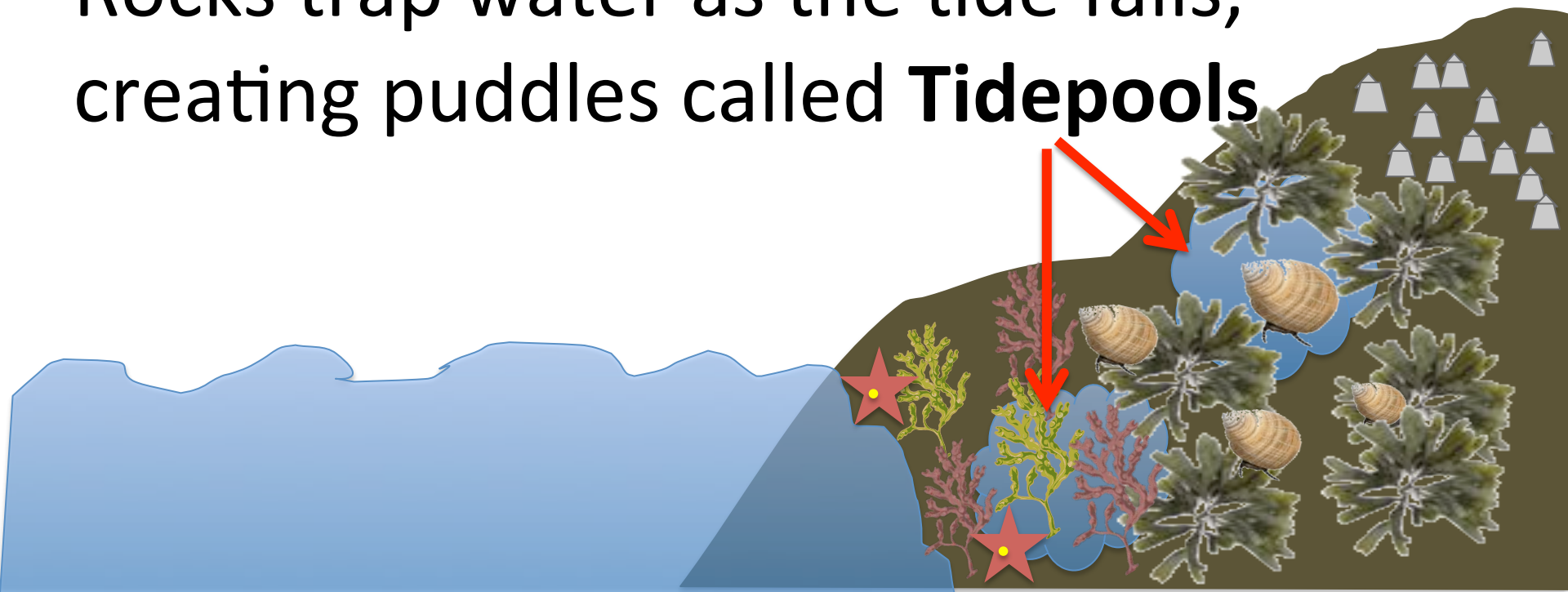

Who has been to a beach like this?
Sandy Beach


Who has been to a beach that has more rocks than sand?
Rocky Beach

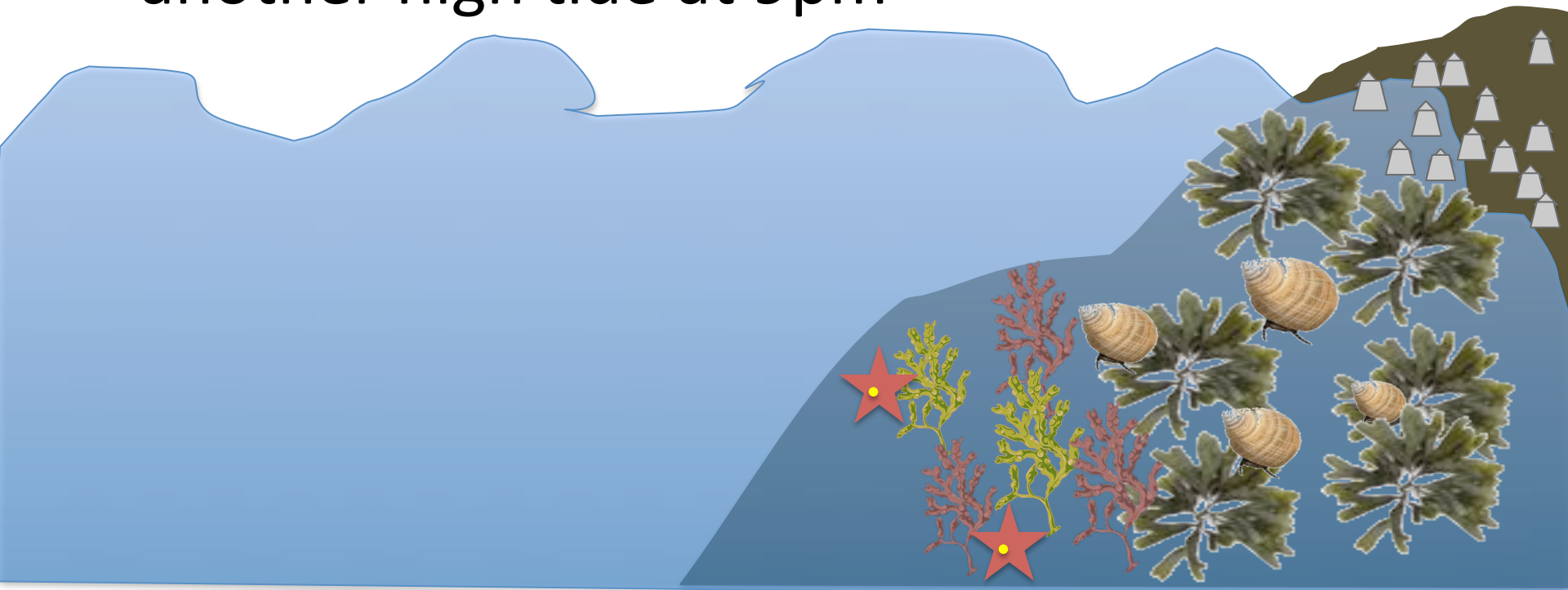
Low Tide

- When the water is low on the rocks
- In New England, there are 2 low tides per day, 12 hours apart
- Rocks trap water as the tide falls, creating puddles called **Tidepools**



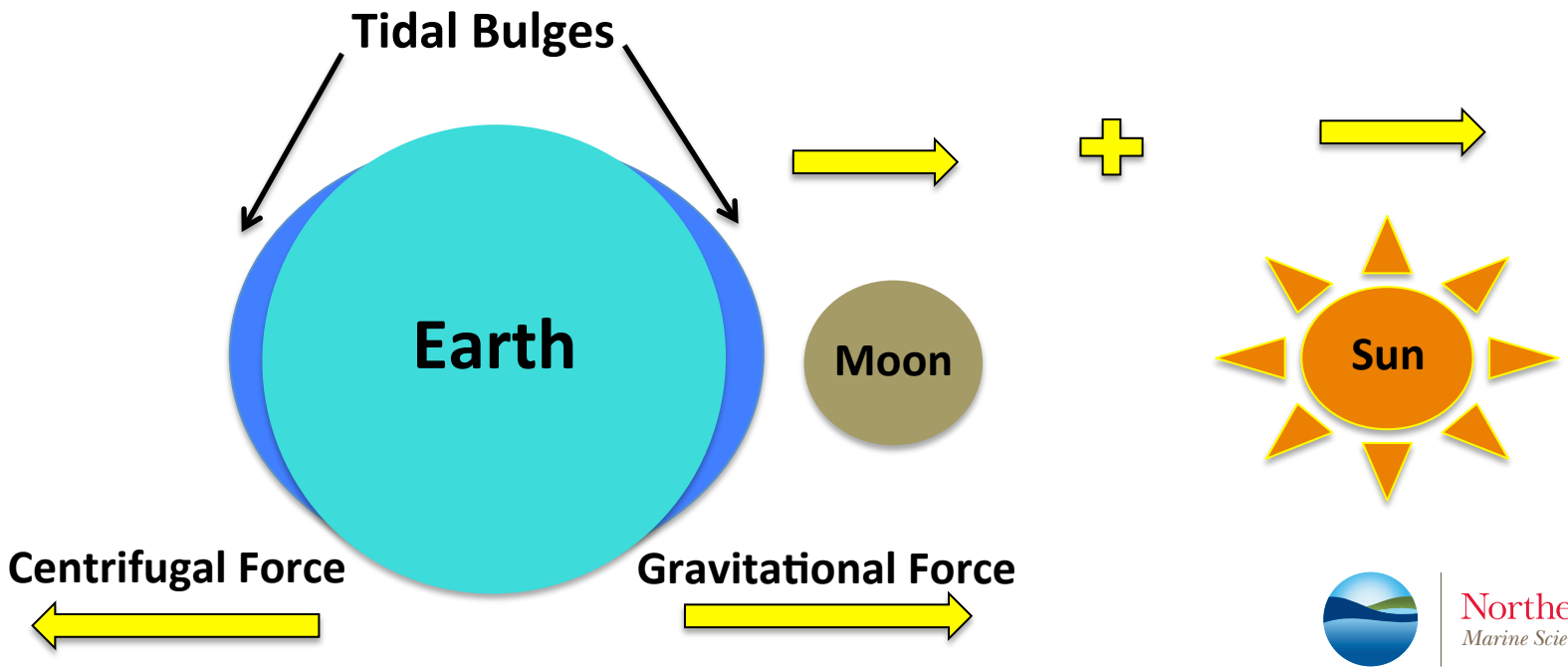
High Tide

- When water covers the rocks on the beach
- In New England, there are 2 high tides per day, 12 hours apart
- If high tide is at 9am today, there will be another high tide at 9pm



What cases the tides?

- The sun and the moon
- What force? Gravity
- Gravity from the moon on the earth pulls the water in the ocean towards the moon



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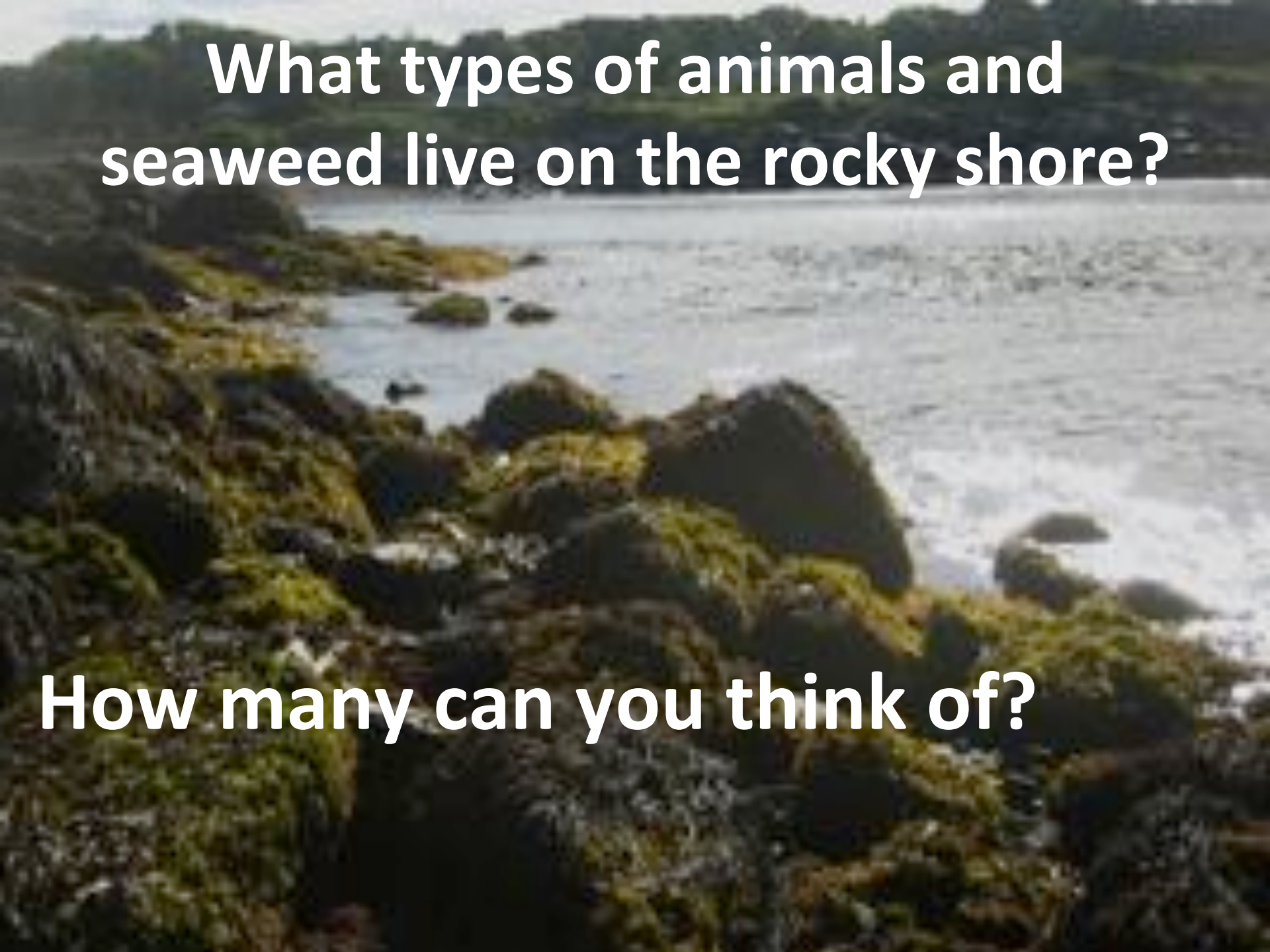
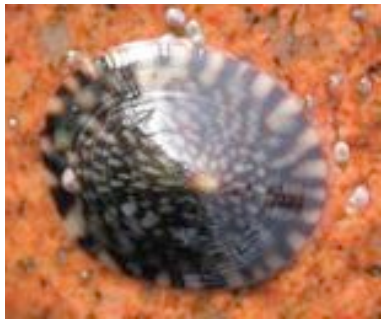

What types of animals and seaweed live on the rocky shore?
How many can you think of?

Molluscs

RED=INVASIVE SPECIES

Periwinkles



Limpet

Dog whelk

Lady Slipper Snail

Blue Mussel

Sea slug

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Crustaceans

RED=INVASIVE SPECIES

Barnacles

Spider Crab

Green Crab

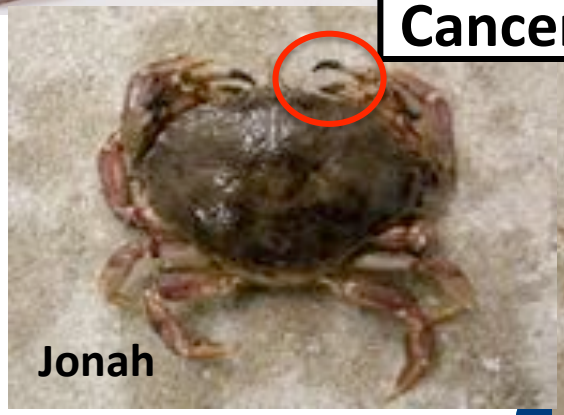
Hermit Crab

Lobster

Shrimp

Asian Shore Crab

Cancer Crabs



Jonah

Rock

Echinoderms

Forbes Sea Star

Northern Sea Star

Green Sea Urchin

Blood star

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RED=INVASIVE SPECIES

Anemone

Lacy Crust Bryozoan

Sea squirts

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Brown Seaweed

Bladder Wrack

Kelp

Rockweed

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Red Seaweed

Coralline Algae

Irish Moss

Red Stain Algae

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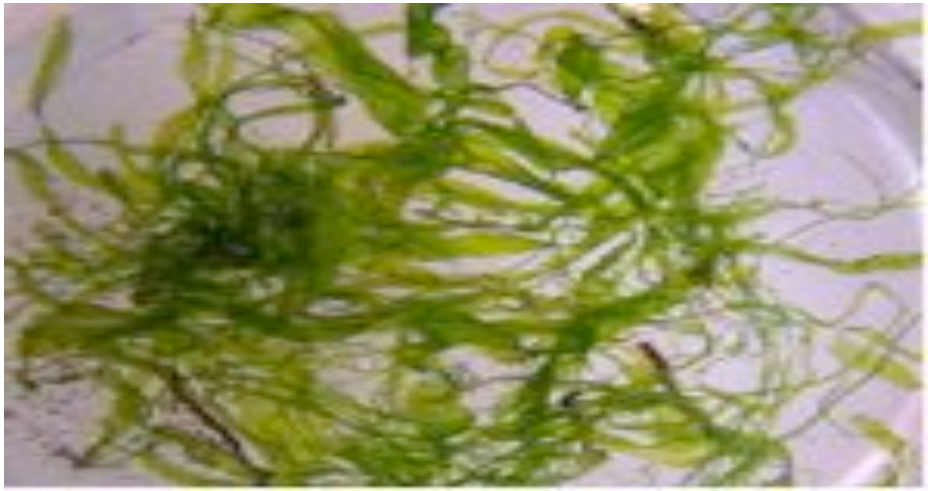
Green Seaweed

RED=INVASIVE SPECIES

Sea Lettuce



Gutweed

Dead Man's Fingers

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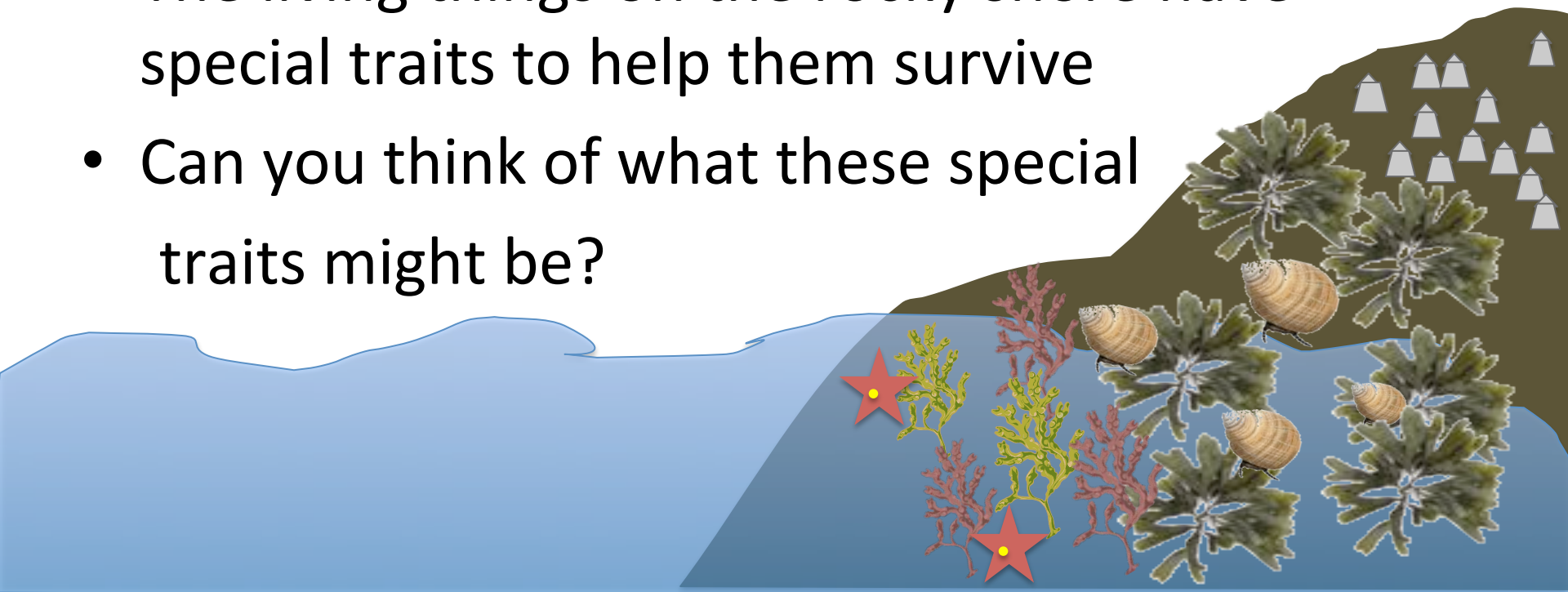
A very special habitat

- Living things on the rocky shore spend half of their life covered with water and half their life exposed to air
- Could you do that?
- The living things on the rocky shore have special traits to help them survive
- Can you think of what these special traits might be?



What's so interesting about the rocky shore?

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Why do scientists study the rocky shore?

- Easy to get here – walk right onto the beach at low tide!
- Biodiversity – lots of animals and seaweeds live here!

Who cares?

- The rocky shore
  - Habitat for many living things
  - Storm barrier
  - Place for people to study marine environments
  - Is a great place for tidepooling and fun!

Where is the rocky beach?

It is high tide, so the rocky beach is covered by water!

Come back in a few hours to explore!

Thanks for exploring the

Rocky Shore

with us today!

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