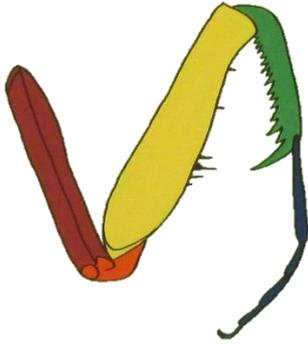




Name _____

Walk this Way Tour Activity

1. Label the five parts of an insect leg (Hint: Use the Trait wall with the legs on it).



2. Find and draw an insect in the museum. Pay special attention to its legs in your drawing.

3. Fill in the table about your insect.

Type of Insect	
Habitat/Environment	
Type of legs (For this, use the Trait wall to figure out which type is the closest fit to your insect)	

4. Why do you think the legs you drew are shaped this way?

5. How does this shape help that insect move around in its environment?



Name _____

Creating Robots

Work through the following tasks to create a robot with functional legs.

1. Write a sentence for each leg type describing what it looks like and where it can be found. Use examples of insects that have these types of legs.

Running _____

Jumping _____

Swimming _____

Grasping _____

Digging _____

2. Now that you have studied insects and their legs, you are ready to design robots. Brainstorm which type of leg you would choose the following robots to have. Think about the function of the robots in the areas where they are needed.

Robot on a rocky surface on Mars:

Leg type

Robot in the garden:

Leg type

Robot to assist a doctor during surgery:

Leg type

Robot Underwater:

Leg type

Name _____

Walk this Way Tour Activity - Answers

1. Label the five parts of an insect leg (Hint: Use the Trait wall with the legs on it).
[Coxa, Trochanter, Femur, Tibia, Tarsi](#)
2. Find and draw an insect in the museum. Pay special attention to its legs in your drawing.
[answers may vary](#)
3. Fill in the table about your insect.
[answers will vary depending on the species drawn](#)
4. Why do you think the legs you drew are shaped this way?
[answers will vary depending on the species drawn](#)
5. How does this shape help that insect move around in its environment?
[answers will vary depending on the species drawn](#)

Creating Robots

Running: [Insects, like beetles, use running legs to move quickly in their environment. These legs are long and thin.](#)

Jumping: [Grasshoppers use their hind legs to jump far distances. These legs have very muscular bases.](#)

Swimming: [Diving beetles use their hind legs to swim. They have small hairs that are used very much like oars.](#)

Grasping: [Praying mantids use their forelegs to hold onto prey. They have long spines on the tibia to help hold onto prey.](#)

Digging: [Mole crickets use their forelegs to dig through substrate. These legs are shaped like large scoops.](#)

Robot on a rocky surface on Mars: [running](#)

Robot in the garden: [Jumping](#)

Robot to assist doctor during surgery: [Grasping](#)

Robot underwater: [Swimming](#)

Choose one of the robots from the list, and draw or describe what this robot would look like. Pay special attention to the way it will walk around. Would your robot be able to fly as well? Use this space to plan your robot. Get creative!

[answers may vary](#)