

Characters:

Phoebe (tourist)	Nicole (Horseshoe crab)
Karen (tourist)	Isaacs (marine biologist)
Jacky (Horseshoe crab)	Kelly (marine biologist)

Setting: A mudflat in Hong Kong. Phoebe and Karen are walking on the beach, looking at the water.

**Phoebe:** "Do you see a mini-creature there? Is it a crab? " (points to the water)

**Karen:** "A crab? Oh, Yes! We can bring it home and eat it!" (excitedly)

**Isaacs:** "No, you can't do that!"

**Phoebe** and **Karen:** "Why?" (confused)

(Two marine biologists come out)

**Isaacs:** "This is not an ordinary crab; it's a horseshoe crab. They play a very important role in our ecosystem, and due to overhunting, their population has been declining."

**Jacky:** "Yes, that's right. We are horseshoe crabs, and we are facing a big problem."

**Nicole:** "Our population is declining – and our big family is getting much smaller in number because people use our blue blood for making medicine in the medical industry."

**Karen:** "Blue blood? What's so special about that?"

**Jacky:** "Our blood is bright blue, and it contains a substance called Limulus Amebocyte Lysate, which is sensitive to toxic bacteria. And now people can often use us to test if a certain bacteria contains poison."

**Karen:** The technical term sounds really difficult to me. Could you please say it again?

**Jacky:** You may simply call it LAL. When LAL comes into contact with bacteria, it clots around it. Just like the plastic wrap we use for wrapping up unused ingredients, the protective LAL layer can be easily observed and seen. Then the manufacturer can know that this batch of products may be poisoned and contaminated, and understand that they should not sell them to the public. Actually, in the past three years, our blood has been widely used in producing COVID-19 vaccines."

**Nicole:** "In some Asian countries, humans also hunt us for food, which causes a decrease in our population. Please don't kill us. We need to be protected so that we can continue to play our important role in the ecosystem."

**Phoebe:** "You are very nice to us, but it's sad to know that you are facing extinction – the dying of all horseshoe crabs."

**Isaacs:** "Luckily, medical companies have developed man-made alternatives to horseshoe crab blood, which have the same function as the blue blood and can be used to replace LAL in testing."

**Kelly:** "Horseshoe crabs have been living with us for more than a million years. They are living fossils that have stayed alive after times and times of difficult environments. In fact, they are even older than dinosaurs. We can study their body structure and behavior to learn more about the evolution of life on Earth."

**Karen:** "They have lived so long. It seems like they can adapt to any environment easily!"

**Kelly:** "That is absolutely wrong. We have been taking care of baby horseshoe crabs since February, and taking care of horseshoe crabs is not easy because they require a specific type of living area and water conditions to keep them alive. They prefer sandy or muddy bottoms where they can hide themselves under the sand or mud."

**Phoebe:** "What do they eat? And how often do you feed them?"

**Kelly:** "They eat small brine shrimp, and we should feed them four times a week."

**Phoebe:** "Can I touch these baby crabs and try to feed them?"

**Isaacs:** "Be careful! When handling horseshoe crabs, it's important to be gentle and avoid touching their gills or tail."

**Nicole:** "We may also become stressed if our habitat, that is, our living environment, is disturbed or if we are put under bright lights or hear loud noises."

**Karen:** "That's why it's important to handle them with care and keep our environment as natural as possible. Is there anything else we can do to help?"

**Isaacs:** "Yes, you can support organizations that are working to protect horseshoe crabs and their habitats. You can also participate in beach cleanups to help keep their environment clean and free from debris such as broken rocks."

**Phoebe:** "We can start by reducing our carbon footprint and supporting sustainable practices. Every little bit helps. Let's start by taking small actions, and surely we can make a big impact."

**Karen:** "Maybe both of us will grow up to be scientists who discover a breakthrough that saves horseshoe crabs from extinction! Let's make Science our dream subject to study in the future!" (leave and fade out)